Online supplemental material, Humes et al., "A Follow-Up Clinical Trial Evaluating the Consumer-Decides Service Delivery Model," AJA, https://doi.org/10.1044/2018_AJA-18-0082

Supplemental Material S2. Data collection forms.

Visit 1

- 1-1 Phone screen
- 1-2 Study Consent Form
- 1-3 HIPAA Form
- 1-4 Permission to contact for research
- 1-5 Demographic Form
- 1-6 Black Binder
- 1-7 Red Binder
- 1-8 Blue Binder
- 1-9 Rx Pad
- 1-10 Visit 1 Questions
- 1-11 Hearing Aid Decision Form for CTC
- 1-12 Visit 1 Hearing Aid Selection Survey
- 1-13 User Guide
- 1-14 Hearing Aid Case Checklist

Visit 2

- 2-1 Aided CST #1
- 2-2 Visit 2 Hearing Aid Selection Survey
- 2-3 Hearing Aid Inspection Checklist
- 2-4 Visit 2 Checklist
- 2-5 Instructions for Loudness Test
- 2-6 Categories of Loudness
- 2-7 Datalogging
- 2-8 Aided CST #2
- 2-9 Hearing Aid Decision #1
- 2-10 Audiogram
- 2-11 Unaided CST
- 2-12 Mini Mental State Exam
- 2-13 Case History
- 2-14 Hearing Aid Status #1

Visit 3

- 3-1 Visit 3 Checklist
- 3-2 Orientation Checklist

Visit 4

- 4-1 Aided CST #1
- 4-2 Hearing Aid Inspection Checklist

- 4-3 Aided CST #2
- 4-4 Hearing Aid Decision
- 4-5 Datalogging
- 4-6 Visit 4 Checklist
- 4-7 Hearing Aid Adjustment Log
- 4-8 Hearing Aid Questions
- 4-9 Hearing Aid Status #2
- 4-10 Exit Form

Tablet Forms

- T-1 Unaided PHAP
- T-2 Unaided HHIE
- T-3 Aided PHAP
- T-4 Aided HHIE

Miscellaneous

M-1 Unscheduled Visit Checklist

CD2 1-1

Name:	Age:	Date:
How did you find out ab	out our study?	
Mailing Address:		
Phone:	Email:	

Hello. This is (name) from the Audiology Research Lab in the Department of Speech and Hearing Sciences at Indiana University Bloomington.

(If follow-up from voicemail: You had previously responded to an ad about this study.)

Do you have a few minutes to hear about a new study in our lab?

- If yes, go on to next section.
- If no, "is there a better time to reach you or do you have an email address we could send the information to?"- take down information and either call back or email.

We are currently enrolling participants for a study that examines whether people are able to select their own hearing aids themselves and save money in the process.

Does that sound like something that might interest you?

- **If yes**, go on to next section.
- If no, "thank you for your time, have a nice day."

In order to participate in this study, you must:

- Be between 55-79 years old
- Be a native English speaker
- You must be a new hearing aid user which means that you have never worn hearing aids or have only worn them for a short period of time (for less than 6 weeks, more than 1 year ago).
- You also must have the ability to read 18 point typed font. 18 point font is larger than most typed documents.
- Be willing to purchase hearing aids.

Would you like to hear more about the study?

- If yes, go on to next section.
- If no, "thank you for your time, have a nice day."

Each participant will attend two to four visits. The first and second visits each last approximately 2 hours. If additional visits are needed, those will last between 1-2 hours At the first visit, you will come to the research clinic at IU Speech and Hearing to select your hearing aids yourself following instructions provided. After wearing the hearing aids for about four weeks, you will return to the research clinic for a

CD2 1-1

second visit to have your performance with the hearing aids evaluated. At the second visit, you will also receive a full hearing evaluation and decide whether you want to keep your hearing aids.

The initial cost of the hearing aids is \$600. For completion of Visit 1 you will receive \$50 off of the price bringing the total due at Visit 1 to \$550. We are not able to accept credit cards for payment, therefore the \$550 will need to be in the form of cash or check.

For completion of Visit 2, you will receive a \$50 cash payment. This effectively reduces the price of the hearing aids to \$500, which is a 16.7% discount off of the price of these good-quality devices that are made by a major manufacturer. The hearing aids have a 1 year warranty.

Consistent with standard clinical practice, participants will have a 4-week trial period after which the hearing aids may be returned for a full refund, less any credits or payments received by you previously for your participation.

Does this still sound like something you might be interested in?

- If yes, go on to next section.
- If no, "thank you for your time, have a nice day."

Visit 1 Date:	 Time:	
Contact log		
Scheduled on calendar		
Letter sent		

INDIANA UNIVERSITY INFORMED CONSENT STATEMENT FOR

Evaluating Hearing Aid Service-Delivery Models

You are invited to participate in a research study of examining different ways of providing hearing aids to adults with hearing loss. You were selected as a possible subject because you responded to an initial advertisement for this study and were subsequently found to be eligible for the study. Please read this form and ask any questions you may have before agreeing to be in the study.

The study is being conducted by Larry E. Humes, Distinguished Professor, Department of Speech and Hearing Sciences, Indiana University. It is funded by the National Institutes of Health (NIH).

STUDY PURPOSE

The purpose of this study is to examine the benefits resulting from consumer's selection of their own hearing aids. Due to the nature of the study, we are not able to provide you with the full details of the study at this time, but will provide additional information at the conclusion of the study.]

NUMBER OF PEOPLE TAKING PART IN THE STUDY

If you agree to participate, you will be one of about 40 subjects who will be participating in this research.

PROCEDURES FOR THE STUDY

If you agree to be in the study, you will do the following things:

Each participant will attend two to four visits. At the first visit, you will come to the research clinic at IU to select your pair of hearing aids yourself from among the three available choices following instructions provided. (You will also choose the color of your pair of hearing aids with each of the three pairs being available in beige, brown and grey.) After wearing the hearing aids for about four weeks, you will return to the research clinic for a second visit to have your performance with the hearing aids evaluated. At the second visit, you will receive an auditory test that requires you to listen and respond to words or sentences presented via loudspeakers under different listening conditions. Your responses will be recorded by the examiner using a written answer sheet. You will also complete two surveys about difficulties you experience in everyday listening situations. Just like any person purchasing hearing aids in the U.S., you will then be given the option to return the hearing aids, if desired, and receive a full refund of the purchase price of the hearing aids, less any credits or payments made to you for completion of test sessions. Finally, at the end of the second visit, you will receive a complete hearing evaluation.

The first and second visits each last between 1 and 2 hours and the second visit will be scheduled approximately 4 weeks after the first visit.

In this study, we are evaluating how well patients can select their own hearing aids. Consistent with standard clinical practice, participants will have a 4-week trial period after which the hearing aids may be returned for a full refund, less any credits or payments received by you previously for your participation.

RISKS OF TAKING PART IN THE STUDY

While on the study, the risks are minimal. Because you will be choosing your own hearing aids, it is possible you may chose a device that is not appropriate for your particular hearing loss. Outcomes may differ, being inferior for

some of the subjects because they will be choosing their own hearing aids. There is a potential risk of the hearing aid decreasing auditory awareness. Steps have been taken to minimize this risk. The devices to be fitted are "open-fit" devices which minimize plugging up the ear canal.

In addition, because hearing aids and eartips will be inserted into the subjects' ears, there is some minimal risk for transmission of infection. This risk will be minimized by the thorough cleaning of all hearing aids and eartips tried by the patient after each subject's use.

.

BENEFITS OF TAKING PART IN THE STUDY

The benefits to participation that are reasonable to expect are outcomes of this investigation may aid hearing professionals in making decisions about how best to deliver hearing aids to adults with hearing loss. Subjects may also experience direct benefits through the use of hearing aids that counteract the effects of hearing loss.

ALTERNATIVES TO TAKING PART IN THE STUDY

Instead of being in the study, you have these options: An alternative to participating in the study is to choose not to participate. If you do not participate, but are still interested in receiving hearing aids, you are welcome to do so at the IU Hearing Clinic, following normal clinical procedures, or elsewhere at your discretion

CONFIDENTIALITY

Efforts will be made to keep your personal information confidential. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Your identity will be held in confidence in reports in which the study may be published and databases in which results may be stored.

Organizations that may inspect and/or copy your research records for quality assurance and data analysis include groups such as the study investigator and his/her research associates, the Indiana University Institutional Review Board or its designees the study sponsor [National Institutes of Health, NIH], and (as allowed by law) state or federal agencies, specifically the Office for Human Research Protections (OHRP, etc., who may need to access your medical and/or research records.

A description of this clinical trial will be available on <u>ClinicalTrials.gov</u>, as required by U.S. law. This website will not include information that can identify you. At most, the website will include a summary of the results. You can search this website at any time.

COSTS

Taking part in this study may lead to added costs to you or your insurance company. You or your insurance company will be responsible for the following costs: Having your ears cleared of wax at your physician's office or location of your choosing. You will not be responsible for these study-specific costs: Having your ears cleared of wax by the audiologists working on the study.

You will not be responsible for these study-specific costs: a complete hearing evaluation provided in Visit 2. You will be responsible for purchasing the hearing aids, if you wish to participate in the study. The cost for the pair of hearing aids is \$600, which is due at the completion of the first session.

PAYMENT

You will receive payment for taking part in this study. You will be paid \$50 after the completion of Visits 1 and 2 of this study for a total payment of \$100. This amounts to 16.7% of the \$600 purchase price for your hearing aids. The first payment of \$50 will be applied as a credit toward the \$600 purchase price with the balance of \$550 payable at the end of Visit 1. The second payment, at the end of Visit 2, will be issued to you as a check for \$50.

COMPENSATION FOR INJURY

In the event of physical injury resulting from your participation in this research, necessary medical treatment will be provided to you and billed as part of your medical expenses. Costs not covered by your health care insurer will be your responsibility. Also, it is your responsibility to determine the extent of your health care coverage. There is no program in place for other monetary compensation for such injuries. However, you are not giving up any legal rights or benefits to which you are otherwise entitled. If you are participating in research that is not conducted at a medical facility, you will be responsible for seeking medical care and for the expenses associated with any care received.

CONTACTS FOR QUESTIONS OR PROBLEMS

For questions about the study or a research-related injury, contact the researcher, Larry Humes, at or . If you cannot reach the researcher during regular business hours (i.e., 8 a.m. to 5 p.m.), please call the IU Human Subjects Office at
For questions about your rights as a research participant, to discuss problems, complaints, or concerns about a research study, or to obtain information or offer input, contact the IU Human Subjects Office at

VOLUNTARY NATURE OF THIS STUDY

Taking part in this study is voluntary. You may choose not to take part or may leave the study at any time. Leaving the study will not result in any penalty or loss of benefits to which you are entitled. Your decision whether or not to participate in this study will not affect your current or future relations with the investigator(s).

Your participation may be terminated by the investigator without regard to your consent in the following circumstances: If it is determined that you have significant earwax buildup that interferes with test procedures and you choose to not have it removed.

If you withdraw or are terminated from the study before completion, your partial data may be used for data analysis unless you request that it not be used.

SUBJECT'S CONSENT

In consideration of all of the above, I give my consent to participate in this research study.

I will be given a copy of this informed consent document to keep for my records. I agree to take part in this study.

Subject's Printed Name:	<u> </u>
Subject's Signature:	Date:
	(must be dated by the subject
Printed Name of Person Obtaining Consent:	
Signature of Person Obtaining Consent	Date:

CD2 1-3

Introduction: You have the right to decide who may review or use your Protected Health Information ("PHI"). The type of information that may be used is described below. When you consider taking part in a research study, you must give permission for your PHI to be used and disclosed by the Research Team for the specific purpose of this research study.

What does this authorization relate to? This authorization relates to the following study:

Larry E. Humes	1111007504
PRINCIPAL INVESTIGATOR (in charge of Research Team)	IRB PROTOCOL #
	SPONSOR # R01-DC011771-01
NAME OF RESEARCH PARTICIPANT	BIRTHDATE
STREET ADDRESS	CITY. STATE & ZIP CODE

<u>What information will be used for research purposes?</u> The PHI used for this research study will include information that you provide to the Research Team and any data and reports created by the Research Team that may include this information. Your medical records will not be requested or otherwise accessed.

Who can access your PHI for the study? The principal investigator and research team may share my PHI (or the PHI of the individual(s) whom I have the authority to represent), with the following persons or groups for the research study: IU Institutional Review Board and its designees, Research Sponsor and its representatives, Research Organizations, the Department of Health & Human Services or other US or foreign government agencies as required by law, and to the Food and Drug Administration (FDA) or a person subject to the jurisdiction of the FDA in order to audit or monitor the quality, safety or effectiveness of the product or activity.

The Research	Team includes the Pri	ncipal Investigator,	his/her staff, res	search coordin	ators, research tecl	hnicians
and other staff	f members who provide	e assistance to the R	esearch Team.	If there is a	Research Sponsor	(s) , this
shall include:	National Institutes of	Health and any Res	search Organiz	zations who j	provided assistance	e to the
Research	Sponsor(s)	including,	but	not	limited	to:
Expiration da	te of this Authorization	n: This authorization	n is valid until th	e following d	ate or event:	
☐ Spe ☐Oth	ecify Date// er:		the Study authorization is	valid indefini	tely	

Efforts will be made to ensure that your PHI will not be shared with other people outside of the research study. However, your PHI may be disclosed to others as required by law and/or to individuals or organizations that oversee the conduct of research studies, and these individuals or organizations may not be held to the same legal privacy standards as are doctors and hospitals. Thus, the Research Team cannot guarantee absolute confidentiality and privacy.

CD2 1-3

I have the right:

1. To refuse to sign this form. Not signing the form will not affect my regular health care including treatment, payment, or enrollment in a health plan or eligibility for health care benefits. However, not signing the form will prevent me from participating in the research study above.

- 2. To review and obtain a copy of my personal health information collected during the study. However, it may be important to the success and integrity of the study that persons who participate in the study not be given access until the study is complete. The Principal Investigator has discretion to refuse to grant access to this information if it will affect the integrity of the study data during the course of the study. Therefore, my request for information may be delayed until the study is complete.
- 3. To cancel this release of information/authorization at any time. If I choose to cancel this release of information/authorization, I must notify the Principal Investigator for this study **in writing** at: *Department of Speech and Hearing Sciences, Attn: Dr. Larry Humes, 200 South Jordan Avenue, Bloomington, IN 47405.* However, even if I cancel this release of information/authorization, the Research Team, Research Sponsor(s) and/or the Research Organizations may still use information about me that was collected as part of the research project between the date I signed the current form and the date I cancel the authorization. This is to protect the quality of the research results. I understand that canceling this authorization may end my participation in this study.
- 4. To receive a copy of this form.

I have had the opportunity to review and ask questions regarding this release of information/authorization form. By signing this release of information/authorization, I am confirming that it reflects my wishes.

Printed name of Individ	dual/Legal Representative			
Trimed manie of manrie	and Zegan Hep esemente			
Signature of Individual	/Legal Representative		Date	
*If signed by a legal re	presentative; state the relat	ionship and identify below th	e authority to act on behalf o	f the individual's behalf.
	•	1 33		,
*Individual is:	a Minor	Incompetent	Disabled	□ Deceased
*Legal Authority:				
Custodia	al Parent L	egal Guardian	Executor of Estate of	f the Deceased
Power o	f Attorney Healthcare		Authorized Legal Re	
Other: _				-

For IU Human Subjects Office Use ONLY

CD2

PERMISSION TO CONTACT FOR OTHER RESEARCH PROJECTS

The Audiology Research Laboratory (ARL) is part of the Department of Speech and Hearing Sciences at Indiana University and often conducts research in conjunction with the I.U. Hearing Clinic. Researchers in the lab are continually trying to uncover new information about human hearing, better understanding of problems caused by hearing loss and new ways to help people with hearing problems. Research participants are scheduled for testing at their convenience and are provided with free parking. In addition, they often receive other benefits. For example, in several recent hearing aid research projects, participants have received discounts from 40-100% on the latest hearing aid technology.

