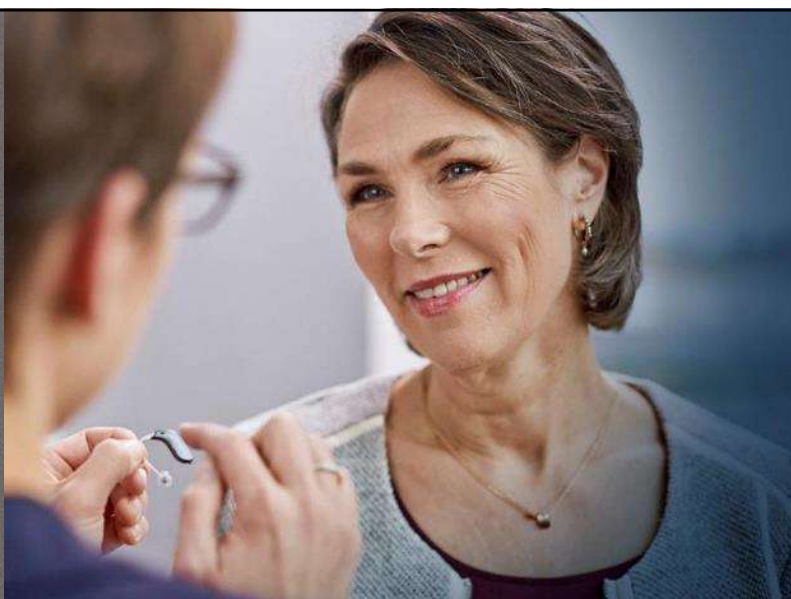


## The Follow-up Process for New Users

Donald J Schum, PhD

Vice President, Audiology



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### Learning Objectives

- After this course learners will be able to describe the time course of rejection of amplification by first time users.
- After this course learners will be able to explain the balance between counseling and adjustments for first time user.
- After this course learners will be able to identify the top ten Oticon recommendations for follow-up adjustments.

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# Why?

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## The Mindset of the First Time User

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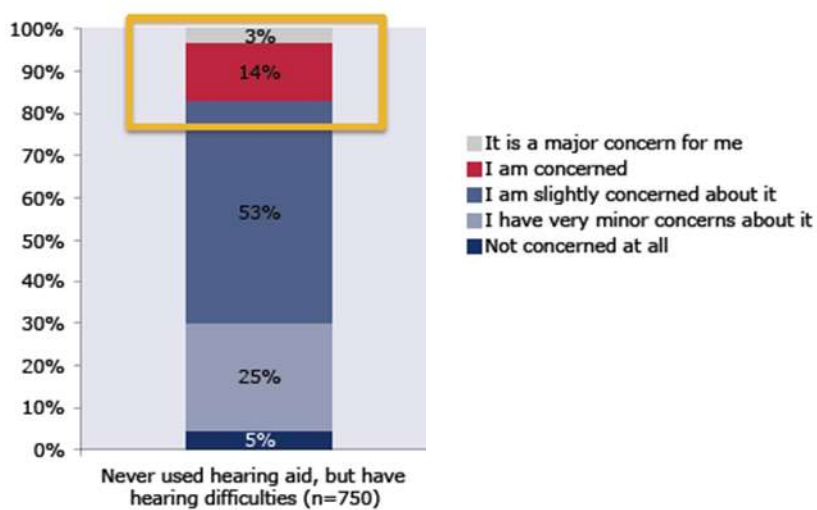
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#### First Time Users: New Insights

- Web-based survey
- 1,450 respondents
  - 750 first time users, 700 experienced users, recruited through local web panels
  - US, CAN, GER, FRA and ITA

