

# An Abbreviated Auditory Program for Adults Using the Adult Aural Rehabilitation Guide

## Rationale for an Abbreviated Auditory Program

Sometimes there is limited time or a limited number of sessions for an adult's auditory rehabilitation. To create a treatment plan that is efficient and effective, it is useful to determine the recipient's present level of auditory functioning and go from there. This allows the clinician to establish goals and select activities that are appropriate for the individual needs of each recipient.

## Where to Start in the Guide

In general, treatment goals are developed based on the skills and levels where the recipient has some success but is not 100% proficient. Start where the recipient's responses are 90% correct and as skills improve, progress onto more challenging exercises. Go back to a less difficult level if the recipient shows any frustration. This should allow for progress in a timely and naturally occurring manner.

## What to Do if the Exercises in the Guide are Too Difficult

If the adult does not perform at the 90% level on the easiest exercises in the Guide, such as Exercise 1.0 Syllable Counting, it may be helpful to try some or all of the following techniques to encourage success.

- Develop lists with words that are meaningful and familiar to the recipient. Examples of categories to consider are: Names of family members and friends, common foods, and lingo used in the recipient's profession or job. Start with a closed set of two words that have wide contrasts in syllable numbers where one word has one syllable and the second word is three or four syllables in length.
- Encourage the recipient to count the number of syllables he hears even if he cannot understand what he heard.
- Provide training in active listening to more firmly establish an active auditory self-monitoring loop. First the recipient reads aloud the two choices. Next the listening coach says one of the two words and then pauses to allow the recipient a chance to mentally choose which word he heard. The coach then points to the word and says it again. The recipient repeats the word aloud. Continue this type of training in active closed set listening until the recipient gains confidence to select one of the two words simply by listening. This technique takes the emphasis away from a "testing" situation and moves it clearly into a training activity.
- Incorporate progressive listening techniques. Move the recipient along a continuum starting from easiest to most difficult listening as listed below:
  - Familiar to unfamiliar language
  - Wide differences in number of syllables to same number of syllables
  - Slower to fast rate of speech
  - Close to distant location from the microphone of the cochlear implant
  - Phonemes that differ in manner of production to same manner of production
  - Repetition to no repetition
  - Predictable to unpredictable information
  - Closed to open set
  - Quiet to noisy environment
- Continue to practice with individualized lists until the recipient reaches a 90% success rate. At this point go back to the exercises in the Guide.



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## Individualizing the Program

Reassess periodically so the recipient is challenged while remaining positive. Encourage feedback from the recipient as to whether he/she would like to continue at the present level, review less difficult skills or move on.

The order of the abbreviated auditory program suggested below is based on the premise that the recipient continues to achieve 90% correct and therefore will not need to practice exercises that are similar in difficulty. Exercises that fall between the abbreviated order may be used as supplementary activities if at any point the recipient would like more practice on a particular skill, falls below 90% correct or wishes to move to a more challenging progressive listening level (*as discussed above*).

Treatment goals should be established concurrently in all three areas presented in the Guide:

- Analytic Training
- Synthetic Training
- Communication Therapy

## Analytic Training

### *Syllable Counting*

- Start with Exercise 1.0.
  - If  $\geq 90\%$  correct on Exercise 1.0, go to Exercise 1.4.
  - If  $\geq 90\%$  correct on Exercise 1.4, go to Exercise 1.7.
  - If  $\geq 90\%$  correct on Exercise 1.7, go to Exercise 1.10.

### *Word Stress*

- Do Exercise 2.0 with all recipients.

### *Vowel and Consonant Phonemes*

- Start with Exercise 3.0.
  - If  $\geq 90\%$  correct on Exercise 3.0, go to Exercise 3.1.
  - If  $\geq 90\%$  correct on Exercise 3.1, go to Exercise 3.5.
- Do Exercise 3.7 with *all* recipients.

### *Phonemes*

- Start with Exercise 3.8.
  - If  $\geq 90\%$  correct on Exercise 3.8, go to Exercise 3.9.
  - If  $\geq 90\%$  correct on Exercise 3.9, go to Exercise 3.10.
  - If  $\geq 90\%$  correct on Exercise 3.10, go to Exercise 3.12.
  - If  $\geq 90\%$  correct on Exercise 3.12, go to Exercise 3.14.
  - If  $\geq 90\%$  correct on Exercise 3.14, go to Exercise 3.16.
  - If  $\geq 90\%$  correct on Exercise 3.16, go to Exercise 3.17.
  - If  $\geq 90\%$  correct on Exercise 3.17, go to Exercise 3.18.
  - If  $\geq 90\%$  correct on Exercise 3.18, go to Exercise 3.19.
- Do Exercise 4.2 with *all* recipients.
- Do Exercise 5.0 with *all* recipients.
- Start with Exercise 6.0.
  - If  $\geq 90\%$  correct on Exercise 6.0, go to Exercise 6.5.



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## Synthetic Training

- Do Continuous Discourse Training with all recipients. (See page 83 in the Guide.)
- Do Exercise 2.0 and 2.1 with *all* recipients.
- Do Exercise 3.0 with *all* recipients.
- Start with Exercise 4.0.
  - If  $\geq 90\%$  correct on Exercise 4.0, go to Exercise 4.6.
- Start with Exercise 4.7.
  - If  $\geq 90\%$  correct on Exercise 4.7, go to Exercise 5.0.
- Start with Exercise 5.0.
  - If  $\geq 90\%$  correct on Exercise 5.0, go to Exercise 5.2.
- Start with Exercise 6.0.
  - If  $\geq 90\%$  correct on Exercise 6.0, go to Exercise 7.0.
- Do Exercise 7.0 with *all* recipients.
- Do Exercise 8.0 with all recipients.
- Start with Exercise 9.0.
  - If  $\geq 90\%$  correct on Exercise 9.0, go to Exercise 10.0.
- Do Exercise 10.0 with *all* recipients.
- Start with Exercise 11.0 with all recipients.
  - If  $\geq 90\%$  correct on Exercise 11.0, go to Exercise 11.2.
- Do Exercise 12.0 with *all* recipients.

## Communication Therapy

Try each Exercise with *all* recipients. Feedback from the recipient should indicate areas to cover in more depth.

## Home Carry-over

For optimal results, it is suggested that an adult practice at home with a family member or friend for at least 20 minutes per day and at least 5 days per week. It is useful for the listening helper to attend a few auditory therapy sessions for coaching in how to be helpful, positive, and encouraging. The more opportunities a recipient has to practice in both structured and natural environments, the quicker (s)he will reach their full listening potential with the cochlear implant(s).

## Additional Resource: Sound and WAY Beyond

In addition to using the *Adult Aural Rehabilitation Guide*, it is recommended that the recipient and auditory therapist utilize Sound and WAY Beyond, an interactive computer software product for home use that is designed to enhance auditory skills post cochlear implantation. Sound and WAY Beyond has modules for vowels, consonants, sentence hearing, music enjoyment and more. As the user improves his or her listening skills, the software automatically moves the person to the next level of difficulty providing additional opportunities for challenge and improvement. Research has shown that moderate training (5 days per week for at least 30 minutes) on targeted phonemes can improve speech perception by as much as 15-20%\* For more information and to order a copy of the Sound and WAY Beyond software, please go to [www.CochlearAmericas.com/HOPE](http://www.CochlearAmericas.com/HOPE).

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