If research studies arise in the future in the ARL, would you be willing to be contacted by a researcher to see if you are interested in participating in the project? If so, please check "Yes" below. If you check "Yes" below, you are just indicating a willingness to be contacted in the future and are in no way obligated to participate in a project until it has been fully explained to you and you agree to participate. If you change your mind and decide that you do not wish to be contacted, you may contact the director of the ARL, Larry Humes, to have your name removed from the list. A copy of this form is provided for your records. If you have any questions about this information, please contact Larry Humes

Yes, I am willing to be or research in this laboratory.	contacted in the future as a possib	ole subject for
No, I am not interested i	n being contacted in the future.	
Participant's Signature	Date	
Examiner's Signature	Date	
Phone number/e-mail address		

CD2 1-5

CD2 Demographic (Visit 1)

1) <u>Gen</u>	der (check one)
	Male
	Female
2) <u>Ethn</u>	ic Category (check one)
_	Hispanic or Latino
_	Not Hispanic or Latino
3) <u>Raci</u>	al Categories (check all that apply)
_	American Indian/Alaska Native
_	Asian
_	Native Hawaiian or Other Pacific Islander
	Black or African American
_	White
	***** For Lab Use Only *****
	4) Date:
	5) Grant Type: ABCD
	6) Date of Data Entry Completion:

START HERE

and HOW TO CHOOSE A COLOR FOR YOUR HEARING AID

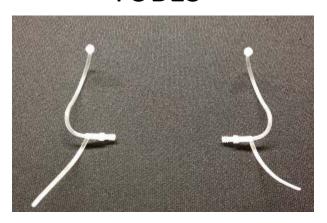
You will now use the contents of these binders to assemble and select hearing aids for both of your ears, beginning with your right ear. A 5-10 minute instructional video will demonstrate the steps you will take.

Each hearing aid has been programmed to sound a bit differently (denoted by the X, Y, and Z) and you will figure out which sounds the best to you, but all have the same basic features. The hearing aids are available in three colors (beige, brown, and grey). Your first task will be to pick the color you want. Then, you will assemble a hearing aid for your right ear and decide which programming suits you best by listening to provided sound samples with each of the different hearing aids (X, Y, and Z). Finally, you will repeat this assembling process for your left ear.

The pages in these binders will walk you through the necessary steps (steps 2-6) to choose a hearing aid for your right ear first and then your left ear (steps 2-5). After viewing the 5-10 minute instructional video, please complete the instructions on each page of the binders in order without skipping any steps.

Parts of the hearing aid

TUBES



DOMES



BODY OF HEARING AID



How to choose a color for your hearing aid

You have a choice of three colors:

beige brown grey



Steps for picking the color for your hearing aids (Steps A-E):

- A. There are two mirrors for you to use: a pedestal mirror that has a magnified side and a large mirror on the wall to your right.
- B. Look at the three trays of hearing aids. One tray contains 6 beige hearing aids, one contains 6 brown hearing aids, and one contains 6 grey hearing aids. Pull the color tray you think you would like closer to you.

- C. Choose one of the 2 hearing aids labeled **X** from the color tray you have selected.
- D. Look in the mirror, hold the hearing aid behind your ear and up to your hair, and decide if you like this color or not. Feel free to go back to one of the other trays if you are uncertain.
- E. After you have picked the color that you like best, stack the other two trays and push them to the back of the table out of your way.

Note: Do not close the battery door to the hearing aids yet. You will be instructed to close it later. If it closes accidentally before instructed, just open it slightly.

Before you start putting together your hearing aid for each ear, it may be helpful to see the finished product. When you are finished, your hearing aid should look like this when all parts are assembled. See the display on the model ears for what it will look like on your ear in the end.

LEFT EAR







Now you are going to make some decisions for each ear starting with your right ear.

After you have completed steps 2-6 in the red book for your right ear, you will then then do steps 2-5 in the blue book for your left ear.

Close this book and set it to the side. Pick up the red book and follow steps 2-6 to assemble and pick a hearing aid for your right ear.

CHOOSING A HEARING AID FOR YOUR RIGHT EAR

2. How to choose a tube and dome for your right ear

Men start with a red size 2 tube and a large dome.



LARGE DOME





Women start with a **red** size 1 tube and a **medium** dome.

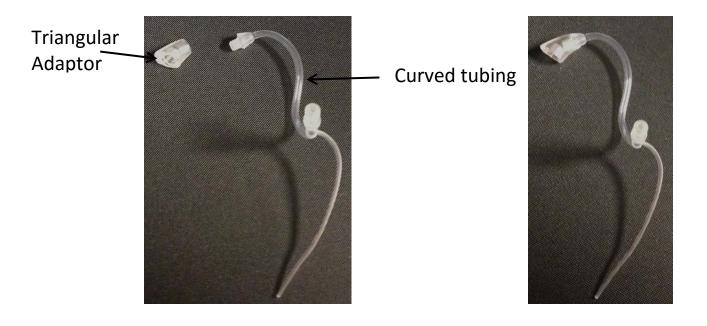


MEDIUM DOME



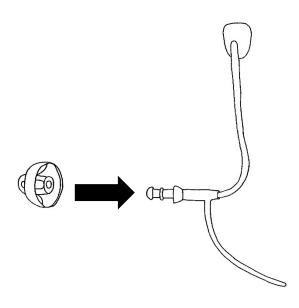


There are two parts to the tube; the triangular adaptor (top portion) and the curved tubing. The triangular adaptor is currently attached to the tube, but it should remain attached to the hearing aid body during cleaning. Later, you should review the user guide for how to clean the tubes when necessary.

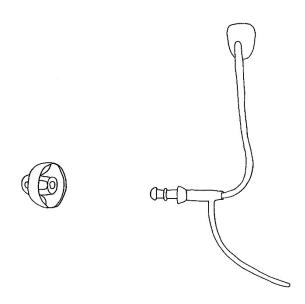


Steps for attaching the dome to the tube (Steps A-B):

A.Push the dome over the ridged end of the tube.

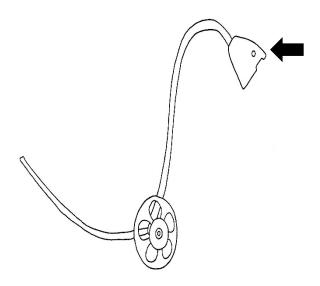


B. Make sure the dome is pushed onto the tube as far as it can go.

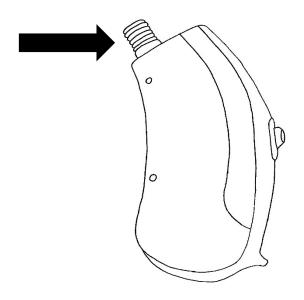


Steps for attaching the tube and dome to the body of the hearing aid (Steps A-D):

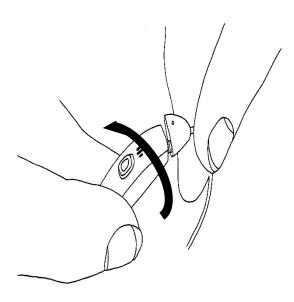
A. Find the triangular end of the tube.



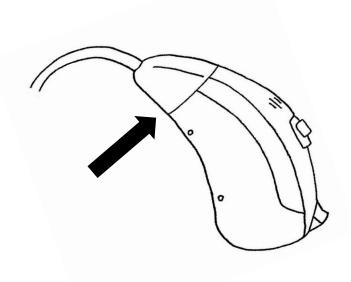
B. Find the grey screw on the top of the hearing aid body.



C. Attach the two parts together. To do this, screw (clockwise) the triangular part of the tube onto the grey screw on the top of the hearing aid body.



D. Screw the tube onto the hearing aid until the triangular section fits neatly with the hearing aid body.



3. How to put the hearing aid in your right ear

Use your right hand to place the hearing aid body behind your right ear.



Insert the dome snugly into your ear opening. Leave the anchor sticking out for now.



Feel the bowl of your ear with your finger. This is where the anchor will go.

Curl the anchor along the bowl of your ear, and ensure it does not stick out of your ear.





The tube should fit close to the side of your head (should not be bowed out or pinching the top of your ear).

When it is in correctly it should look like the picture on the left. If your hearing aid does not look like this on your ear, the next step will tell you how to fix it.

PLACED CORRECTLY



PLACED INCORRECTLY



4. How to check the fit of the hearing aid on your ear

Checking that the tube fits well (Steps A-H):

- A. The tubes are sized from 0 (shortest) to 3(longest).
- B. Move your head side to side and tilt it forward and back.
- C. If the tube is not sitting close to the side of your face or the hearing aid falls off your ear, try a shorter tube.
- D. If the hearing aid feels too tight/pinches on the top of your ear, try a longer tube.
- E. If it feels fine and stays on your ear, keep the tube you have.
- F. Place any tubes that you tried but did not fit in the **black/no** bin.
- G. Slide the container with the **red** (right) tubes off to the left side of the table.
- H. Record your final choice on the Rx pad.

Steps for checking that the dome fits well (Steps A-F):

- A. Open and close your mouth.
- B. If the dome feels like it is going to come out of your ear, choose a bigger dome.
- C. If it feels too tight inside your ear, choose a smaller dome.
- D. If it feels comfortable, keep the dome you have.
- E. Place any domes that you tried but did not fit in the **black/no** bin.
- F. Record your final choice on the Rx pad.

5. How to listen to different sounds with the "X" hearing aid

With the hearing aid you have on from the **X** bin, in your color choice, and tube and dome configuration, snap the battery door shut. This will turn your hearing aid on. See the next page for additional instructions.

To do this, while still wearing the hearing aid, push the battery door on the bottom of the hearing aid with your thumb until it completely closes. You will hear/feel a click when the battery door closes. Also, you will hear several beeps indicating that the hearing aid is powering on.

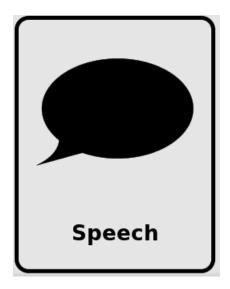


It should look like this after it is closed.



Now you will listen to different sound samples using the small computer screen on the right side of the table. The loudspeaker is located directly in front of you mounted on the wall. When doing any of the following listening tasks, after you push one of the sound buttons on the small computer screen, you should look directly at the loudspeaker to get the best listening experience.

Press the speech bubble button.



- You will hear up to one minute of men and women speaking various sentences, but you can replay it as many times as you need.
- While listening, take note of the sound quality you hear with this model.
- You can stop the sample by pressing the stop button at any time.

Now press the music note button.



- You will hear up to one minute of classical music, but you can replay it as many times as you need.
- While listening, take note of the sound quality you hear with this model.
- You can stop the sample by pressing the stop button at any time.

Next press the tree button.



- You will hear up to one minute of environmental sounds, but you can replay it as many times as you need.
- While listening, take note of the sound quality you hear with this model.
- You can stop the sample by pressing the stop button at any time.

6. How to listen to sounds with Y and Z hearing aids

If you have already listened with **Y** model skip ahead to instructions for **Z** model.

Now you are going to pick one of the two hearing aids of the same color from the **Y** bin and repeat the steps in Steps 3&5 for putting the hearing aid on and listening to speech, music, and environmental sounds.

Before listening to these sounds you will need to switch hearing aids. The 4 steps on the next page will tell you how to switch hearing aids.

- A. To remove the hearing aid from your ear, grab by the tube and pull outward.
- B. With the hearing aid out of your ear, open the battery door, and remove your tube, with your dome and the triangular adaptor still attached, by unscrewing it (counterclockwise) from the body of the hearing aid. Put the X model in the green/yes bin. You will now be using the Y model to listen to sound samples.
- C. Screw your tube (with your dome and the triangular adaptor still attached) onto (clockwise) the body of the **Y** hearing aid. Refer to step 2 if you have forgotten how to do this. Now repeat steps 3&5 (putting the hearing aid on and listening to sound samples).
- D. After listening to the sound samples, decide if you prefer the **Y** model over the **X** model. Keep your favorite model on your ear, and place the other model in the **black/no** bin.

If you have already listened with the **Z** model skip ahead to page 32.

Now you are going to pick one of the two hearing aids of the same color from the **Z** bin and repeat the steps in Steps 3&5 for putting the hearing aid on and listening to speech, music, and environmental sounds.

Before listening to these sounds you will need to switch hearing aids. The 4 steps on the next page will tell you how to switch hearing aids.

- A. To remove the hearing aid from your ear, grab by the tube and pull outward.
- E. With the hearing aid out of your ear, open the battery door, and remove your tube, with your dome and the triangular adaptor still attached, by unscrewing it (counterclockwise) from the body of the hearing aid. Put this model in the green/yes bin. Now you will be using the Z model to listen to sound samples.
- B. Screw your tube (with your dome and the triangular adaptor still attached) onto (clockwise) the body of the **Z** hearing aid. Refer to step 2 if you have forgotten how to do this. Now repeat steps 3&5 (putting the hearing aid on and listening to sound samples).
- C. After listening to the sound samples, decide if you prefer the **Z** model over the model in the **green/yes** bin. Place/keep your favorite model on your ear, and place the other model in the **black/no** bin.

After you have tried different models, if you are certain of your choice continue on to the next page.

If you are uncertain of your preference, feel free to go back and try the other models again listening to the sound samples as needed.

When you are certain of your preference, place that model on your ear (refer to step 4 if you have forgotten how to do this) and the other two models in the **black/no** bin.

Record your final choice on the Rx pad.

Now that you have picked a hearing aid for your right ear, you will do the same thing for your left ear.

Close this book and set it to the side. Pick up the blue book and follow the steps to assemble and pick a hearing aid for your **left ear**.

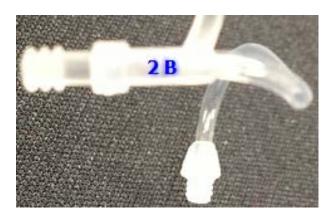
CHOOSING A HEARING AID FOR YOUR LEFT EAR

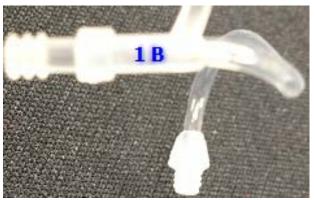
Now you are going to assemble a hearing aid for your left ear.

Pick up the other hearing aid in the bin of the model you chose for your right ear which should be recorded on your Rx pad. For example, if you chose a Y model for your right ear, you should pick up the Y model for your left ear. Use this hearing aid for the following steps (Steps 2-5).

Note: Do not close the battery door on the **left** hearing aid yet. You will be instructed to close it later. If it closes accidentally before instructed, just open it slightly.

How to choosea tube and domefor your left ear





LARGE DOME





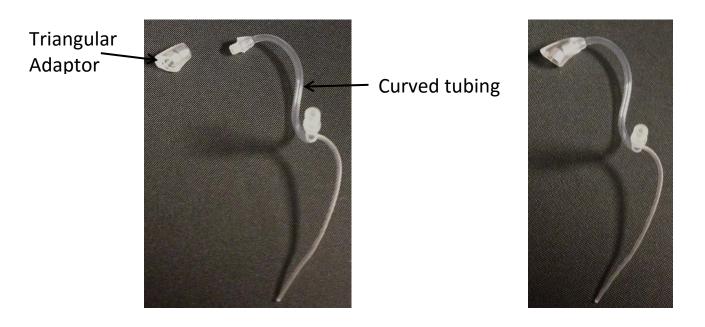
MEDIUM DOME





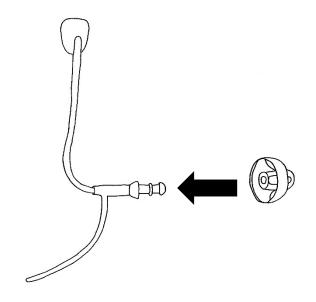
Choose the same size tube and dome you ended up with for your right ear. Refer to your Rx pad to find these sizes.

There are two parts to the tube; the triangular adaptor (top portion) and the curved tubing. The triangular adaptor is currently attached to the tube, but it should remain attached to the hearing aid body during cleaning. Later, you should review the user guide for how to clean the tubes when necessary.

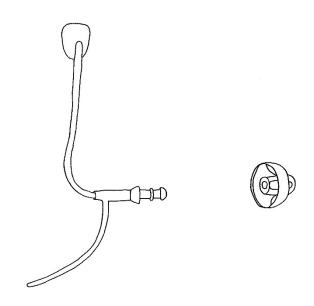


Steps for attaching the dome to the tube (Steps A-B):

A. Push the dome over the ridged end of the tube.



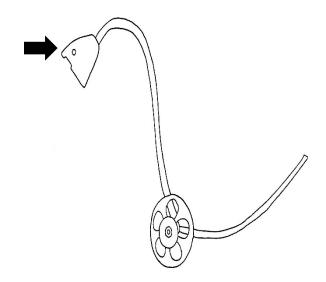
B. Make sure the dome is pushed onto the tube as far as it can go.