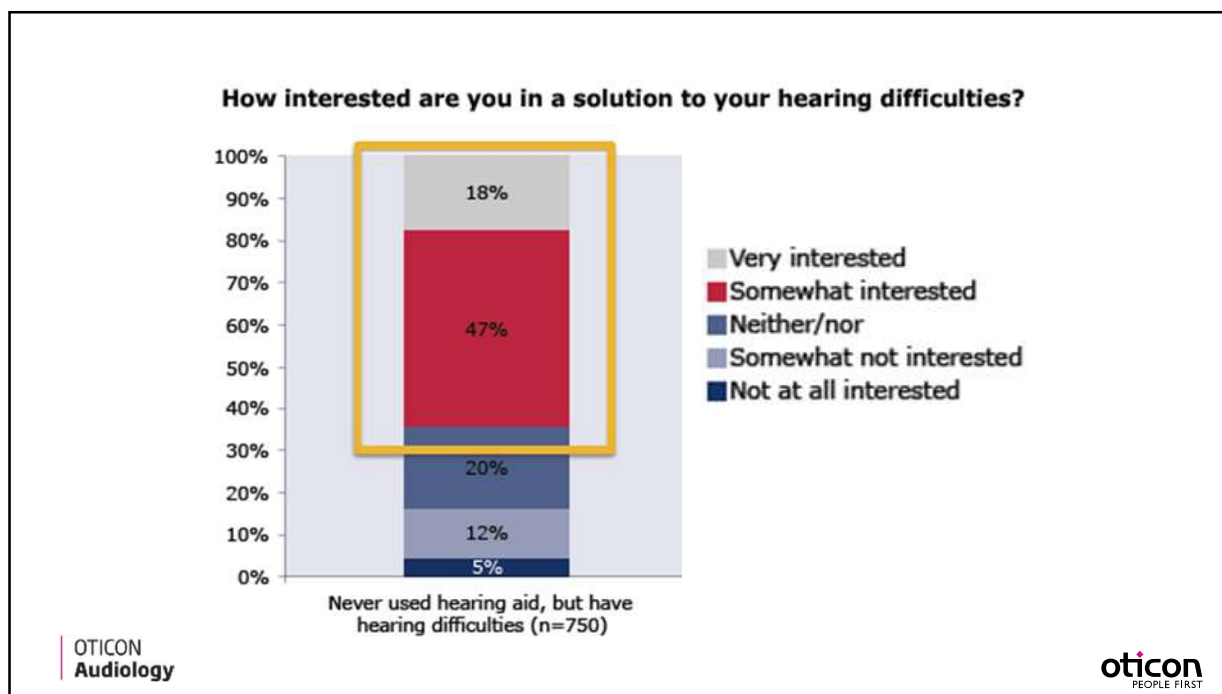
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#### How concerned are you that this is a problem?



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## The Patient has decided to try hearing aids:

- ▶ Resistance to action
- ▶ Movie Night

## The Patient has decided to try hearing aids:

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  - ▶ Movie Night
  - ▶ The Role of Family



## The Patient has decided to try hearing aids:

- ▶ Resistance to action
  - ▶ Movie Night
  - ▶ The Role of Family
- ▶ The difference between **Willing** and **Ready**

## What makes a patient ready?

- Trust
  - ▶ Professional
  - ▶ Product
  - ▶ Self
- Emotionally feels the effects of the hearing loss . . . Sense of urgency
- Takes ownership
- Realistic expectations



# Why?

**Is rejection about the hearing aids  
or the patient?**

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## The First Month

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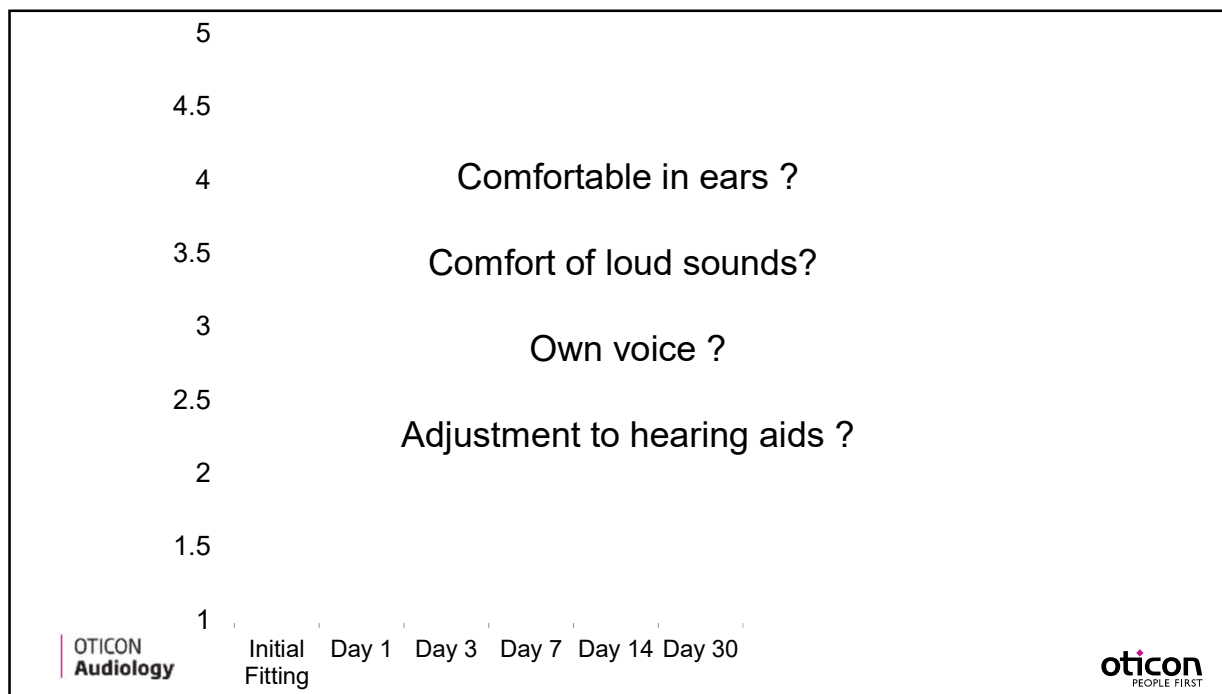
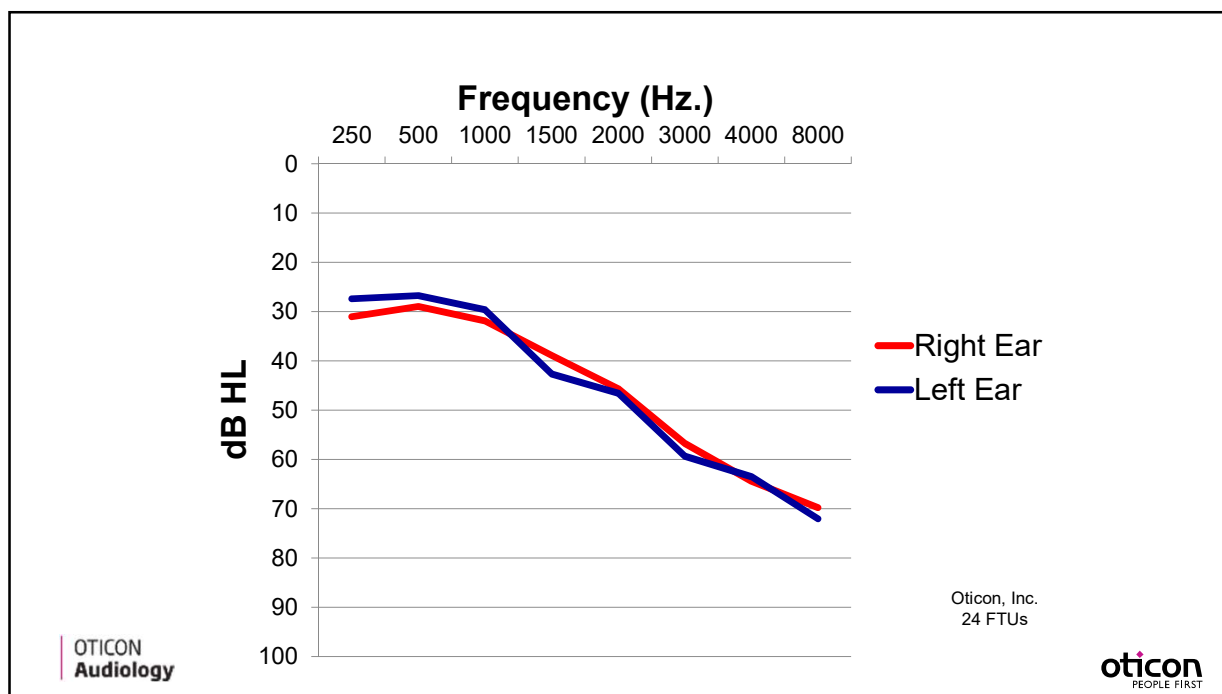
## First Month Studies