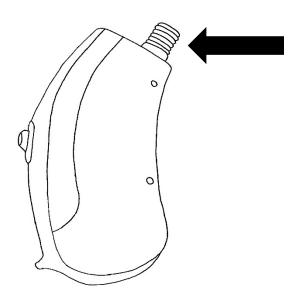
Steps for attaching the tube and dome to the body of the hearing aid (Steps A-D):

A. Find the triangular end of the tube.

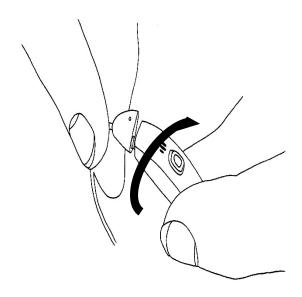
LEFT EAR



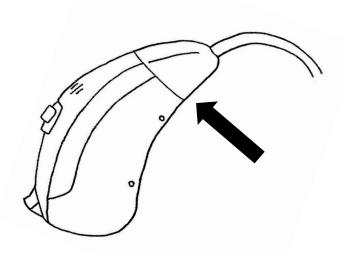
B. Find the grey screw on the top of the hearing aid body.



C. Attach the two parts together. To do this, screw (clockwise) the triangular part of the tube onto the grey screw on the top of the hearing aid body.



D. Screw the tube onto the hearing aid until the triangular section fits neatly with the hearing aid body.



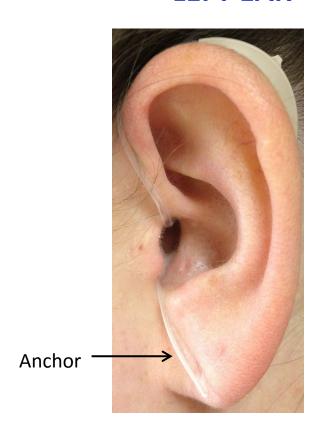
3. How to put the hearing aid in your left ear

Use your left hand to place the hearing aid body behind your left ear.



Insert the dome snugly into your ear opening. Leave the anchor sticking out for now.

LEFT EAR



Feel the bowl of your ear with your finger. This is where the anchor will go.

Curl the anchor along the bowl of your ear, and ensure it does not stick out of your ear.





The tube should fit close to the side of your head (should not be bowed out or pinching the top of your ear).

When it is in correctly it should look like the picture on the left. If your hearing aid does not look like this on your ear, the next step will tell you how to fix it.

PLACED CORRECTLY



PLACED INCORRECTLY



4. How to check the fit of the hearing aid on your ear

Steps for checking that the tube fits well (Steps A-G):

- A. The tubes are sized from 0 (shortest) to 3(longest).
- B. Move your head side to side and tilt it forward and back.
- C. If the tube is not sitting close to the side of your face or the hearing aid falls off your ear, try a shorter tube.
- D. If the hearing aid feels too tight/pinches on the top of your ear, try a longer tube.
- E. If it feels fine and stays on your ear, keep the tube you have.
- F. Place any tubes that you tried but did not fit in the **black/no** bin.
- G. Record your final choice on the Rx pad.

Steps for checking that the dome fits well (Steps A-F):

- A. Open and close your mouth.
- B. If the dome feels like it is going to come out of your ear, choose a bigger dome.
- C. If it feels too tight inside your ear, choose a smaller dome.
- D. If it feels comfortable, keep the dome you have.
- E. Place any domes that you tried but did not fit in the **black/no** bin.
- F. Record your final choice on the Rx pad.

5. How to listen to different soundswith both hearing aids

With the hearing aids you have chosen, in your color choice, and tube and dome configuration, snap the battery door of the **left** hearing aid shut (your **right** hearing aid should already be turned on). This will turn your hearing aid on. See the next page for additional instructions.

To do this, while still wearing the hearing aid, push the battery door on the bottom of the hearing aid with your thumb until it completely closes. You will hear/feel a click when the battery door closes. Also, you will hear several beeps indicating that the hearing aid is powering on.

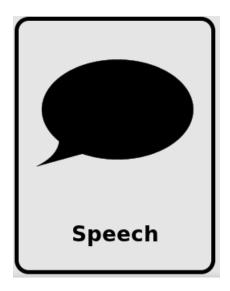


It should look like this after it is closed.



Now you will listen to different sound samples using the small computer screen on the right side of the table. The loudspeaker is located directly in front of you mounted on the wall. When doing any of the following listening tasks, after you push one of the sound buttons on the small computer screen, you should look directly at the loudspeaker to get the best listening experience.

Press the speech bubble button.



- You will hear up to one minute of men and women speaking various sentences, but you can replay it as many times as you need.
- While listening, take note of the sound quality you hear with this model.
- You can stop the sample by pressing the stop button at any time.

Now press the music note button.



- You will hear up to one minute of classical music, but you can replay it as many times as you need.
- While listening, take note of the sound quality you hear with this model.
- You can stop the sample by pressing the stop button at any time.

Next press the tree button.



- You will hear up to one minute of environmental sounds, but you can replay it as many times as you need.
- While listening, take note of the sound quality you hear with this model.
- You can stop the sample by pressing the stop button at any time.

Now, after listening to all three sound samples by wearing a hearing aid on each ear, do you like the way the hearing aids sound together?

If **YES**, record your final choices on your Rx pad and continue on to the next page.

If **NO**, pick two of the same hearing aids from a different bin (**X**,**Y**, or **Z**) and listen to the sound samples again. For example, if you are wearing two **X** models, switch to either two **Y's** or two **Z's**. You will need to remove the hearing aids from your ears, remove the tubes from these hearing aids, and then place them on a different hearing aid. You will then place this model on your ear and listen to the different sound samples.

Once you have determined which model is your favorite, place them on your ears and place the other models in the **black/no** bin.

Record your final choices on your Rx pad.

In the end, you will have only one hearing aid for the right ear and only one hearing aid for the left ear.

When you are comfortable with your decision, you should have your preferred model on your ears, and the rest of the models that you tried on today should be in the **black/no** bin along with any tubes and domes that were tried, but did not fit.

Congratulations! You have now selected your new hearing aids. Press the button on the pager device located behind you to let the Clinical Trials Coordinator know you have made your final decision.



Rx for			

Т	ľ
	П
•	
_	G

	Right Hearing Aid	Left Hearing aid	
Color	Beige	Beige	
	Brown	Brown	
	Grey	Grey	
Tube	Size 0	Size 0	
	Size 1	Size 1	
	Size 2	Size 2	
	Size 3	Size 3	
Dome	Small	Small	
	Medium	Medium	
	Large	Large	
	Tulip	Tulip	
Model	X	X	
	Υ	Υ	
	Z	Z	

Rx for	

Z

	Right Hearing Aid	Left Hearing aid	
Color	Beige	Beige	
	Brown	Brown	
	Grey	Grey	
Tube	Size 0	Size 0	
	Size 1	Size 1	
	Size 2	Size 2	
	Size 3	Size 3	
Dome	Small	Small	
	Medium	Medium	
	Large	Large	
	Tulip	Tulip	
Model	X	X	
	Υ	Υ	

□ Z

Rx for _

_	
	_
-1	T-
ш	ш.
٠.	
- 4	

	Right Hearing Aid	Left Hearing aid	
Color	Beige	Beige	
	Brown	Brown	
	Grey	Grey	
Tube	Size 0	Size 0	
	Size 1	Size 1	
	Size 2	Size 2	
	Size 3	Size 3	
Dome	Small	Small	
	Medium	Medium	
	Large	Large	
	Tulip	Tulip	
Model	X	X	
	Υ	Υ	
	Z	Z	

Rx for _____

Color	Beige	Beige	
	Brown	Brown	
	Grey	Grey	
Tube	Size 0	Size 0	
	Size 1	Size 1	
	Size 2	Size 2	
	Size 3	Size 3	
Dome	Small	Small	
	Medium	Medium	
	Large	Large	
	Tulip	Tulip	
Model	Χ	X	

 \Box Z

Left Hearing aid

Right Hearing Aid

Υ



CD2 1-10 (8/23/17)

SUBJECT #:	TEST DATE:
EXAMINER'S INITIALS	S:
Time needed for Visit 1: _	
Number of times subject p	paged CTC with questions/problems (outside of
needed pages when finish	ed with something):
Reasons for being paged a	

CD2	1-10 (8/23/17)

Subject #:			Date:	
Number of addit	ional people ir	n room:		
Relationship(s) to	patient:			
	HEAR	RING AID DECIS	SION FORM FOR CTC	
On a scale of 1-1	0, with 10 bei	ng the best, how	helpful was the instructional video?	
RIGHT Hearing Aid:			LEFT Hearing Aid:	
Hearing aid: X	Y Z		Hearing aid: X Y Z	
Serial Number:			Serial Number:	
Color: Grey E	Beige Brown		Color: Grey Beige Brown	
Tubing Length: 0	1 2 3		Tubing Length: 0 1 2 3	
Dome Size: S M	L Tul	ip	Dome Size: S M L Tulip	
	<u>N</u>	NOT INTERESTE	<u>D BIN</u>	
Hearing Aids			<u>Tubes and Tips</u>	
Color	Letter			
	1			

CD2 Subject	# Date:	1-12
	Visit 1 Hearing Aid Selection Survey	
	10 (easy), how easy/difficult was it to select and	fit your tubing ? (write #
gh 10, in blank)		
1 (Difficult)	5 (Neutral)	10 (Easy)
	10 (easy), how easy/difficult was it to select and	fit your dome ? (wi
rough 10, in blank)		
1 (Difficult)	5 (Neutral)	10 (Easy)
a scale of 1 (difficult) to	10 (easy), how easy/difficult was it to select and	fit your hearing aids ?
rough 10, in blank)		
nrough 10, in blank)		
1 (Difficult) a scale of 1 (not confide	5 (Neutral) ent) to 10 (confident), how confident were you in	10 (Easy) selecting your tubing?
1 (Difficult)	ent) to 10 (confident), how confident were you in	
1 (Difficult) a scale of 1 (not confide #, 1 through 10, in blan 1 (Not Confident)	ent) to 10 (confident), how confident were you in	selecting your tubing?
1 (Difficult) a scale of 1 (not confide #, 1 through 10, in blan 1 (Not Confident)	ent) to 10 (confident), how confident were you in it.) 5 (Neutral) ent) to 10 (confident), how confident were you in	selecting your tubing?
1 (Difficult) a scale of 1 (not confide #, 1 through 10, in blan 1 (Not Confident) a scale of 1 (not confide	ent) to 10 (confident), how confident were you in it.) 5 (Neutral) ent) to 10 (confident), how confident were you in	selecting your tubing?
1 (Difficult) a scale of 1 (not confide #, 1 through 10, in blan 1 (Not Confident) a scale of 1 (not confide #, 1 through 10, in blan	ent) to 10 (confident), how confident were you in it.) 5 (Neutral) ent) to 10 (confident), how confident were you in it.)	selecting your tubing? 10 (Confident) selecting your dome?
a scale of 1 (not confident) 1 (Not Confident) a scale of 1 (not confident) a scale of 1 (not confident) #, 1 through 10, in blant	5 (Neutral) 2 (Neutral) 2 (Neutral) 3 (Neutral) 4 (Neutral) 5 (Neutral) 5 (Neutral) 6 (Neutral)	selecting your tubing? 10 (Confident) selecting your dome?

5 (Neutral)

10 (Most Helpful)

(write #, 1 through 10, in blank)

1 (Least Helpful)

USER GUIDE

BEHIND-THE-EAR (BTE) MODELS: THIN TUBE





Hearing instrument mode	el:
Battery size:	_
Tube length:	_
Dome size:	_
Left serial number:	
Right serial number:	
Date of Purchase:	
Warranty Expiration:	

1-13

STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from the one in which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications can void the user's authority to operate the equipment.

INTENDED USE

Generic air-conduction hearing instruments are wearable sound-amplifying devices intended to compensate for impaired hearing. The fundamental operating principle of hearing instruments is to receive, amplify, and transfer sound to the ear drum of a hearing impaired person.

INTRODUCTION

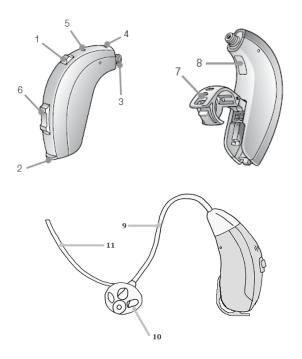
Congratulations on the purchase of your new hearing instruments. The innovative sound technology and design will make hearing a more enjoyable experience. These hearing instruments are state of the art digital technology with multiple channels, directional microphones, and advanced feedback control and noise reduction. Your hearing instruments will enable you to hear sounds that you may not have heard in years because of your hearing loss. Practice and a positive attitude are important in learning to use hearing instruments. Some people adjust quickly to wearing hearing instruments in their ears and hearing new sounds; other people may need more time. Please read this manual carefully in order to wholly benefit from the use of your hearing instruments. With proper care, maintenance, and usage, your hearing instruments will aid you in better communication for many years. Ask IUCT if you have any questions.

CONTENTS	PAGE
GETTING STARTED	
Components	6
Adjusting to a world of new sounds	7
Turning your hearing instrument on and	off 7
Delayed start	8
Insertion and removal	8
CONTROLS AND FEATURES	
Volume control	9
Telephone use	9
Listening to the radio/TV	10
Cell phones	10
Changing the battery	10
Low battery indicator	11
Battery warning information	11
MAINTENANCE	
Daily maintenance	12
Care and maintenance	12
Maintaining the thin tubes and domes	13
How to apply domes	14
GENERAL INFORMATION	
General precautions	15
General warnings	15-16
Troubleshooting guide	17
Warranty and repairs	18
Loss and damage	18
Communication hints	19-20
Notes	21-22
Personal information	23

GETTING STARTED 1-13

COMPONENTS

- 1. Volume Control
- 2. Battery compartment & On/Off switch
- 3. Sound outlet
- 4. Front microphone inlet
- 5. Back microphone inlet
- Optional Volume Control (Your hearing aid does not have this)
- 7. Left/Right indicator (Left=Blue/Right=Red)
- 8. Serial number
- 9. Thin tube
- 10. Dome
- 11. Anchor



GETTING STARTED 1-13

ADJUSTING TO A WORLD OF NEW SOUNDS

A hearing loss is typically acquired gradually over many years. You may have become accustomed to an everyday life with fewer sounds, which also means hearing less noise than people with normal hearing.

With your new hearing instruments you will experience many sounds that you may not have heard for years such as:

Clocks tickingNewspaper crinklingBird songs

- Children's voices - Footsteps on the floor

Whispers and soft speech
 It can take several months for your brain to become accustomed to all of the "new" sounds around you.

TURNING YOUR HEARING INSTRUMENT ON AND OFF

Your hearing instrument is equipped with an on/off switch integrated into the battery compartment.

- 1. When the battery compartment is fully closed, the instrument is turned on.
- To turn the instrument off, open the battery door by lifting the tab at the base of the battery door. Once the battery door opens, the instrument will be turned off.
- Whenever you are not using the instrument, remember to turn it off to reduce battery consumption.



GETTING STARTED 1-13

DFLAYED START

Generally, people prefer to turn on the hearing instrument once it is fully inserted in the ear. To facilitate this, IUCT has activated the delayed start function. Delayed start allows you to insert the instrument into the ear without annoying squealing sounds by delaying activation of the device by ten seconds after closing the battery door. During this 10-second period you will hear soft beeps.

INSERTION AND REMOVAL

INSERTION

- 1. Hang the instrument over the top of your ear.
- Hold the thin tube where it bends, and gently push
 the dome into the ear canal. Push the dome far
 enough into the ear canal so that the thin tube lies
 flush with the head. Curl the anchor along the bowl of
 your ear.
- 3. It is important that the tube and the dome fit correctly into your ear.
- 4. When the dome is placed correctly, you should not be able to see the thin tube sticking out when facing a mirror.

Note: You should never attempt to bend or modify the shape of the thin tube.

RFMOVAL

Hold the thin tube with your thumb and forefinger and pull the tube outward.

VOLUME CONTROL

Your hearing instrument features volume settings. Please refer to page 6 for the location of the volume control.

- You can switch between volume settings by pushing the volume control once.
- You will hear one or more beeps. The number of beeps indicates which volume setting you have selected.
- 3. You can always return to everyday setting by turning your instrument off and then on again.

Volume setting	Description
1 beep	Everyday
2 beeps	Soft
3 beeps	Softest
4 beeps	Loudest

TELEPHONE USE

Finding the optimal position for holding a telephone may require practice for some individuals, and one or more of the following suggestions may be helpful.

- 1. Hold the telephone as you would normally.
- 2. Hold the telephone towards the top of the ear (closer to where the microphones are).
- If whistling occurs, it may take a few seconds of holding the telephone in the same position before the hearing instrument eliminates the feedback.
- 4. Any whistling may also be decreased by holding the telephone slightly away from the ear.



LISTENING TO THE RADIO OR TV

When listening to the TV or the radio, start out by listening to news commentators since they usually speak clearly, and then try other programs.

CELLULAR PHONES

Your hearing instrument is designed to comply with the most stringent Standards of International Electromagnetic Compatibility. However, not all cell phones are hearing instrument compatible. The varying degree of disturbance can be due to the nature of your particular cellular phone or of your wireless telephone service provider.