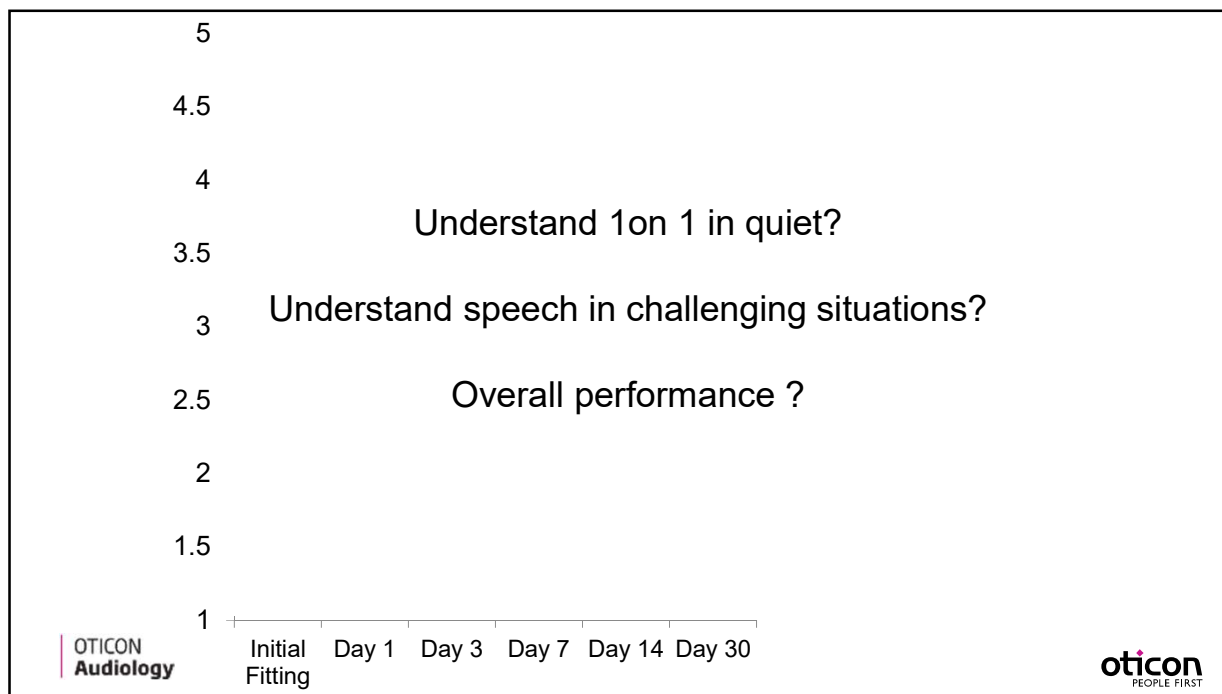
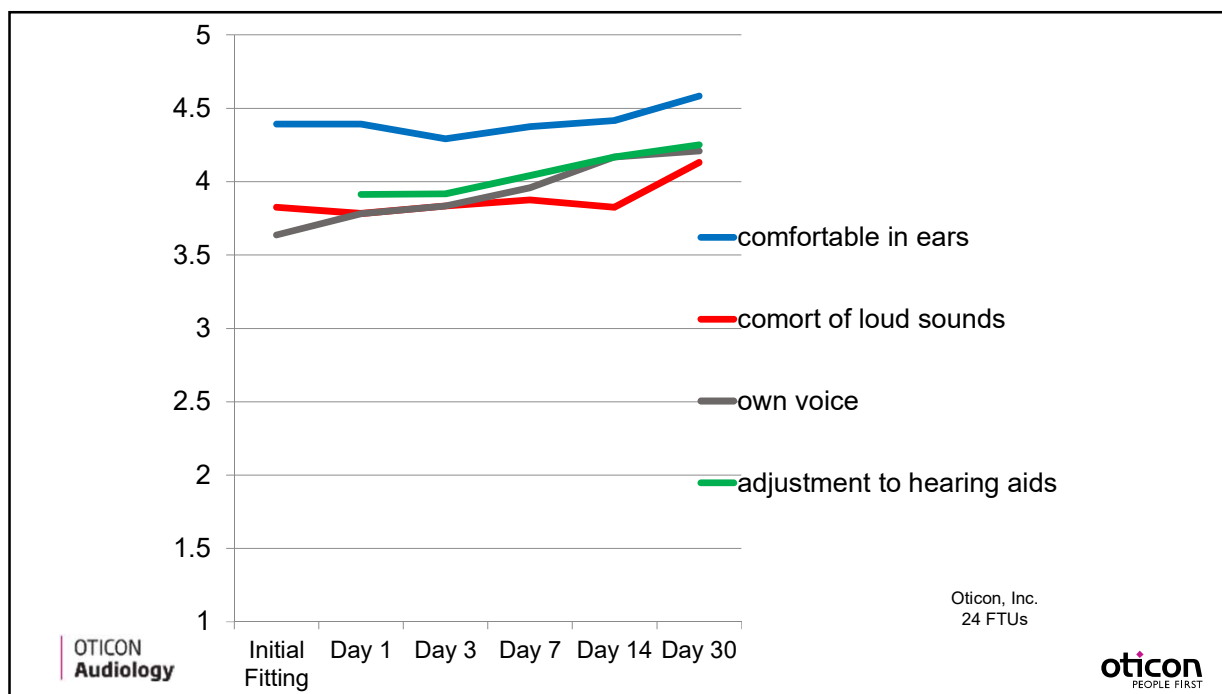
- Oticon Inc. Survey: 24 FTUs
- Towson University Clinical Study: 19 FTUs

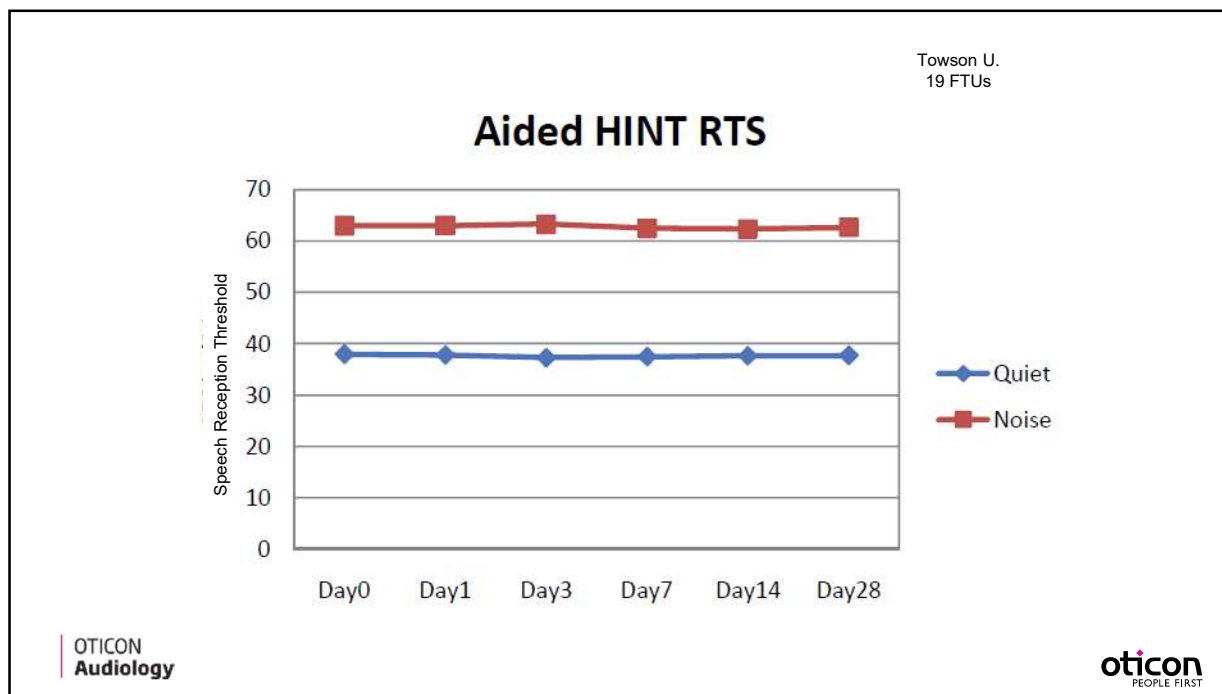
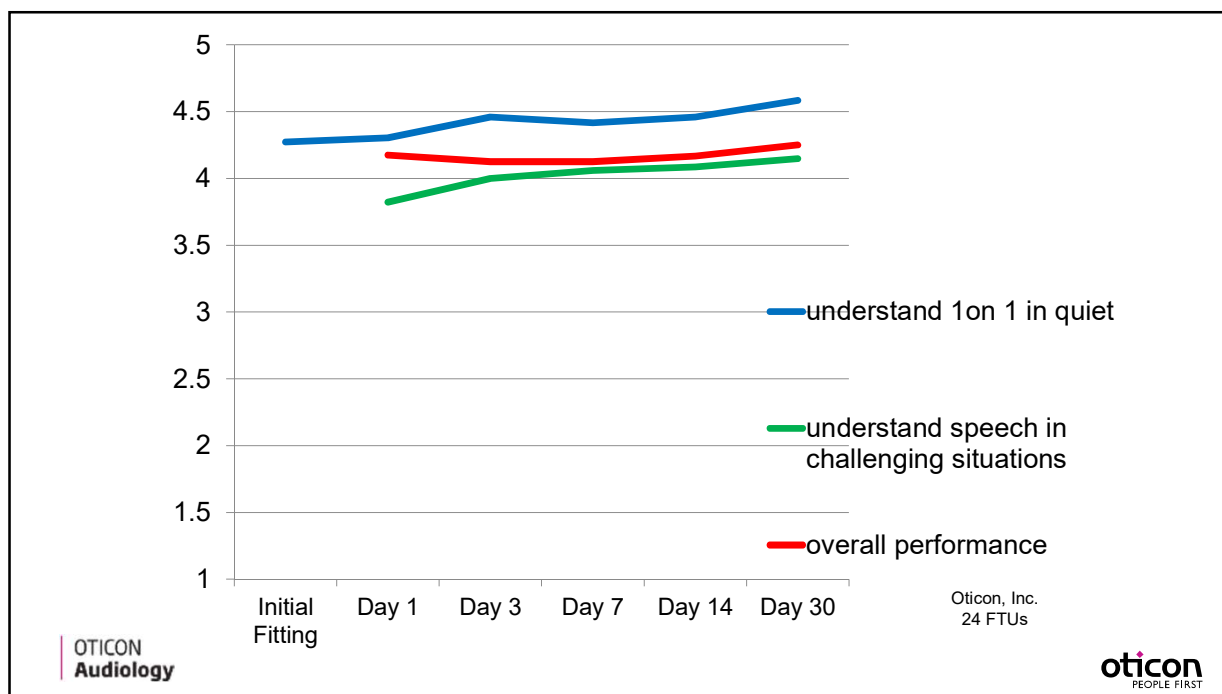
## What happens during first 30 days?