CHANGING THE BATTERY

The batteries for the hearing instrument are quite small, which may cause difficulty in seeing the battery and battery door markings. A magnifying glass and good lighting may be helpful.

- 1. Open the battery door completely by using your fingernail to lift on the battery door.
- Remove the used battery if present. Insert the new battery with the positive "+" (flat) side facing the "+" on the battery door.
- It should fit in like a puzzle piece. The battery door should close very easily. Never use force to close the door as this may damage your hearing instrument.
- 4. The magnet on the end of your cleaning brush can be used to remove the battery.
- 5. Always use the correct size new Zinc-Air batteries that have a minimum remaining shelf life of 1 year.

LOW BATTERY INDICATOR

A low battery indicator is activated in your hearing instruments. The hearing instrument will reduce amplification and play a melody if battery power gets too low. This signal will recur every five minutes until the hearing instrument automatically switches off. The timing of the low battery indicator can vary slightly depending on the type of battery used. It is recommended that you keep spare batteries on hand. Your batteries will last 5-7 days with typical everyday use.

Please note that a weak battery will affect the performance of your hearing instrument. Remove the batteries to prevent battery leakage or corrosion when the hearing instruments are not in use for an extended period of time.

BATTERY WARNING INFORMATION

Batteries contain dangerous substances and should be disposed of carefully. This is for your safety. Please note:

- DO NOT attempt to recharge batteries (Zinc Air)
 which are not specifically designated as rechargeable
 because they may leak or explode.
- DO NOT attempt to dispose of batteries by burning them.
- DO NOT place batteries in your mouth. Consult a physician immediately if a battery has been swallowed, as they can be harmful to your health.
- 4. Keep batteries away from pets, children and individuals who are mentally challenged.
- 5. Used batteries are harmful to the environment.
 Please dispose of them according to local regulations or return them to IUCT.

MAINTENANCE 1-13

DAILY MAINTENANCE

It is important to keep your hearing instrument clean and dry. On a daily basis, clean the case of the hearing instruments using a soft cloth or tissue. Do not use water or solvents, as these can damage the hearing instrument(s). The use of a drying kit is recommended in order to avoid damage due to humidity or excessive perspiration, and will be provided to you for your use at the end of session 3.



CARE AND MAINTENANCE

Your hearing instrument is protected by a layer of protective, hydrophobic nanocoat material. However, please follow these instructions to further prolong the durability of your hearing instruments.

- Never immerse hearing instruments in water or other liquids, as liquids may cause permanent damage to the hearing instruments.
- Avoid rough handling of hearing instruments or dropping them on hard surfaces or floors.
- Do not leave hearing instruments in or near direct heat or sunlight, as excessive heat can cause damage or deform the casing.
- 4. Hair spray, make-up, etc. may damage hearing instruments. Remove the instruments prior to the application of cosmetics.

MAINTENANCE 1-13

MAINTAINING THE THIN TUBES AND DOMES

The thin tube and the dome feed the amplified sound from the hearing instrument into the ear. It is important that the tube and the dome fit correctly in your ear. If the tube or the dome irritates your ear in any way and prevents you from wearing your hearing instrument please let the clinician know when you return for session 3 in about 6 weeks. You should never attempt to modify the shape of the tube yourself.

The tube and the dome should be cleaned regularly.

- Wipe down thin tubes and domes with a damp cloth.
 The wire loop on the end of your cleaning brush can be used to remove debris from the dome and sound bore, and the cleaning brush can be used to remove debris from the microphone ports.
- 2. If debris is seen in the thin tube, first remove thin tubes from hearing instruments before cleaning by unscrewing them counter clockwise from the triangular adaptor. Then, push the black cleaning rod through the thin tube, beginning at the end opposite the dome. This will push out any debris or moisture that may be in the thin tube.
- It is not recommended to submerge or rinse the tube and dome with water, as there is a risk that a water drop may become lodged in the tube.



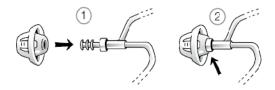
Note: The thin tube may become stiff, brittle, or discolored over time. Contact IUCT regarding tube and dome changes.

MAINTENANCE 1-13

HOW TO APPLY THE DOMES STANDARD DOMES

1. Push the new dome over the flanges on the thin tube.

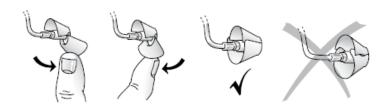
2. Make sure that the new dome is properly and securely mounted.



TULIP DOMES

Tulip domes are mounted in a similar manner to standard domes, but a few extra steps are required. Tulip domes consist of two "petals". It is important to note that the largest petal is the outermost petal. To ensure this:

- 1. Push the largest petal away from the thin tube using a finger. This bends the petal forward.
- 2. Then push the largest petal back, and it will be placed on top of the smallest petal.



GENERAL PRECAUTIONS

- 1. Do not leave hearing instruments in the sun, near an open fire, or in a hot, parked car.
- Do not wear hearing instruments while showering, swimming, in heavy rain, or in a moist atmosphere such as a steam bath or sauna.
- 3. Should the hearing instrument become moist, remove the battery and place the hearing instrument in a closed container with a drying agent. IUCT will provide a drying kit at the end of session 3.
- 4. Remove the hearing instruments when applying items such as cosmetics, perfume, aftershave, hair spray, and suntan lotion.
- 5. Use only the original consumables, e.g., tubes and domes given to you by IUCT.

GENERAL WARNINGS

- Please let the IUCT staff know on return visit if you think there may be a foreign object in your ear canal, if you experience skin irritation, or if excessive ear wax accumulates with the use of the hearing instrument.
- 2. Different types of radiation, from e.g. NMR, MRI, or CT scanners, may damage hearing instruments. It is recommended not to wear hearing instruments during these or other similar procedures. Other types of radiation, such as burglar alarms, room surveillance systems, radio equipment, mobile telephones, contain less energy and will not damage hearing instruments. However, they have the potential to momentarily affect the sound quality or temporarily create strange sounds from hearing instruments.

- Do not wear hearing instruments in mines, oil fields, or other explosive areas unless those areas are certified for hearing instrument use.
- 4. Do not allow others to use your hearing instruments. This may cause damage to the hearing instruments or to the hearing of the other individual.
- 5. Instrument usage by children or mentally challenged persons should be supervised at all times to ensure their safety. The hearing instrument contains small parts that could be swallowed by children. Please be mindful not to leave children unsupervised with this hearing instrument.
- Hearing instruments should be used only as prescribed by your hearing care professional. Incorrect use may result in hearing loss.
- 7. Warning to hearing care professionals: Special care should be exercised in selecting and fitting a hearing instrument(s) whose maximum sound pressure level exceeds 132 dB SPL (with an IEC 60711:1981 occluded ear simulator), because there may be a risk of impairing the remaining hearing of the hearing instrument user.

TROUBLESHOOTING GUIDE

Symptom	Cause	Possible Remedy
No sound	-Not turned on	-Turn on by
		closing the
		battery door
	-Battery	-Replace battery
	low/dead	
	-Battery door	-Insert battery
	will not close	properly
	-Battery	-Insert battery
	improperly	properly
	inserted	
	-Blocked tube	-Clean tube
Not loud enough	-Incorrect dome	-Re-insert dome
	placement	
	-Blocked dome	-Clean/replace
		dome
	-Change in	-Consult IUCT on
	hearing	or after session 3
	sensitivity	
	-Excessive ear	-Consult your
	wax	physician
Excessive	-Incorrect dome	-Re-insert dome
whistling/feedback	placement	
	-Excessive ear	-Consult your
	wax	physician
	-Thin tube worn	-Consult IUCT on
	or damaged	or after session 3
	-Thin tube	-Consult IUCT on
	connection	or after session 3
	loose	
Sound distorted/	-Weak battery	-Replace battery
not clear	-Improper dome	-Consult IUCT on
	fit	or after session 3
	-Hearing	-Consult IUCT on
	instrument	or after session 3
	damaged	

WARRANTY AND REPAIRS

These hearing instruments have been provided by an international hearing aid company in Denmark to Indiana University Clinical Trials. The Danish company provides a warranty on hearing instruments in the event of defects in workmanship or materials, as described in applicable warranty documentation.

In its service policy, the company pledges to secure functionality at least equivalent to the original hearing instrument.

As a signatory to the United Nations Global Compact initiative, the company is committed to doing this in line with environment-friendly best practices. Hearing instruments therefore, at the company's discretion, may be replaced by new products or products manufactured from new or serviceable used parts, or repaired using new or refurbished replacement parts.

The warranty period of your hearing instruments is designated on the inside cover of this user guide. For hearing instruments that require service, please contact IUCT for assistance.

The company's hearing instruments that malfunction must be repaired by a qualified technician. Do not attempt to open the case of hearing instruments, as this will invalidate the warranty.

1-13

COMMUNICATION HINTS GENERAL

- A. Keep informed about national and world affairs, community events and activities within your social circle.
- B. Keep informed about events of interest to your family and friends.
- C. Encourage two-way exchange of information. Don't monopolize a conversation.
- D. Concentrate on understanding concepts and main ideas rather than isolated words.
- E. Cultivate personality traits that win friends and influence people, such as having a genuine interest in others, wearing a sincere ready smile, maintaining an even disposition, and respecting the speaker.
- F. Remember that everyone hears and understands less well when they are tired or ill.
- G. Relax! Tension interferes with effective communication.

FOR HEARING-IMPAIRED PEOPLE SPEAKING WITH OTHERS

- A. Wear recommended hearing aids (and glasses).
- B. Let the audible aspects of speech supplement visible speech movements.
- C. Position yourself so that the sun or light is at the speaker's face, not in your eyes.
- D. Face the speaker directly and on the same level when possible. Sit across from and close to the speaker with your better ear toward the speaker.
- E. Become familiar with the way different people express themselves: facial expression, vocabulary sentence structure, accent or dialect, etc.

- F. Watch facial expressions and body gestures while listening to the speaker.
- G. Learn to anticipate and understand the topic of conversation by using situational cues, contextual cues and understanding of the logical sequence of events. Also, use the rhythm of a spoken message to help understand a conversation.
- H. If in another room, go to the speaker or have him come to you.
- I. In your home, reduce competing noises by turning off or lowering the volume of TV's, stereo equipment, running water, etc. for improved speech recognition.
- Lessen room echoes by using sound absorbing carpeting, ceiling tiles, drapes and overstuffed furniture.
- K. Educate others to the fact that quiet, natural speech is easiest for you to understand.
- L. Be realistic! Don't blame you hearing loss for every communication problem. No one hears everything all the time.

These hearing instruments were
purchased by
from the IU clinical trials on
Name:
Address:
Phone Number:

CD2 1-13

Indiana University Clinical Trials





CD2 1-14

SUBJECT #:	TEST DATE:
CTC'S INITIALS:	

HEARING AID CASE CHECKLIST

Big leather case	
- Hard case	
- Small Velcro pouch	
- Small zipper pouch	
 Soft cloth 	
 Brush with wire loop and magnet 	
- Wire rod	
- 2 extra domes	
- User guide	
- 2 packs of batteries	
- CTC's card	

CD2	2-1
SUBJECT #:	TEST DATE:
EXAMINER'S INITIALS:	

AIDED CST FORM #1 (Visit 2)

(AS WORN)

TRACK 33

(CST 50 dB HL; +3 dB SNR; SP: 0 degrees N: 180 degrees; Binaural; Aided)

Text for the CONNECTED SPEECH TEST

(scoring words are capitalized, mark through each incorrect response in ink with an X, and record the total number of words correct below)

Passage: 1- UMBRELLA

The NAME "umbrella" means a small shadow.

Umbrellas **WERE** first used in **ANCIENT** Egypt.

THEY GAVE protection FROM the fierce SUNSHINE.

SLAVES held UMBRELLAS over their MASTERS.

In Egypt today, many people CARRY umbrellas.

In EARLY Rome, ONLY WOMEN used umbrellas.

IF a MAN did, he WAS CONSIDERED a sissy.

Umbrellas were **USED** by both **SEXES** in **ENGLAND**.

TODAY, people use umbrellas to keep **OUT** the **RAIN**.

Umbrellas **USED** as sunshades are called parasols.

Passage 2- GIRAFFE

The giraffe is the tallest wild **ANIMAL**.

It is three times taller than a man.

A full grown giraffe is eighteen **FEET** high.

The giraffe has an extremely LONG NECK.

The neck HAS ONLY seven NECKBONES.

The **GIRAFFE'S BODY** is about the **SIZE** of a **HORSE'S**.

The **BODY** is **SHAPED LIKE** a triangle.

Africa is the only country WHERE giraffes LIVE WILD.

LARGE GROUPS of them are FOUND ON the PLAINS.

They live there with **LIONS** and **ELEPHANTS**.

* Total Number of C	CORRECTLY identified	words:/49

CD2	Subject #	Date:	2-2
	Visi	t 2 Hearing Aid Selection Survey	
On a scale of 1 ough 10, in bla		how easy/difficult was it to select and	fit your tubing ? (write #, 1
1 (Difficult)		5 (Neutral)	10 (Easy)
On a scale of 1 L through 10, i		how easy/difficult was it to select and	fit your dome ? (write
1 (Difficult)		5 (Neutral)	10 (Easy)
On a scala of 1	/ list: lib 40 / b	harman Alman II. and the colored	fit your hearing aids ? (
on a scale of 1 1 through 10, i		how easy/difficult was it to select and	<u></u> (
1 through 10, i 1 (Difficult) On a scale of 1	in blank) (not confident) to 10 (5 (Neutral) [confident), how confident were you in	10 (Easy)
1 through 10, i 1 (Difficult) On a scale of 1	in blank) (not confident) to 10 (gh 10, in blank)	5 (Neutral)	10 (Easy)
1 through 10, i 1 (Difficult) On a scale of 1 rite #, 1 through 1 (Not Confidence) On a scale of 1	in blank) (not confident) to 10 (gh 10, in blank)	5 (Neutral) (confident), how confident were you in	10 (Easy) selecting your tubing? 10 (Confident)
1 through 10, i 1 (Difficult) On a scale of 1 rite #, 1 through 1 (Not Confidence) On a scale of 1	in blank) (not confident) to 10 (gh 10, in blank) fident) (not confident) to 10 (gh 10, in blank)	5 (Neutral) (confident), how confident were you in 5 (Neutral)	10 (Easy) selecting your tubing? 10 (Confident)
1 (Difficult) 1 (Difficult) On a scale of 1 rite #, 1 through 1 (Not Confident) 1 (Not Confident) 1 (Not Confident) 1 (Not Confident)	in blank) (not confident) to 10 (gh 10, in blank) (inot confident) to 10 (gh 10, in blank) (gh 10, in blank)	5 (Neutral) confident), how confident were you in 5 (Neutral) confident), how confident were you in 5 (Neutral)	10 (Easy) selecting your tubing? 10 (Confident) selecting your dome? 10 (Confident)

5 (Neutral)

10 (Most Helpful)

1 (Least Helpful)

SUBJECT #:	
-------------------	--

TEST DATE:	
------------	--

EXAMINER INITIALS: _____

CHECK PAINT

HEARING AID PHYSICAL INSPECTION CHECKLIST (VISIT 2)

Do not open battery door until after as	s worn s	peechma	apping is complete
_	RIG	HT	LEFT
Otoscopy/Ear exam			
Hearing aid inserted correctly?	yes□	no□	yes□ no□
If no, describe:			
Unremarkable?	yes□	no□	yes□ no□
EAC red?	yes□	no□	yes□ no□
Excessive cerumen?	yes□	no□	yes□ no□
Other:	yes□	no□	yes□ no□
Notes:			
Hearing Aid			
Tubing intact?	yes□	no□	yes□ no□
Tubing kinked?	yes□	no□	yes□ no□
Tubing blocked with cerumen?	yes□	no□	yes□ no□
Dome intact?	yes□	no□	yes□ no□
Dome blocked with cerumen?	yes□	no□	yes□ no□
Dome discolored?	yes□	no□	yes□ no□
RUN AS WORN SIMULATED SPEECI	H MAPF	ING	
Listening Check:			
Current program	1 2	3 4	1 2 3 4
**Return hearing aid to program	1 after	recordir	ng current program*
Acceptable sound quality?	yes□	no□	yes□ no□
If no, describe:			
Battery:			
Sufficient charge? (≥ ¾ charge)	yes□	no□	yes□ no□
SEE REVERSE SIDE TO COMPLETE			
Was battery changed?	RIGH' yes□	T no□	LEFT yes□ no□
Was tubing changed?	yes□	no□	yes□ no□
Were domes changed?	yes□	no□	yes□ no□

Visit 2 checklist

1. As-worn aided CST
2. Aided PHAP (subj does this while physical inspection is completed)
3. Aided HHIE (subj does this while physical inspection is completed)
4. HA Selection Survey