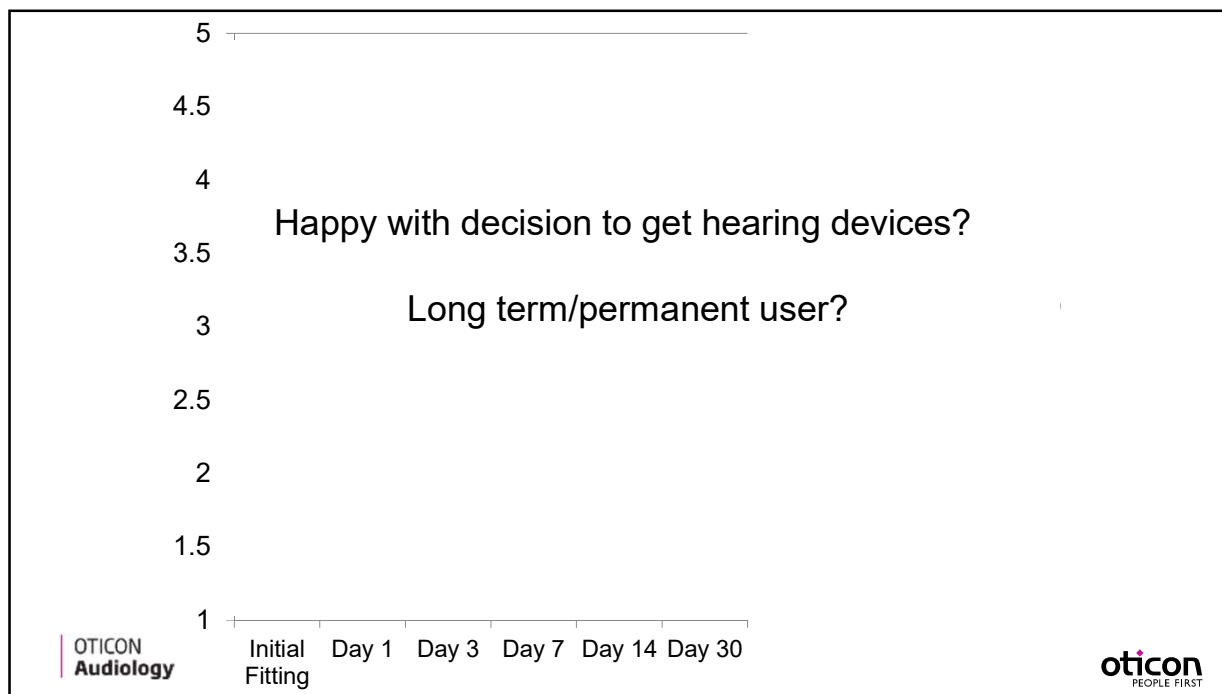
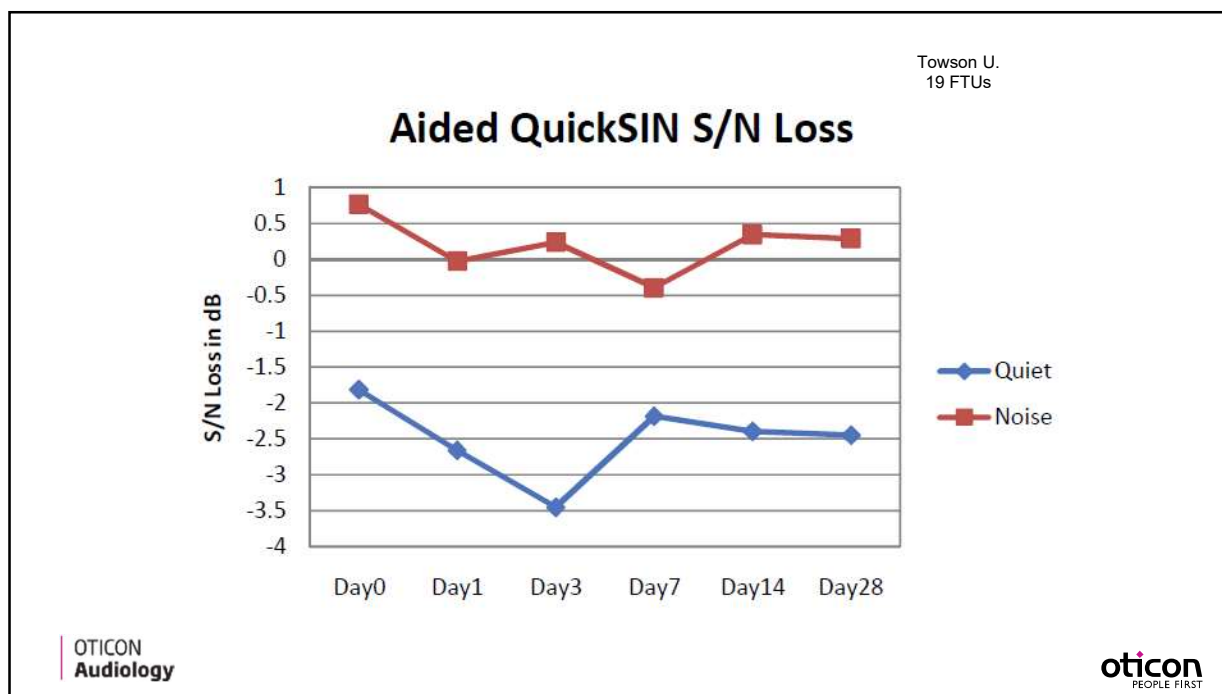
- First Times Users (high end)
- Fitting, +1, +3, +7 +14, +30 days
- Subjective Qs on Side Effects, Performance & Attitude
- At Towson: Speech Understanding in Quiet & Noise
- All subjects kept the devices