- ___ 5. Physical inspection Checklist
 - a. As-worn speechmap
 - i. Test → Testbox measures → speechmap
 - ii. Run 65, 55, 75 dB SPL and MPO
 - iii. Print results in table format to USB and save to XML
 - b. Hearing aid maintenance
 - c. Post-maintenance speechmap
 - i. Run 65, 55, 75 dB SPL and MPO (printed at end of visit)

_____6. Datalogging

- a. Create file in Noah with patient's subj # and connect hearing aid to software
- b. Record datalogging and print report
- c. Reset datalogging
- d. Save to session and hearing aid.
- _____7. MPO with adjustments
 - a. Familiarize with loudness categories.
 - b. Change to graph view on Verifit to watch where subject raises hand.
 - c. Run MPO at 85 with RIGHT first (left muted). (decrease at appr freq by 4 dB).
 - d. Do same for LEFT (right muted).

times MPO adjusted (-4 dB increments)

	250	500	750	1000	1500	2000	3000	4000	6000
Right									
Left									

e. Do loudness measures for both ears unmuted (decrease at appr freq by 2 dB in both aids).

times MPO adjusted (-2 dB increments)

	250	500	750	1000	1500	2000	3000	4000	6000
Both									

 Print results in table format to USB and save to XML.
8. On-ear UNAIDED 65dB speechmap measurements
a. Tests \rightarrow On-Ear measures \rightarrow speechmap
b. Insert probe tubes in ears without hearing aids
c. Start with RIGHT
d. Choose EQUALIZE
e. Run speechmap on RIGHT at 65
f. Repeat for LEFT starting with EQUALIZE.
9. On-ear AIDED 65, 55, 75 speechmap measurements
a. Put hearing aid on ear.
b. Choose EQUALIZE while hearing aids are turning OFF, after white noise
stops, close battery door RIGHT
c. Run speechmap on RIGHT at 65, 55, and 75 dB SPL
d. Repeat with LEFT hearing aid
10.RECD
 a. Print results in table format to USB and save to XML.
11. Aided CST
12. Hearing aid decision
13.Audio
a. Otoscopy
b. AC thresholds 250-8000Hz
c. SRT
d. WRS using CID-W22
e. BC thresholds 250-4000 Hz
14. Unaided CST
15. Tymps and reflexes
a. Tymps and reflexes at 500, 1000, and 2000 Hz
16. MMSE
17. Case history
———18. Find out hearing aid choice from Dana
——— 19. Hearing aid status #1 form.
20. Take subject to Dana for payment
21. After subject is gone, enter audiogram and RECD into Verifit on ear speechmap
screen for both the right and left ears.

22. Print results in table format to USB, save XML file to USB.

SII (V2PMSIMMAP)	65	55	75	
Right				
Left				
CII (V2I Incided)	C.F.			
SII (V2Unaided)	65			
Right				
Left				
SII (V2MAP)	65	55	75	
Right				
Left				

_____ 23.Print hard copies of V2PMSIMMAPs and RECD and place in Visit 2 folder.

CD2 2-5

Instructions for loudness test:

The purpose of this test is to find your judgments of the loudness of different sounds.

You will hear sounds that increase and decrease in volume. You must make a judgment about how loud the sounds are. Pretend you are listening to the radio at that volume. How loud would it be?

After each sound, tell me which of these categories best describes the loudness.

Keep in mind that an uncomfortably loud sound is louder than you would ever choose on your radio no matter what mood you are in.

CATEGORIES OF LOUDNESS

- 7. Uncomfortably loud
- 6. Loud, but okay
- 5. Comfortable, but slightly loud
- 4. Comfortable
- 3. Comfortable, but slightly soft
- 2. Soft
- 1. Very soft

CD2 2-7 (6/5/17)

Datalogging Form-Visit 2

SUBJECT #:		TEST DATE:	
EXAMINER:			
	RIGHT	LEFT	
Total # hours used:			
Average hours used per day:			
Since date			
Program Usage (%)			
Program 1:			
Program 2:			
Program 3:			
Program 4:			

CD2	2-8
SUBJECT #:	TEST DATE:
EXAMINER'S INITIALS:	

AIDED CST FORM #2 (Visit 2)

TRACK 36

(CST 50 dB HL; +3 dB SNR; SP: 0 degrees N: 180 degrees; Binaural; Aided)

Text for the CONNECTED SPEECH TEST

(scoring words are capitalized, mark through each incorrect response in ink with an X, and record the total number of words correct below)

Passage: 1- NAIL

Nails are used to **FASTEN WOOD TOGETHER**.

Pioneers **USED WOODEN** pegs **INSTEAD** of nails.

One **END** of a nail is quite **POINTED**.

The **POINT** creates an **OPENING** for the **NAIL**.

It also helps **KEEP** the **WOOD** from **SPLITTING**.

At the nail's **OTHER** end is the **HEAD**.

It provides a **STRIKING SURFACE** for the hammer.

It also **COVERS** the nail **HOLE** in the wood.

There is a **SPECIAL NAIL** for every **PURPOSE**.

For MOST purposes a ROUND nail will do.

Passage 2- WOODPECKER

The woodpecker is a bird with a **STRONG BEAK**.

It bores **HOLES** in **TREES** looking for **INSECTS**.

Woodpeckers LIVE in all parts of the world.

The **TOES** of woodpeckers **ARE VERY UNUSUAL**.

Two **POINT FORWARD** and two face **BACKWARD**.

This allows the **BIRD** to cling to **TREES**.

The **TAIL FEATHERS** of a woodpecker are **STIFF**.

THEY can USE their tails as a SUPPORT.

They also use their tails to grasp **TREES**.

Woodpeckers **HAVE** long **TONGUES** with pointed **TIPS**.

* Total Number of CORRECTLY identified words:	/50
Total Number of CONNECTET Identified words.	/30

SUBJECT #:				TEST DATE:			
EXAMIN	ER'S INIT	TIALS: _					
]	HEARIN	G AID DECI	SION FORM #1			
1. Based or aids?	n your exper	ience over	the past 4-6 w	eeks, are you going to	keep the hearing		
RIGHT:	YES	NO					
LEFT:	YES	NO					
If NO, ask	why? (recor	d choices f	for data entry, o	don't give choices to s	ubject)		
			RIGHT	LEFT			
Can't hear	in noise						
Can't hear	on phone						
Can't get u	ised to sound	l					
Feedback							
Uncomfort	able						
Costs too n	nuch						
No benefit							
Other:							
·		_		ne with the hearing aid w helpful was the guid			



child nom -150-+60

adult norm -110-+50

daPa

-400

ctaPa :

AUDIOLOGIC RECORD

Indiana University Clinical Trial Group



Bloomington, IN 47405 Date: _____ Age: ____ DOB: ____ Subject Number:_____ Tested by: ______ Referral Source: ______ Audiometer: ____GSI-61 Earphone: 3 A TDH Research Project: <u>CD2</u> Test Reliability: good fair poor P/T follow-up Session: 1 Procedure: VRA CPA Standard Frequency in Hertz .75 K 1.5 K 3 K 6K Aided Ex. of no AC AC BC BC Sound 2K 1 K .25 K .5 K 4 K 8 K Sound response Unmasked Masked Unmasked Masked Field Field R 00 X Hearing Level in dBHL (ANSI, 1996) Α SRT Material: MLV WRS Material: CD CD CST Material: Sound 50 Field Sound Bone Aided Field SpeechAudiometry PTA__,__,& __ kHz SRT or SAT EM for SRT or SAT WRS % Quiet dB HL 100 CST#Correct 50 50 dB HL S/N Ratio +3 +3 **EMfor WRS** .5 K 1 K 2K 3 K 4 K EM in dB SPL R Discomfort HL Level (LDL) SPL .5 K 1 K Stim in Meas in .5 K 1 K 2 K 4 K HL R L Contra Acoustic-Reflex ReflexDecay (HL) Testing R Ipsi (HL) Comments Pass/Fail **Tympanometry** Equivalent Volume child norm .4-1.0 adult nom .6-1.5 ml Static Compliance child norm .2-.9 adult norm .3-1.4 Peak Compliance

CD2	2-11
SUBJECT #:	TEST DATE:
EXAMINER'S INITIALS:	

UNAIDED CST FORM (Visit 2)

TRACK 32

(CST 50 dBHL; +3 dB SNR; SP: 0 degrees N: 180 degrees; Binaural; Unaided)

Text for the CONNECTED SPEECH TEST

(scoring words are capitalized, mark through each incorrect response in ink with an X, and record the total number of words correct below)

Passage: 1- WINDOW

Windows **PROVIDE LIGHT** and air to **ROOMS**.

Windows were **ONCE COVERED** with **CRUDE SHUTTERS**.

Later, oiled **PAPER** was **USED** for windowpanes.

GLASS windows FIRST appeared in ancient Rome.

COLORED glass was used in European **WINDOWS**.

SOME CHURCHES were **FAMOUS** for their **BEAUTIFUL** windows.

These windows **DISPLAYED PICTURES** from the **BIBLE**.

PIECES of glass were **HELD** together by lead.

SUCH windows **MAY** be seen in French cathedrals.

English churches also contain **STAINED** glass windows.

Passage 2- GLOVE

Gloves are **CLOTHING WORN ON** the **HANDS**.

The WORD "GLOVE" MEANS "palm of the hand."

CRUDE GLOVES were WORN by PRIMITIVE MAN.

Greeks wore **WORKING** gloves to **PROTECT** their hands.

The **ROMANS USED** gloves as a sign of **RANK**.

Knights used to fasten gloves to their helmets.

The gloves **SHOWED** their **DEVOTION** to their **LADIES**.

A glove thrown on the **GROUND SIGNALED** a challenge.

Knights threw them at their enemy's feet.

FIGHTING STARTED WHEN the enemy picked up the glove.

* Total Number of CORRECTLY id	lentified words:/50



		1100	
Red	Fo	171	1

Date of exami	nation	Ex	aminerAge	Sex
Years of school	of completed	Purpose of exa	rijas valenas	
Alert/ Responsive	Drowsy	Stuporous	Comatose/ Unresponsive	

Instructions: Words in boldface type should be read aloud clearly and slowly to the examinee. Item substitutions appear in parentheses. Administration should be conducted privately and in the examinee's primary language. Unless otherwise specified, circle 0 if the response is incorrect or 1 if the response is correct. Begin by introducing the test:

Now I'd like to ask you some questions about your memory.

REGISTRATION	RESPONSE	Acad Ask Sales	ORE le one)
Listen carefully. I am going to say three words. You say the EGG [pause], CONFIDENT [pause], AFTER [pause]. Now repe [Repeat up to 3 times, but score only the first trial.]	m back after I stop. Ready? Here t at those words back to me.	hey are	
500		0	1
CONFIDENT	Symposity of	0	1
AFTER		0	1
Now keep those words in mind. I am going to ask you to say	them again in a few minutes.		
ORIENTATION TO TIME			
What day is today? What is the			
year?		0	1
season?	64-64-64-64-64-64-64-64-64-64-64-64-64-6	0	1
month of the year?		0	1
day of the week?		0	1
date?		0	1
ORIENTATION TO PLACE*			
Where are we now? What is the			
state (or province)?		0	1
county (or city/town)?	4.18.44.6	0	1
city/town (or part of city/neighborhood)?		0	1
building (name or type)?		0	1
floor of the building (room number or address)?		0	1
*Alternative place words that are appropriate for the setting and increasingly	precise may be substituted and noted.		
RECALL			
What were those three words I asked you to remember? [Do	not offer any hints.]		
EGG		0	-1
CONFIDENT		0	1
AFTER		0	1
	70 (C. 1) (C. 1) (C. 1) (C. 1) (C. 1)		W VIVE S

PAR • 16204 N. Florida Ave. • Lutz, FL 33549 • 1.800.331.8378 • www.parinc.com

(16 max. points)

MMSE copyright © 1975, 1998, 2001 and MMSE-2 copyright © 2010 by MiniMental, LLC. All rights reserved. Published 2001, 2010 by Psychological Assessment Resources, Inc. (PAR). May not be reproduced in whole or in part in any form or by any means without written permission of Psychological Assessment Resources, Inc. This form is printed in blue and burgundy ink on white paper. Any other version is unauthorized. Printed in the U.S.A.

Reorder #RO-6686 2 3 4 5 6 7 8 9

MMSE-2:BV	
total raw score	

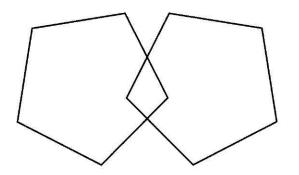
۸	TTENTION	AND	CALCIII	ATION	[Sovial 7c]
7	LILIVIN	AIND	CALCUL	ALIVIN	iseriai isi

/16	****	points)
(10	max.	Domis.

(30 max. points)

Now I'd like you to subtract	7 from 100. Then keep s	ubtracting 7 from each answer until	I tell you to stop.	
What is 100 take away 7?	[93]		0	1
If needed, say: Keep going.	[86]		0	1
If needed, say: Keep going.	[79]		0	1
If needed, say: Keep going.	[72]		0	1
If needed, say: Keep going.	[65]	*		1
Score 1 point for each correct ar even if the previous answer was		ered correct if it is 7 less than the previous	answer,	
NAMING				
What is this? [Point to mouth	.]		0	1
What is this? [Point to nose.]			0	1
REPETITION				
Now you say that. [Wait for end of the last page of this for upper half of the detached paupper half of the detached paupper back half of the detached task and the bottom half of the COMPREHENSION	xaminee response and re Y BUT TOO WINDY. The Tear the detached page, which has three shapes ge, which has three shapes ge as a stimulus form for the page as a stimulus and the page (blank) as a response		one time.] on line. Use the rehension task. ask. Use the cting pentagons)	1
	at these pictures and po	o something. [Show examinee the ged sint to the triangle, then point to the s		
	Correct response	Observed response		
	Δ		0	1
			0	1
	0		0	
READING			Ŭ	
Show examinee the word still	mulus nago 1 Digaso do 1	what this save to do		
5	2 12 15	vilat tills says to do.		73 4 7
OPEN YOU	RIVIOUTH		0	1
WRITING				
Please write a sentence. [/f e	examinee does not respoi	e and provide a pen or pencil.] nd, say: Write about where you live.] ns a subject and a verb. Ignore errors in gr	0 rammar	1
DRAWING				
		m and provide a pen or pencil.] Please sided figures that intersect to form a 4-side		1
		to	MMSE-2:SV otal raw score	

OPEN YOUR MOUTH



CD2	2-13	j
SUBJECT #:	TEST DATE:	
EXAMINER'S INITI	ALS:	
	CD2 CASE HISTORY FORM (Visit 2)	
·	Date of Birth Gender: M or F (please circle) of hearing loss (please choose one answer)	
_	ng) Noise exposure Unknown Not Applicable (I do not have hearing lo	oss)
II. Duration	Not Applicable	
A. Duration	n of loss year(s)	
co-workers	ch time passed from the time when you or others (family, friends,) first suggested you might have trouble hearing, and the time that n appointment with a doctor or an audiologist to have your hearing year (s)	J
III. Noise exposure	history	
Have you worked po If "Yes", how many	reviously in a noisy job (factory, carpentry, etc.)? Yes No years?	
Were you ever in the If "Yes", how many	e military? YesNo years?	

Do you have any noisy hobbies (woodworking, snowmobiles, band, etc.)? __Yes __No

If "Yes", how many years? ____

IV. Educational level

Highest Level of Education Completed:	(please choose one answer)
Less than high school	College degree
High school	☐ Some graduate school
☐ Some college	☐ Master's degree
☐ Vocational or technical degree	Doctorate or medical degree
V. Occupation Previous or current occupation: (please ch	noose one answer)
Laborer	☐ Professional
Trade union	Other
☐ Clerical	
How long in that position? years	
If retired, how long? years	
VI. Socioeconomic status (please choose o	one answer)
Indicate total household annual income fi.e., salary and wages, retirement benefits	For the last tax year (please consider all sources s, investments, rent, etc)
☐ \$5,000 – 15,	000
\$15,000-25,0	000
\$25,000-35,0	000
\$35,000-45,0	000
□> \$45,000	

VII. Hearing Evaluation History

	st competed hearing test, had you ever received a hearing test like the ved? Yes No (if "No", please skip to B, next page)
	ost recent test? (check only one item below)
	within the past 3 months
	3-6 months ago
	6-12 months ago
	1-2 years ago
	more than 2 years ago
Who performed th	e test? (check only one item below)
	Audiologist
	Hearing aid dealer
	ENT physician
	Nurse
	Internet- or Telephone-based test
	Other
What were the resu	ults and/or recommendations? (check only one item below)
	Hearing loss and should try hearing aids
	Hearing loss but just retest in a year
	Hearing was normal
	No follow-up needed
	Other
Did you follow thr	rough on the recommendations?
What did you do?_	

• •	•	competed hearing test, had you ever received a hearing screening (a r hearing, but not a full hearing test like you just had)?
☐ Yes	□ No	(If "No", please skip to C, next page)
When was	your mo	est recent screening? (check only one item below)
		within the past 3 months
		3-6 months ago
		6-12 months ago
		1-2 years ago
		more than 2 years ago
Who perfor	rmed the	e screening? (check only one item below)
		Audiologist
		Hearing aid dealer
		ENT physician
		Nurse
		Internet- or Telephone-based test
		Other
What were	the resu	lts and/or recommendations? (check only one item below)
		Did not pass and should have a full hearing evaluation
		Did not pass and no follow-up recommended
		Passed
		Other
Did you fol	llow thro	ough on the recommendations?
What did y	ou do?	

	•	oks into your ears with a light)?
☐ Yes	\square No	(If "No", please go to next page)
When was	your mo	ost recent ear exam? (check only one item below)
		within the past 3 months
		3-6 months ago
		6-12 months ago
		1-2 years ago
		more than 2 years ago
Who perfo	ormed the	e ear exam? (check only one item below)
		ENT physician
		Nurse
		Primary care physician (Family doctor)
		Other
What were	e the resu	alts and/or recommendations? (check only one item below)
		Ear wax removed and hearing evaluation recommended
		Ear wax removed and hearing evaluation NOT recommended
		Hearing evaluation recommended
		Imaging (X rays, CAT scan, etc.) recommended
		Medication prescribed
		No follow-up recommended
		Other
Did you fo	ollow thre	ough on the recommendations?
What did	you do?	

VIII. Previous hearing aid experience

Before using the study hearing aids you are currently wearing, have you ever used other hearing aid(s), even for a brief period of time? Yes No
If you answered "yes" to the question above, please provide the following information:
A. Approximate date non-study hearing aids were last worn:
B. Total amount of time previous non-study hearing aid(s) were used: (please choose one answer)
Less than or equal to 6 weeks
7 weeks-11 months
1-3 years
☐ 4-10 years
□>10 years
C. Monaural or Binaural Use: (please choose one answer)
Consistently wore just the RIGHT aid
Consistently wore just the LEFT aid
Wore both aids consistently
D. During the time of use, did you typically wear your non-study hearing aid(s) for: (please choose one answer)
\square < 1 hour per day \square 1 - 3 hours per day
4-6 hours per day 7-10 hours per day
>10 hours per day

CD2

IX. Medications

Please list any current medications and indicate both your dosage and how long you've been taking each one.
X. Living Arrangements (please choose one answer)
Live alone independently
Live with spouse or significant other
Live with other family members
Live with spouse and other family members
XI. Social Activities (such as visiting with a friend or in a group, entertaining in your home, eating in a restaurant, playing cards, etc.) (please choose one answer)
Regularly participate in social activities with family/friends (almost daily)
Occasionally participate in social activities with family/friends (weekly)
Rarely participate in social activities with family/friends (monthly or less)
XII. Outside Interests (such as religious services, movies, theatre, sporting events, lectures, etc.) (please choose one answer)
Regularly attend outside activities (once or more a week)
Occasionally attend outside activities as above (monthly)
Rarely attend outside activities (once or twice each year)

XIII. Ethnic Category (check one)		
☐ Hispanic or Latino ☐ Not Hispanic or Latino		
XIV. Racial Category (check all that apply) American Indian/ Alaska Native Asian Native Hawaiian or Other Pacific Islander Black or African American White		
XV. Medical Conditions/Specific Medications		
Please answer "yes" or "no" to the following questions:		
1. Do you have diabetes?	Yes	No
2. If yes to #1, is your diabetes well-controlled by medication or diet?		
3. Do you currently take a diuretic (Lasix, etc.)?		
4. Do you currently take 8 or more aspirins per day?		

Created 10-1-10 Edited 8-4-17 CD2 2-14

SUBJECT#:	TEST DA	ATE:
EXAMINER'S INITIALS:		
HA Status #1 (do a	t end of visit 2)
As you know, you selected your own hearing aid aids were not programmed specifically for your any instruction from an audiologist about the us aids. Would you be interested in having the hear receiving instruction on the use and care of the leweeks at no additional cost to you? You would stor a full refund after the 4 weeks is over. If the subject chooses to have hearing aids revous will return for Visit 3 in a few days for the hearing aids. Then in 4 weeks, you will return for additional tests. At Visit 4 you will decide if you return them for a full refund.	hearing loss. You e, care and maintenting aids re-programearing aids and tractill have the opportunity of the programmed: re-programming a for Visit 4 during v	also did not receive nance of your hearing mmed for your loss, ying them for another 4 rtunity to return them nd orientation to your which we will do a few
Status of HAs:	RIGHT	LEFT
Kept study hearing aid(s) as-is		
Kept study hearing aid(s) and requested adjustments/reprogramming		
Returned study hearing aids		

CD2 3-1 (6/5/17)

Visit 3 Audiologist Checklist

Enter participant audiogram in Aventa; enter audiogram and RECD into Verifi

__Audiologist chooses tube and dome size

	Right	Different from subject choice RIGHT (y/n)	Left	Different from subject choice LEFT (y/n)
Tube size				
Dome size				

____ Unaided speechmap R/L. Probe tubes only. Print to usb and XML.

SII (V3Unaided)	65
Right	
Left	

___Reset hearing aids to initial fit

Generate first fitting and verify P1 is set appropriately:

- a. Fitting formula: NAL-NL2.
- b. Fitting should default to "Experienced Non-Linear"
- c. Select "Fitting" tab (top toolbar) and turn "Binaural Correction" OFF
- d. Change Physical Properties to the size of dome and tube chosen.
- e. Change P1 to "Basic+Softswitching" if it is not already on that setting.
 - i. Directionality should be **FIXED**
 - ii. Directional Mix: Very Low
 - iii. DFS Ultra: Moderate
 - iv. Expansion: Off
 - v. Noise Tracker II: **Per Environment**
 - vi. Wind Guard: Off
- f. Click on "Environmental Optimizer" and click "Reset to..." then select "0 dB" so that all levels are at zero.
- g. If applicable, click on "Tinnitus Sound Generator" and ensure it is OFF

___Real Ear Measurement at 65dB SPL (using participant's RECD) and fine tuning

-Target-Matching Rule: for 250-4000Hz, all measured values within 4 dB of target at ALL frequencies. Will accept fit after initial fine tuning attempts if only within 7 dB of target at all frequencies. (If unable to meet ±7 dB criterion, subject will NOT be exited from study but will likely need to replace that subject in the study. FLAG file and let Dr. Humes and CTC know.)

Real Ear Measurements following fine tuning: 55 dB SPL and 75 dB SPL (do not fine tune)

CD2 3-1 (6/5/17)

SII (V3MAP)	65	55	75
Right			
Left			

___MPO measurement at 85 dB SPL [Instructions: "You will hear several loud beeps that get higher in pitch. The beeps will be loud, but if it gets uncomfortably loud, (refer to LDL chart), raise your hand. It is very quick, so try to raise your hand as quickly as possible. We can repeat if necessary."]

times MPO adjusted (-4 dB increments)

	250	500	750	1000	1500	2000	3000	4000	6000
Right									
Left									

times MPO adjusted (-2 dB increments)

		•							
	250	500	750	1000	1500	2000	3000	4000	6000
Both									

Review	beeps	in	Aventa	software
--------	-------	----	--------	----------

___Program VC based on HFPTA

HFPTA (1,2, &4kHz)	VC P1	VC P2	VC P3	VC P4
≤21	0	-2	-4	2
22-29	0	-3	-6	3
30-38	0	-4	-8	4
39-47	0	-5	-10	5
48-55	0	-6	-12	6
56-64	0	-7	-14	7
≥ 65	0	-8	-16	8

___Final Coupler Measurements (no fine tuning)

SII (V3SIMMAP)	65	55	75
Right			
Left			

Print measurements to USB
Complete HA Orientation (with guest if applicable)
Print R&L SIMMAP and place in folder

\boldsymbol{C}	\sim

3-2 (6/5/17)

SUBJECT #:	TEST DATE:
NUMBER OF ADDITIONAL PEOPLE IN ROOM:	EXAMINER'S INITIALS:

ORIENTATION CHECKLIST (Visit 3)

FEATURES OF HEARING AID:	INSERTION AND REMOVAL OF AID:
(1) User manual	(1) Right vs Left
(2) Warranty Information (1 year)	(2) Turning aid on and off
(4) 4 week trial period	(3) Do over a soft surface
	(4) Orientation of aid in hand
	(5) Comfort in ear
	(6) PRACTICE
COMPONENTS AND EFACURES.	LICE AND CADE OF AIDS.
COMPONENTS AND FEATURES:	USE AND CARE OF AIDS:
(1) Microphone	(1) Brush and wire to clean thin tube and dome
(2) Receiver	(2) Wipe with soft cloth
(4) Program button for VC	(3) Avoid moisture and extreme temperature
(4) Program button for VC	(4) Do not use hair spray, cologne, etc with aid in ear
(5) Battery door	(5) Open battery door when not in use (helps prevent
(6) Thin tube	moisture damage) and store in case with lid open
(7) Dome	(6) Keep hearing aids away from small children and pets
(8) Anchor	
(10) Riss	(7) T 1 1
(10) Difference between beeps	(7) Telephone use
BATTERIES:	(8) PRACTICE
(1) Size (312/ brown)	(9) PRACTICE switching volume levels
(2) Type (Zinc-air)	(10) Initial use of aid
(3) Cost (~\$1/battery)	-Situations: quiet before noise; 1 on 1 before group situation
(4) Places to purchase	-Hours worn: Wear both aid s at least a MINIMUM of 4
(5) Removal of tab for zinc air	hours/ day for the first week, increase by AT LEAST 2
(6) Battery life (5-7 days of typical use)	hours/day every week until wearing them full time by follow-
(7) Toxicity, keep away from children, pets and	up appointment
medication	HEARING AID ADJUSTMENT:
(8) Open battery door when not in use	(1) Benefits/Limitations
(9) Insertion and removal of battery (+vs-)	(2) Discuss communication strategies
(10) PRACTICE	(3) Call CTC with questions during 4 week trial period

CD2		4-1 (6/5/17
SUBJECT #:	TEST DATE: _	
EXAMINER'S INITIALS:		

AS-WORN CST FORM #1 (Visit 4) TRACK 40

(CST 50 dB HL; +3 dB SNR; SP: 0 degrees N: 180 degrees; Binaural; Aided)

Text for the CONNECTED SPEECH TEST

(scoring words are capitalized, mark through each incorrect response in ink with an X, and record the total number of words correct below)

Passage: 1- DONKEY

Donkeys are **SMALLER**, sturdier relatives of **HORSES**.

The **WILD** donkey is **SHAPED** like a **ZEBRA**.

It is four **FEET** high at the **SHOULDERS**.

The donkey's **COAT** is **GRAY** and black.

It HAS a DARK LINE along its BACK.

This **ANIMAL** is **EXTREMELY INTELLIGENT**.

SURPRISINGLY, it is also a SWIFT RUNNER.

Man has **TAMED** donkeys for his personal use.

Donkeys are **OFTEN** used as **BEASTS** of burden.

All donkeys are **NOTED** for their **HUGE EARS**.

Passage 2- GUITAR

The guitar is a stringed MUSICAL INSTRUMENT.

Guitars are used to ACCOMPANY SINGING.

They are played in **GROUPS** with other **INSTRUMENTS**.

A **POPULAR** style of guitar **HAS** a flat top.

It is made of wood and **HAS** six **STRINGS**.

You TUNE a guitar BY comparing OCTAVE NOTES.

The **FINGERBOARD** is **HELD** with the **LEFT** hand.

The MUSICIAN'S right hand PULLS the strings.

He plays **BASS NOTES** with his **RIGHT** thumb.

OTHER notes are **PLAYED** with the first **THREE** fingers.

SUBJECT #:	TEST DATE:

EXAMINER INITIALS: _____

CHECK PAINT

HEARING AID PHYSICAL INSPECTION CHECKLIST

		VISIT	4		
Do not open bat	tery door until afte	er as worn s	peechmaj	pping is com	plete
		RIG	HT	LEF	T
Otoscopy/Ear exam	n				
Hearing aid	inserted correctly?	yes□	no□	yes□	no□
If no	, describe:				
Unremarkab	le?	yes□	no□	yes□	no□
EAC red?		yes□	no□	yes□	no□
Excessive ce	erumen?	yes□	no□	yes□	no□
Other:		yes□	no□	yes□	no□
Notes:					
Hearing Aid					
Tubing intac	et?	yes□	no□	yes□	no□
Tubing kink	ed?	yes□	no□	yes□	no□
Tubing block	ked with cerumen?	yes□	no□	yes□	no□
Dome intact	?	yes□	no□	yes□	no□
Dome block	ed with cerumen?	yes□	no□	yes□	no□
Dome discol	lored?	yes□	no□	yes□	no□
RUN AS WORN S	IMULATED SPE	ECH MAPP	PING		
SII (V4AWSIMMAP)	65	5	55		75
Right					
Left					
Listening Check:					
Current prog	gram	1 2	3 4	1 2	3 4
Return hearing aid to program 1 after recording current program					
Acceptable s	sound quality?	yes□	no□	yes□	no□
If no	, describe:				
Battery:					
Sufficient ch	narge? (≥ ¾ charge)	yes□	no□	yes□	no□

SEE REVERSE SIDETO COMPLETE

4-2

		RIGH	IT	LEF	\mathbf{T}
Was battery changed?		yes□	no□	yes□	no□
Was tubing changed?		yes□	no□	yes□	no□
Were domes changed?		yes□	no□	yes□	no□
RUN POST MAINTEN	NANCE SI	MULATED SI	PEECH M	APPING	
SII (V4PMSIMMAP)	65		55		75
Right					
Left					

^{**}Print R&L PM SIMMAP and give to Dana**

CD2		4-3 (6/5/17)
SUBJECT #:	TEST DATE:	
FXAMINER'S INITIALS:		

AIDED CST FORM #2 (Visit 4)

TRACK 51

(CST 50 dBHL; +3 dB SNR; SP: 0 degrees N: 180 degrees; Binaural; Aided)

Text for the CONNECTED SPEECH TEST

(scoring words are capitalized, mark through each incorrect response in ink with an X, and record the total number of words correct below)

Passage: 1- EAR

The ear is an important **SENSE ORGAN**.

The ear **HAS** two main **PURPOSES**.

It lets **MAN HEAR** and **MAINTAIN** his balance.

GOOD hearing permits **PEOPLE** to understand **SPEECH**.

Through speech, we **EXCHANGE** ideas and **OPINIONS**.

HEARING ALSO makes man **AWARE** of **DANGER**.

The ear's **BALANCE** mechanism helps us walk **UPRIGHT**.

DAMAGE to this section causes **STAGGERING**.

The **PERSON** also **GETS** disoriented and **DIZZY**.

This kind of dizziness is **CALLED VERTIGO**.

Passage 2- LIVER

The liver is a very important **INTERNAL** organ.

Its MAIN FUNCTION is to filter the BLOOD.

The liver is the **LARGEST** organ in **MAN**.

It can **WEIGH** three to four **POUNDS**.

The liver is **DARK RED** or **CHOCOLATE** colored.

It is **LOCATED** in the **MIDDLE SECTION** of the **BODY**.

It **FITS** closely to the intestines and kidneys.

It is **POSSIBLE** to **TRANSPLANT** a liver.

This **ADVANCED** operation is **VERY** expensive.

HOWEVER, it is **RESPONSIBLE** for **SAVING MANY LIVES**.