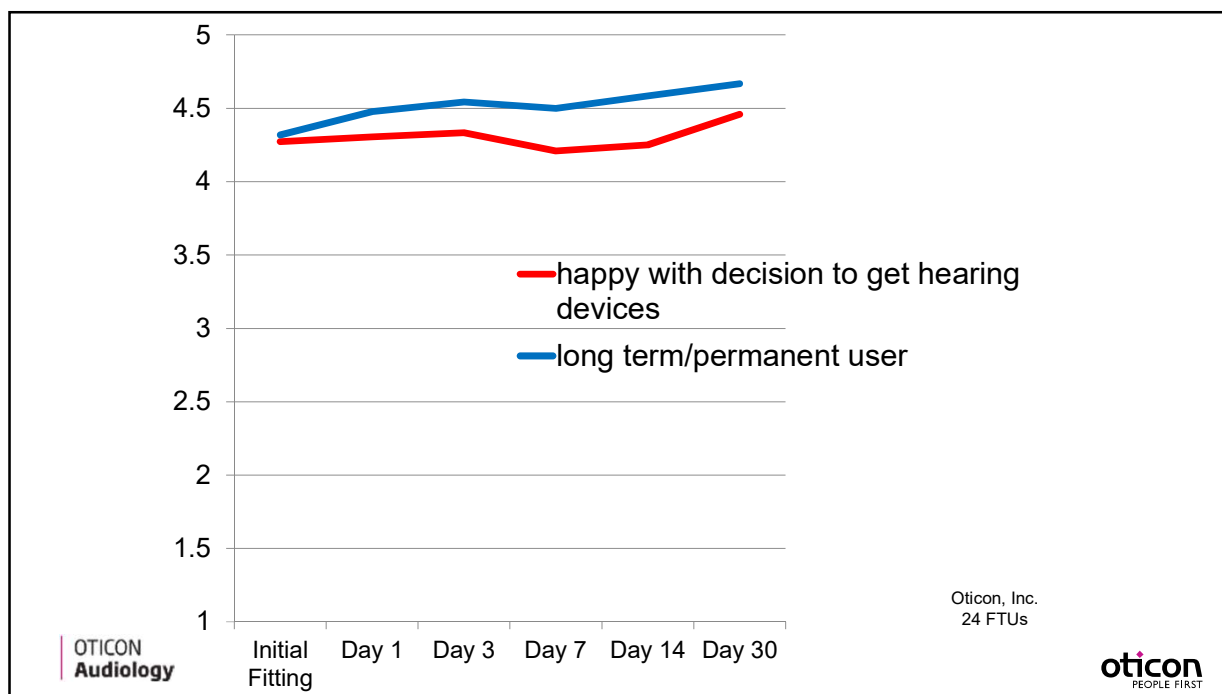










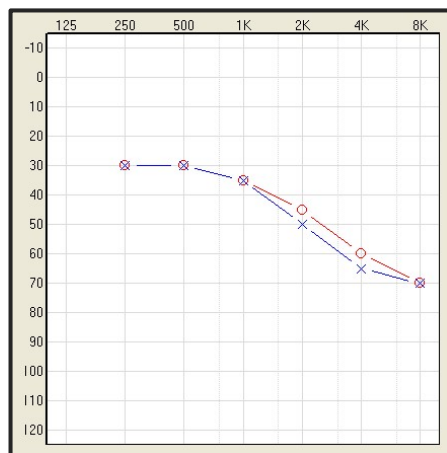


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## When fittings fail . . .

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Average WRS in Quiet  
R: 85% L: 79%

- 115 FTUs
- Average Age: 73 yrs
- Mid & High end HAs
- Returned HAs, no new set
- Filled out by patient away from HCP

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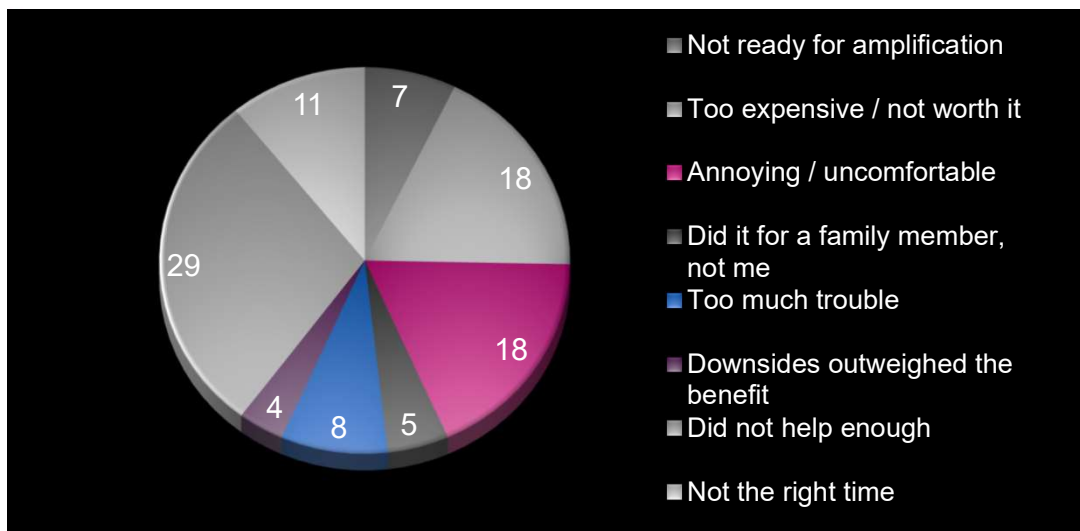
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Why did the fitting not work out for you?