	* Total Number of CORRECTLY identified words:	/50
--	---	-----

CD2 4-4 (6/5/17)

SUBJECT #:			TEST DATE:		
EXAMIN	ER'S INIT	ΓIALS: _			
		HEARIN	IG AID DECI	SION FORM #1	
1. Based or	n your exper	rience over	r the past 4 wee	ks, are you going to keep the aid	s'
RIGHT:	YES	NO			
LEFT:	YES	NO			
If NO, ask	why? (recor	d choices	for data entry,	don't give choices to subject)	
			RIGHT	LEFT	
Can't hear	in noise				
Can't hear	on phone				
Can't get u	sed to sound	d			
Feedback					
Uncomfort	able				
Costs too n	nuch				
No benefit					
Other:					

CD2 4-5 (6/5/17)

Datalogging Form-Visit 4

SUBJECT #:		TEST I	OATE:	
EXAMINER:				
	RIGHT	LEFT		
Total # hours used:				
Average hours used per day:				
Since date				
Program Usage (%)				
Program 1:				
Program 2:				
Program 3:		_		
Program 4:				

Visit 4 Checklist

1.	As-worn aided CST				
2.	Aided PHAP (subj does	this while physical	inspection is comple	eted)	
3.	Aided HHIE (subj does t	this while physical	inspection is comple	ted)	
4.	4. Physical inspection Checklist				
	a. As-worn speechr	nap			
	i. Test → Tes	stbox measures \rightarrow	speechmap		
	ii. Run 65, 55	, 75 dB SPL and MI	PO		
	iii. Print resul	ts in table format t	o USB and save to XI	ML	
	b. Hearing aid main	itenance			
	c. Post-maintenanc	e speechmap			
	i. Run 65, 55	, 75 dB SPL and MI	PO		
	ii. Print resul	ts in table format t	o USB and save to XI	ML	
5.	Post-maintenance aide	ed CST			
6.	6. Hearing aid decision form #2				
7.	Datalogging				
	 a. Record dataloggi 	ng and print repor	t		
	b. Reset dataloggin	g			
	c. Save to session a	nd hearing aid.			
8.	Adjustment of hearing	aids if requested			
	a. Run post-adjustment SIMMAP; record SIIs below; print to usb				
b. complete hearing aid adjustment log					
9. Run DFS					
a. Run post-DFS SIMMAP; record SIIs below; print to usb					
10. Complete hearing aid questions form if applicable					
11	. Complete hearing aid s	status form #2			
12	. Take subject to CTC for	r check out			
	SII (V4PASIMMAP)	65	55	75	

311 (V 41 7 (311 V 11 V 11 7)	05	75
Right		
Left		

SII (V4POSTDFSSIMMAP)	65	55	75
Right			
Left			

CD2 4-7 (6/5/17)

SUBJECT #:	TEST DATE:
VISIT 4 HEARING AID A	DJUSTMENT LOG
EXAMINER:	
RIGHT:	
LEFT:	

CD2 4-8 (6/5/17)

SUBJECT #:	TEST DATE:
VISIT 4	EXAMINER:
MISCELLANEOUS QUI	ESTIONS FROM SUBJECTS ABOUT HEARING
AIDS	
1	
2	
3	
4	
5	
6	
7	
8	<u> </u>
9	
10	

CD2 4-9 (6/5/17)

SUBJECT #:	TEST DATE:	
EXAMINER'S INITIALS:		
HA Status #2 (do at end of Visit	4)	
Status of HAs:	RIGHT	LEFT
Kept Study Aid(s) as-is		
Kept study aids and requested adjustments/reprogramming		
Returned study aids		

SUBJECT #:	TEST DATE:
EXAMINER'S INITIALS:	<u> </u>
CD2	EXIT FORM
Status of Subject:	
Discontinued (Complete Section A)	
Completed Study and elected to keep h	nearing aids
Completed Study and is returning hear	
Section A	A: Reason for Subject Exit
Development of Any Exclusion Crite	eria:
Cognitive/Language-Based Condition	
Medical/Surgical Ear Condition	
Shape of External Ear Canal	
☐Fluctuating Hearing Loss	
Participant in other hearing aid related	Clinical Trials
Disease/Condition Affecting Hearing/O	Cognition
Medication Affecting Hearing/Cognition	
☐VIII Nerve Tumor	
Development of Any Study-Related I	Medical Conditions:
Allergic Reaction	☐ Infection
Accumulation of Ear Wax	Adverse Effect
Miscellaneous:	
☐ Inability/Unwillingness to Maintain	Death or Disability
Wearing Schedule	
Relocation of Subject	Failure to Follow Instructions
Over 3 Weeks Cumulative Off The Ear Time	Lack of Motivation
Threshold Change by More Than 10 dB	☐ Inability/Unwillingness to Participate
Lost to Follow-Up	Other
Investigator's Signature	Date Signed

CD2 Study- PHAP UNAIDED- Visit 1

SUBJECT #: TEST DATE:								
	XAMINER'S INITIALS:							
PHAP Instr				answe	r eacl	h question based	d on your listening	
experience this to help true about	e. Not p you t 75% ed a p	decion of the carticular in th	nat ead le on t e time	ch cho your a e, circl	oice in Inswe e C fo	er. For example in or that item. If yo	tage. You can use f the statement is	
A = Always	s (99%	6)		D = F	Half-th	ne-time (50%)	G = Never (1%)	
B = Almost	t alwa	ys (87	7%)	E = C)ccasi	onally (25%)		
C = Genera	ally (7	5%)		F = S	eldon	n (12%)		
1. I can un	derst	and o	thers	in a sı	mall g	roup situation if	there is no noise.	
Α	В	С	D	E	F	G		
			•	•		· ·	large group, and an effort to listen.	
٨	R	c	D	F	E	G		

PHAP Instructions: Please answer each question based on your listening experiences recently.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%)	D = Half-the-Time (50%) G = Never (1%			
B = Almost Always (87%)	E = Occasionally (25%)			
C = Generally (75%)	F = Seldom (12%)			

- 3. Women's voices sound "shrill."
 - A B C D E F G
- 4. I find that most people speak too softly.
 - A B C D E F G
- 5. I have trouble comprehending speech when I am in a busy department store talking with the clerk.
 - A B C D E F G
- 6. I can understand my family when they speak softly to me.
 - A B C D E F G

PHAP Instructions: Please answer each question based on your listening experiences recently.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%)	D = Half-the-Time (50%)	G = Never (1%)
B = Almost Always (87%)	E = Occasionally (25%)	
C = Generally (75%)	F = Seldom (12%)	

7. I can understand a speaker in a small group, even when those around us are speaking softly to each other.

Α	В	C	D	Ε	F	G

8. I can understand conversations even when several people are talking.

A B C D E F G

9. When the telephone rings, the sound startles me.

A B C D E F G

10. I have to ask people to repeat themselves when there is background noise.

PHAP Instructions: Please answer each question based on your listening experiences recently.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

C = Generally (75%) F = Seldom (12%)

11. When I am in a crowded grocery store, talking with the cashier, I can follow the conversation.

A B C D E F G

12. When I am having a conversation, and people are talking quietly nearby, I have to strain to understand the speaker.

A B C D E F G

13. If a car horn sounds, it makes me jump.

A B C D E F G

14. When I am talking to a group and someone from the back of the room asks a question, I have to ask someone up front to repeat the question.

PHAP Instructions: Please answer each question based on your listening experiences recently.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

C = Generally (75%) F = Seldom (12%)

15. The sounds of construction work are uncomfortably loud.

A B C D E F G

16. When I am in a crowded reception room waiting to be called, I miss hearing my name.

A B C D E F G

17. When I am having a quiet conversation with a companion, I have difficulty understanding.

A B C D E F G

18. When I am listening to the news on the car radio, and family members are talking, I have trouble hearing the news.

PHAP Instructions: Please answer each question based on your listening experiences recently.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

C = Generally (75%) F = Seldom (12%)

19. The sound of screeching tires is uncomfortably loud.

A B C D E F G

20. I can understand conversation when I am walking with a friend through a quiet park.

A B C D E F G

21. The sound of a fire engine siren close by is so loud that I need to cover my ears.

A B C D E F G

22. When I am in conversation with someone across a large empty room (such as an auditorium), I understand the words.

PHAP Instructions: Please answer each question based on your listening experiences recently.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

C = Generally (75%) F = Seldom (12%)

23. When I am on a busy street, asking someone for directions, I have to ask him to repeat them before I really understand.

A B C D E F G

24. The sound of running water, such as a toilet or shower, is uncomfortably loud.

A B C D E F G

25. When a speaker is addressing a small group, and everyone is listening quietly, I have to strain to understand.

26. I	26. I have trouble understanding dialogue in a movie or at the theater.									
	Α	В	С	D	E	F	G			
PHAP Instructions: Please answer each question based on your listening experiences recently.										
expe this t true expe	Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.									
A = A	Always	s (99%	6)		D = F	Half-th	ne-Time (50)%)	G = Never (1	%)
B = A	Almost	t Alwa	ıys (87	7%)	E = C	ccasi	onally (25%	6)		
C = 0	Genera	ally (7	5%)		F = S	eldon	n (12%)			
27. When I am in a crowd with a friend who doesn't want others to overhear our conversation, I have trouble hearing as well.										
	Α	В	С	D	E	F	G			
28. When I am at the dinner table with several people, and am trying to have a conversation with one person, understanding speech is difficult.										
	Α	В	С	D	Е	F	G			
29.	Whe	n I'm	in a q	uiet c	onver	satio	n with my c	doctor	in an	

G

F

examination room, it is hard to follow the conversation.

Ε

Α

В

С

D

30.	I have trouble understanding others when an air conditioner or
fan is	s on.

PHAP Instructions: Please answer each question based on your listening experiences recently.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

C = Generally (75%) F = Seldom (12%)

31. I miss a lot of information when I'm listening to a lecture.

A B C D E F G

32. I can understand my family when they talk to me a normal voice.

A B C D E F G

33. I have to ask people to repeat themselves in one-on-one conversation in a quiet room.

34. I have difficulty hearing conversation when I'm with one other person at home.

A B C D E F G

PHAP Instructions: Please answer each question based on your listening experiences recently.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

C = Generally (75%) F = Seldom (12%)

35. When I am riding in the back seat of a car, and the driver talks to me from the front, I have to strain to understand.

A B C D E F G

36. Music sounds distorted to me.

A B C D E F G

37. When I'm talking with the teller at the drive-in window of my bank, I understand the speech coming from the loudspeaker.

38. When I am in a small office, interviewing or answering questions, I have difficulty following the conversation.

A B C D E F G

PHAP Instructions: Please answer each question based on your listening experiences recently.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

C = Generally (75%) F = Seldom (12%)

39. When a lecturer is giving instructions, I can easily follow along.

A B C D E F G

40. Everyday sounds are too soft for me to hear clearly.

A B C D E F G

41. I avoid using certain appliances (blender, vacuum cleaner, etc.) because their loudness is uncomfortable.

42. When I am in a busy restaurant and the waitress is taking my order, I can comprehend her questions.

A B C D E F G

PHAP Instructions: Please answer each question based on your listening experiences recently.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

C = Generally (75%) F = Seldom (12%)

43. I avoid crowds because the noise is uncomfortably loud.

A B C D E F G

44. When I am at a large, noisy party, conversation is very confusing.

45. When I am in a theater watching a movie or play, and the people around me are whispering and rustling paper wrappers, I can still make out the dialogue.

A B C D E F G

46. When I am in a quiet restaurant, I can understand soft conversation.

A B C D E F G

PHAP Instructions: Please answer each question based on your listening experiences recently.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

C = Generally (75%) F = Seldom (12%)

47. I can't understand the TV news when the volume is set by a normal-hearing person.

48. I	can u A	nders B		conve D				r with my family.
	49. When I am listening to the news on my car radio, and the car windows are closed, I understand the words.							
	Α	В	С	D	Е	F	G	
50. 1	The so	und q	uality	of m	usic is	n't ve	ery good.	
	Α	В	С	D	Е	F	G	
				ease a	ınswe	r eacl	n question based	on your listening
expe	erienc	es rec	ently.					
expe this true expe	Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.							
A = A	Always	s (99%	6)		D = F	lalf-th	ne-Time (50%)	G = Never (1%)
B = A	B = Almost Always (87%) E = Occasionally (25%)							
C = 0	C = Generally (75%) F = Seldom (12%)							
51. 7	The rir	ng of a	telep	hone	soun	ds "ti	nny."	
	Α	В	С	D	Ε	F	G	

52. I understand the newscaster wh	nen I am watching TV news at home
alone.	

53. I can follow the words of a sermon when listening to a religious service.

A B C D E F G

54. When I am at home, talking with someone who is in another room, following the conversation is difficult.

A B C D E F G

PHAP Instructions: Please answer each question based on your listening experiences recently.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

C = Generally (75%) F = Seldom (12%)

55. Unexpected sounds like a smoke detector or alarm bell are uncomfortable.

56. When I'm talking with a friend outdoors on a windy day, I miss a lot of the conversation.

A B C D E F G

57. Everyday sounds that don't bother others are too loud for me.

A B C D E F G

58. It's hard for me to understand what is being said at lectures or church services.

A B C D E F G

PHAP Instructions: Please answer each question based on your listening experiences recently.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

C = Generally (75%) F = Seldom (12%)

59. When I am in a room with the door closed and I want to over-hear a conversation going on outside the door, I have to strain to listen.

60. People's voices sound unnatural.

A B C D E F G

61. When I am in face-to-face conversation with one member of my family, I can easily follow along.

A B C D E F G

62. When I am in a meeting with several other people, I can comprehend speech.

A B C D E F G

PHAP Instructions: Please answer each question based on your listening experiences recently.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

C = Generally (75%) F = Seldom (12%)

63. Traffic noises are too loud.

64. The sound of glass breaking is uncomfortably loud.

A B C D E F G

65. I can communicate with others when we are in a crowd.

A B C D E F G

66. I can understand speech when I am talking to a bank teller, and I am one of a few customers at the bank.

A B C D E F G

PHAB Score Sheet

Familiar Talkers (FT) 1*, 20*, 32*, 48*, 52*, 61*, 66*

Ease of Communication (EC) 12, 17, 25, 29, 33, 34, 38

Reverberation (RV) 2, 14, 22*, 26, 31, 39*, 45*, 53*, 58

Reduced Cues (RC) 4, 6*, 35, 37*, 46*, 47, 49*, 54, 59

Background Noise (BN) 5, 7*, 8*, 10, 11*, 16, 18, 23, 27, 28, 30, 42*, 44, 56, 62*, 65*

Aversiveness of Sounds (AV) 9, 13, 15, 19, 21, 24, 41, 43, 55,

57, 63

Distortion of Sounds (DS) 3, 36, 40, 50, 51, 60

\cap T	7	1

п	г	$^{\circ}$
		- 2

CD2	
SUBJECT #:	TEST DATE:

EXAMINER'S INITIALS: _____

Hearing Handicap Inventory for the Elderly (HHIE) (UNAIDED)

The purpose of this scale is to identify the problems your hearing loss may be causing you. Check 'Yes', 'Sometimes', or 'No' for each question. Do not skip any questions.

S-1. Does a hearing problem cause you to use the phone less often than you would like?	□Yes	□Sometimes	□No
E-2. Does a hearing problem cause you to feel embarrassed when meeting new people?	□Yes	□Sometimes	□No
S-3. Does a hearing problem cause you to avoid groups of people?	□Yes	□Sometimes	□No
E-4. Does a hearing problem make you irritable?	□Yes	□Sometimes	□No
E-5. Does a hearing problem cause you to feel frustrated when talking to members of your family?	□Yes	□Sometimes	□No
S-6. Does a hearing problem cause you difficulty when attending a party?	□Yes	□Sometimes	□No
E-7. Does a hearing problem cause you to feel "stupid" or "dumb"	□Yes	□Sometimes	□No
S-8. Do you have difficulty hearing when someone speaks in a whisper?	□Yes	□Sometimes	□No

E-9. Do you feel handicapped by a hearing problem?	□Yes	□Sometimes	□No
S-10. Does a hearing problem cause you difficulty when visiting friends, relatives or neighbors?	□Yes	□Sometimes	□No
S-11. Does a hearing problem cause you to attend religious services less often than you would like?	□Yes	□Sometimes	□No
E-12. Does a hearing problem cause you to be nervous?	□Yes	□Sometimes	□No
S-13. Does a hearing problem cause you to visit friends, relatives, or neighbors less often than you would like?	□Yes	□Sometimes	□No
E-14. Does a hearing problem cause you to have arguments with family members?	□Yes	□ Sometimes	□No
S-15. Does a hearing problem cause you difficulty when listening to TV or radio?	□Yes	□Sometimes	□No
S-16. Does a hearing problem cause you to go shopping less often than you would like?	□Yes	□Sometimes	□No
E-17. Does any problem or difficulty with your hearing upset you at all?	□Yes	□Sometimes	□No
E-18. Does a hearing problem cause you to want to be by yourself?	□Yes	□Sometimes	□No
S-19. Does a hearing problem cause you to talk to family members less often than you would like?	□Yes	□Sometimes	□No

CD2 T-2

E-20. Do you feel that any difficulty with your hearing limits or hampers your personal or social life?	□Yes	□Sometimes	□No
S-21. Does a hearing problem cause you difficulty when in a restaurant with relatives or friends?	□Yes	□Sometimes	□No
E-22. Does a hearing problem cause you to feel depressed?	□Yes	□Sometimes	□No
S-23. Does a hearing problem cause you to listen to TV or radio less often than you would like?	□Yes	□Sometimes	□No
E-24. Does a hearing problem cause you to feel uncomfortable when talking to friends?	□Yes	□Sometimes	□No
E-25. Does a hearing problem cause you to feel left out when you are with a group of people?	□Yes	□Sometimes	□No

CD2 Study- PHAP AIDED- Visit 2

SUBJECT #:					TEST DATE:			
EXAMINE								
						ch question ba DS OVER THE I	sed on your listening PAST SEVERAL	
experienc this to hel true abou	e. No lp you t 75% ed a	otice to u deci of the partice	hat ea ide on ne tim	och cl your e, cir	hoice i answ cle C f	er. For exampl or that item. If	entage. You can use e if the statement is	
A = Always (99%)			D =	· Half-	the-time (50%)	G = Never (1%)		
B = Almost always (87%)			E =	E = Occasionally (25%)				
C = Generally (75%)			F = Seldom (12%)					
1. I can ur	nders	tand (others	in a	small	group situatio	n if there is no noise.	
Α	В	С	D	Ε	F	G		
			_	•		_	o a large group, and I ke an effort to listen.	
۸	D	C	D	_	Е	C		

PHAP Instructions: Please answer each question based on your listening experiences recently WITH YOUR HEARING AIDS OVER THE PAST SEVERAL WEEKS.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%)	D = Half-the-Time (50%)	G = Never (1%)
B = Almost Always (87%)	E = Occasionally (25%)	
C = Generally (75%)	F = Seldom (12%)	

3. Women's voices sound "shrill."

A B C D E F G

4. I find that most people speak too softly.

A B C D E F G

5. I have trouble comprehending speech when I am in a busy department store talking with the clerk.

A B C D E F G

6. I can understand my family when they speak softly to me.

CD2

PHAP Instructions: Please answer each question based on your listening experiences recently WITH YOUR HEARING AIDS OVER THE PAST SEVERAL WEEKS.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

C = Generally (75%) F = Seldom (12%)

7. I can understand a speaker in a small group, even when those around us are speaking softly to each other.

A B C D E F G

8. I can understand conversations even when several people are talking.

A B C D E F G

9. When the telephone rings, the sound startles me.

10.	I have to ask people to repeat themselv	es when	there is	backgrour	١d
nois	Se.				

PHAP Instructions: Please answer each question based on your listening experiences recently WITH YOUR HEARING AIDS OVER THE PAST SEVERAL WEEKS.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

C = Generally (75%) F = Seldom (12%)

11. When I am in a crowded grocery store, talking with the cashier, I can follow the conversation.

A B C D E F G

12. When I am having a conversation, and people are talking quietly nearby, I have to strain to understand the speaker.

A B C D E F G

13. If a car horn sounds, it makes me jump.

14. When I am talking to a group and someone from the back of the room asks a question, I have to ask someone up front to repeat the question.

A B C D E F G

PHAP Instructions: Please answer each question based on your listening experiences recently WITH YOUR HEARING AIDS OVER THE PAST SEVERAL WEEKS.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

C = Generally (75%) F = Seldom (12%)

15. The sounds of construction work are uncomfortably loud.

A B C D E F G

16. When I am in a crowded reception room waiting to be called, I miss hearing my name.

A B C D E F G

			havin _s stand	•	iiet co	nvers	ation with a com	panion, I have		
	Α	В	С	D	Ε	F	G			
	18. When I am listening to the news on the car radio, and family members are talking, I have trouble hearing the news.									
	Α	В	С	D	E	F	G			
exp	PHAP Instructions: Please answer each question based on your listening experiences recently WITH YOUR HEARING AIDS OVER THE PAST SEVERAL WEEKS.									
expe this true expe	Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.									
A = .	A = Always (99%) D = Half-the-Time (50%) G = Never (1%)									
B = 1	Almos	t Alw	ays (8	7%)	E = (Occas	ionally (25%)			
C = (C = Generally (75%) F = Seldom (12%)									
19. ⁻	The so	ound (of scre	eechir	ng tire	s is uı	ncomfortably lou	d.		
	Α	В	С	D	Ε	F	G			
20.	I car	n und	erstan	d con	versa	tion v	vhen I am walkin	g with a friend		

through a quiet park.

21. The sound of a fire engine siren close by is so loud that I need to cover my ears.

A B C D E F G

22. When I am in conversation with someone across a large empty room (such as an auditorium), I understand the words.

A B C D E F G

PHAP Instructions: Please answer each question based on your listening experiences recently WITH YOUR HEARING AIDS OVER THE PAST SEVERAL WEEKS.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

C = Generally (75%) F = Seldom (12%)

23. When I am on a busy street, asking someone for directions, I have to ask him to repeat them before I really understand.

A B C D E F G

24. The sound of running water, such as a t	toilet or shower, is
uncomfortably loud.	

25. When a speaker is addressing a small group, and everyone is listening quietly, I have to strain to understand.

A B C D E F G

26. I have trouble understanding dialogue in a movie or at the theater.

A B C D E F G

PHAP Instructions: Please answer each question based on your listening experiences recently WITH YOUR HEARING AIDS OVER THE PAST SEVERAL WEEKS.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

C = Generally (75%) F = Seldom (12%)

27. When I am in a crowd with a friend who doesn't want others to overhear our conversation, I have trouble hearing as well.

A B C D E F G

28.	When I	am at the	e dinner	table wit	h several	people,	and am	trying to
hav	e a conv	versation	with one	e person,	understa	nding sr	beech is	difficult.

29. When I'm in a quiet conversation with my doctor in an examination room, it is hard to follow the conversation.

A B C D E F G

30. I have trouble understanding others when an air conditioner or fan is on.

A B C D E F G

PHAP Instructions: Please answer each question based on your listening experiences recently WITH YOUR HEARING AIDS OVER THE PAST SEVERAL WEEKS.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

C = Generally (75%) F = Seldom (12%)

31. I miss a lot of information when I'm listening to a lecture.

A B C D E F G

32. I can understand my family when they talk to me a normal voice.

A B C D E F G

33. I have to ask people to repeat themselves in one-on-one conversation in a quiet room.

A B C D E F G

34. I have difficulty hearing conversation when I'm with one other person at home.

A B C D E F G

PHAP Instructions: Please answer each question based on your listening experiences recently WITH YOUR HEARING AIDS OVER THE PAST SEVERAL WEEKS.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

C = Generally (75%) F = Seldom (12%)

35. When I am riding in the back seat of a car, and the driver talks to me from the front, I have to strain to understand.										
	Α	В	С	D	E	F	G			
36. Music sounds distorted to me.										
	Α	В	С	D	E	F	G			
	37. When I'm talking with the teller at the drive-in window of my bank, I understand the speech coming from the loudspeaker.									
	Α	В	С	D	E	F	G			
	38. When I am in a small office, interviewing or answering questions, I have difficulty following the conversation.									
	Α	В	С	D	E	F	G			
PHAP Instructions: Please answer each question based on your listening experiences recently WITH YOUR HEARING AIDS OVER THE PAST SEVERAL WEEKS.										
Pleas	Please circle the answer that comes closest to your everyday									

experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

39. When a lecturer is giving instructions, I can easily follow along.

A B C D E F G

40. Everyday sounds are too soft for me to hear clearly.

A B C D E F G

41. I avoid using certain appliances (blender, vacuum cleaner, etc.) because their loudness is uncomfortable.

A B C D E F G

42. When I am in a busy restaurant and the waitress is taking my order, I can comprehend her questions.

A B C D E F G

PHAP Instructions: Please answer each question based on your listening experiences recently WITH YOUR HEARING AIDS OVER THE PAST SEVERAL WEEKS.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

C = Generally (75%)	F = Seldom (12%)
---------------------	------------------

43. I avoid crowds because the noise is uncomfortably loud.

A B C D E F G

44. When I am at a large, noisy party, conversation is very confusing.

ABCDEFG

45. When I am in a theater watching a movie or play, and the people around me are whispering and rustling paper wrappers, I can still make out the dialogue.

ABCDEFG

46. When I am in a quiet restaurant, I can understand soft conversation.

A B C D E F G

PHAP Instructions: Please answer each question based on your listening experiences recently WITH YOUR HEARING AIDS OVER THE PAST SEVERAL WEEKS.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

C = Generally (75%) F = Seldom (12%)

47. I can't understand the TV news when the volume is set by a normal-hearing person.

A B C D E F G

48. I can understand conversation during a quiet dinner with my family.

A B C D E F G

49. When I am listening to the news on my car radio, and the car windows are closed, I understand the words.

A B C D E F G

50. The sound quality of music isn't very good.

A B C D E F G

PHAP Instructions: Please answer each question based on your listening experiences recently WITH YOUR HEARING AIDS OVER THE PAST SEVERAL WEEKS.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%)				7%)	E = Occasionally (25%)					
C = 6	Senera	ally (7	5%)		F = S	eldon	า (12%)			
51. T	he rir	ng of a	telep	hone	soun	ds "ti	nny."			
	Α	В	С	D	Е	F	G			
52. I understand the newscaster when I am watching TV news at home alone.										
	Α	В	С	D	Е	F	G			
53. I servi		ollow	the w	ords (of a se	ermon	when listening to a religious			
	Α	В	С	D	Е	F	G			
	54. When I am at home, talking with someone who is in another room, following the conversation is difficult.									
	Α	В	С	D	Ε	F	G			
PHAP Instructions: Please answer each question based on your listening experiences recently WITH YOUR HEARING AIDS OVER THE PAST SEVERAL WEEKS.										
expe this t true	erience to hel about	e. Not p you t 75%	ice th decid of the	at ead e on y e time	ch cho your a e, circl	oice in answe e C fo	osest to your everyday cludes a percentage. You can use r. For example if the statement is r that item. If you have not agine how you would respond in a			
CAPC		cu u p	4	310	Jaacio	,	ADITIC TIONS YOU WOUTH ICSPOTTE IT A			

similar situation.

A = Always (99%)					D = Half-the-Time (50%) G = Never (1%)						
B = Almost Always (87%)					Occas	ionally (25%)					
C = Generally (75%)					F = Seldom (12%)						
55. Unexր uncomfoi			nds lik	e a sr	noke	detector or alarm	n bell are				
Α	В	С	D	Ε	F	G					
56. When I'm talking with a friend outdoors on a windy day, I miss a lot of the conversation.											
Α	В	С	D	Ε	F	G					
57. Every	day sc	ounds	that o	don't	bothe	er others are too	loud for me.				
Α	В	С	D	Ε	F	G					
58. It's hard for me to understand what is being said at lectures or church services.											
Α	В	С	D	Ε	F	G					
	PHAP Instructions: Please answer each question based on your listening										

PHAP Instructions: Please answer each question based on your listening experiences recently WITH YOUR HEARING AIDS OVER THE PAST SEVERAL WEEKS.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is true about 75% of the time, circle C for that item. If you have not

experienced a particular situation, imagine how you would respond in	a
similar situation.	

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

C = Generally (75%) F = Seldom (12%)

59. When I am in a room with the door closed and I want to over-hear a conversation going on outside the door, I have to strain to listen.

A B C D E F G

60. People's voices sound unnatural.

A B C D E F G

61. When I am in face-to-face conversation with one member of my family, I can easily follow along.

A B C D E F G

62. When I am in a meeting with several other people, I can comprehend speech.

A B C D E F G

PHAP Instructions: Please answer each question based on your listening experiences recently WITH YOUR HEARING AIDS OVER THE PAST SEVERAL WEEKS.

Please circle the answer that comes closest to your everyday experience. Notice that each choice includes a percentage. You can use this to help you decide on your answer. For example if the statement is

true about 75% of the time, circle C for that item. If you have not experienced a particular situation, imagine how you would respond in a similar situation.

A = Always (99%) D = Half-the-Time (50%) G = Never (1%)

B = Almost Always (87%) E = Occasionally (25%)

C = Generally (75%) F = Seldom (12%)

63. Traffic noises are too loud.

A B C D E F G

64. The sound of glass breaking is uncomfortably loud.

A B C D E F G

65. I can communicate with others when we are in a crowd.

A B C D E F G

66. I can understand speech when I am talking to a bank teller, and I am one of a few customers at the bank.

A B C D E F G

PHAB Score Sheet

Familiar Talkers (FT) 1*, 20*, 32*, 48*, 52*, 61*, 66*

Ease of Communication (EC) 12, 17, 25, 29, 33, 34, 38

CD2 T-3

Reverberation (RV) 2, 14, 22*, 26, 31, 39*, 45*, 53*, 58

Reduced Cues (RC) 4, 6*, 35, 37*, 46*, 47, 49*, 54, 59

Background Noise (BN) 5, 7*, 8*, 10, 11*, 16, 18, 23, 27, 28, 30, 42*, 44, 56, 62*, 65*

Aversiveness of Sounds (AV) 9, 13, 15, 19, 21, 24, 41, 43, 55,

57, 63

Distortion of Sounds (DS) 3, 36, 40, 50, 51, 60

CD2	T-
SUBJECT #:	TEST DATE:

EXAMINER'S INITIALS:

Hearing Handicap Inventory for the Elderly (HHIE)(AIDED)

The purpose of this scale is to identify the problems your hearing loss may be causing you. Check 'Yes', 'Sometimes', or 'No' for each question. Do not skip any questions. Answer these questions based on your listening experiences WITH YOUR HEARING AIDS OVER THE PAST SEVERAL WEEKS.

S-1. Does a hearing problem cause you to use the phone less often than you would like?	□Yes	□Sometimes	□No
E-2. Does a hearing problem cause you to feel embarrassed when meeting new people?	□Yes	□Sometimes	□No
S-3. Does a hearing problem cause you to avoid groups of people?	□Yes	□Sometimes	□No
E-4. Does a hearing problem make you irritable?	□Yes	□Sometimes	□No
E-5. Does a hearing problem cause you to feel frustrated when talking to members of your family?	□Yes	□Sometimes	□No
S-6. Does a hearing problem cause you difficulty when attending a party?	□Yes	□Sometimes	□No
E-7. Does a hearing problem cause you to feel "stupid" or "dumb"	□Yes	□Sometimes	□No
S-8. Do you have difficulty hearing when someone speaks in a whisper?	□Yes	□ Sometimes	□No

CD2 T-4

E-9. Do you feel handicapped by a hearing problem?	□Yes	□Sometimes	□No
S-10. Does a hearing problem cause you difficulty when visiting friends, relatives or neighbors?	□Yes	□Sometimes	□No
S-11. Does a hearing problem cause you to attend religious services less often than you would like?	□Yes	□Sometimes	□No
E-12. Does a hearing problem cause you to be nervous?	□Yes	□Sometimes	□No
S-13. Does a hearing problem cause you to visit friends, relatives, or neighbors less often than you would like?	□Yes	□Sometimes	□No
E-14. Does a hearing problem cause you to have arguments with family members?	□Yes	□Sometimes	□No
S-15. Does a hearing problem cause you difficulty when listening to TV or radio?	□Yes	□Sometimes	□No
S-16. Does a hearing problem cause you to go shopping less often than you would like?	□Yes	□Sometimes	□No
E-17. Does any problem or difficulty with your hearing upset you at all?	□Yes	□Sometimes	□No
E-18. Does a hearing problem cause you to want to be by yourself?	□Yes	□Sometimes	□No
S-19. Does a hearing problem cause you to talk to family members less often than you would like?	□Yes	□Sometimes	□No

CD2 T-4

E-20. Do you feel that any difficulty with your hearing limits or hampers your personal or social life?	□Yes	□Sometimes	□No
S-21. Does a hearing problem cause you difficulty when in a restaurant with relatives or friends?	□Yes	□Sometimes	□No
E-22. Does a hearing problem cause you to feel depressed?	□Yes	□Sometimes	□No
S-23. Does a hearing problem cause you to listen to TV or radio less often than you would like?	□Yes	□Sometimes	□No
E-24. Does a hearing problem cause you to feel uncomfortable when talking to friends?	□Yes	□Sometimes	□No
E-25. Does a hearing problem cause you to feel left out when you are with a group of people?	□Yes	□Sometimes	□No

CD2 M-1

UNSCHEDULED APPOINTMENT HEARING AID PROBLEM CHECKLIST

ubject #: Status:		DATE:		
erial #: Ear:		E	EXAMINER'S INITIALS:	
rimary Complaint:				
Cerumen (ear wax) or debris:	YES	NO	ACTION TAKEN	
Cerumen/debris on dome?				
Cerumen/debris in tubing?				
Cerumen/debris on microphone port(s)?				
Battery:	YES	NO	ACTION TAKEN	
No battery?				
Battery inserted incorrectly?				
Battery dead?				
Hearing aid parts:	YES	NO	ACTION TAKEN	
Tubing missing?				
Dome missing?				
Tubing incorrectly attached?				
Dome incorrectly attached?				
Tubing broken?				
Dome broken?				
HA casing broken?				

CD2 M-1

Additional Notes:						