When did you know the fitting would not work out for you?

Do you think you will try hearing aids again in the future?

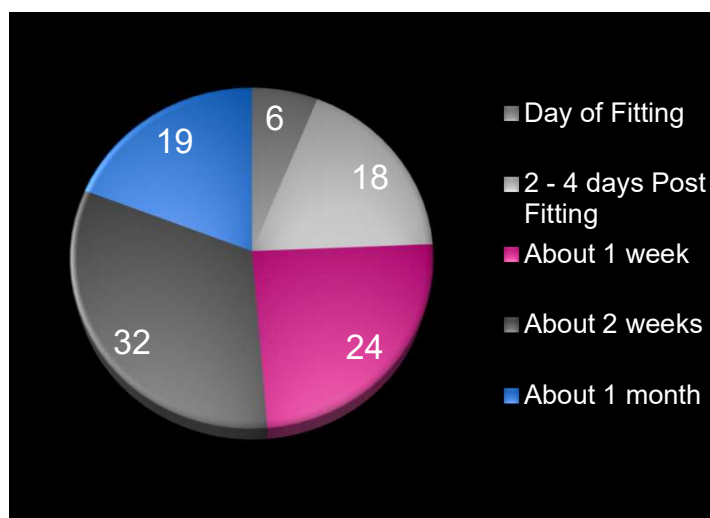
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Why did the fitting not work out for you?

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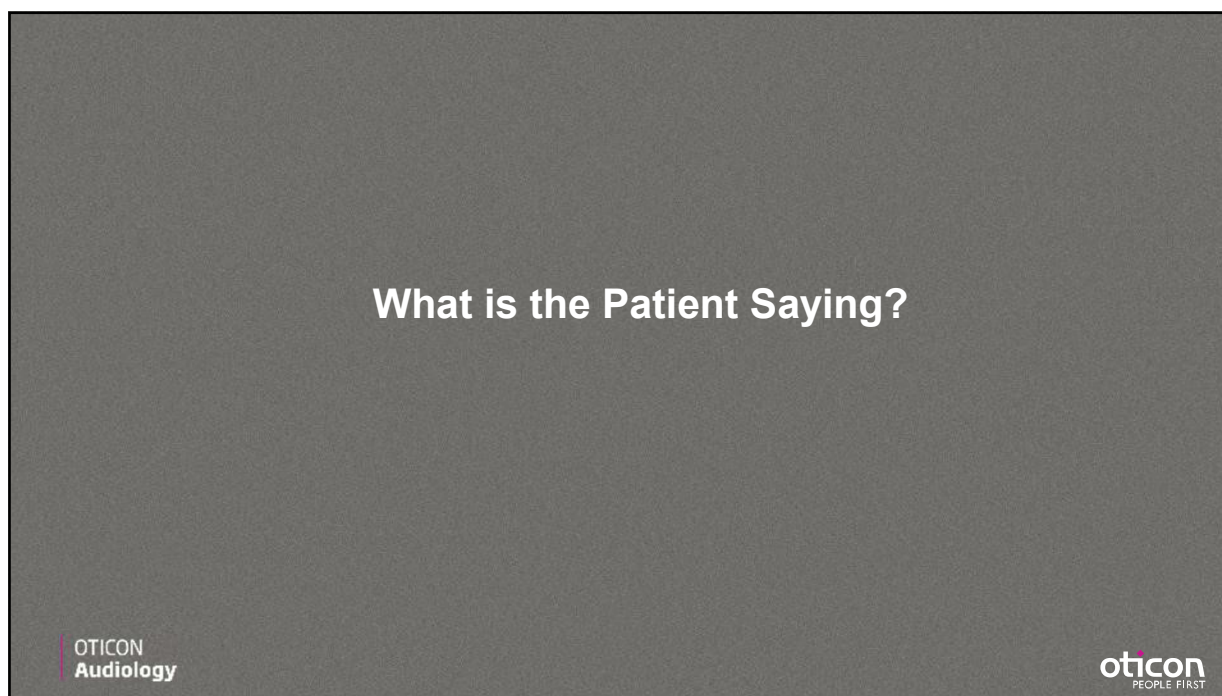
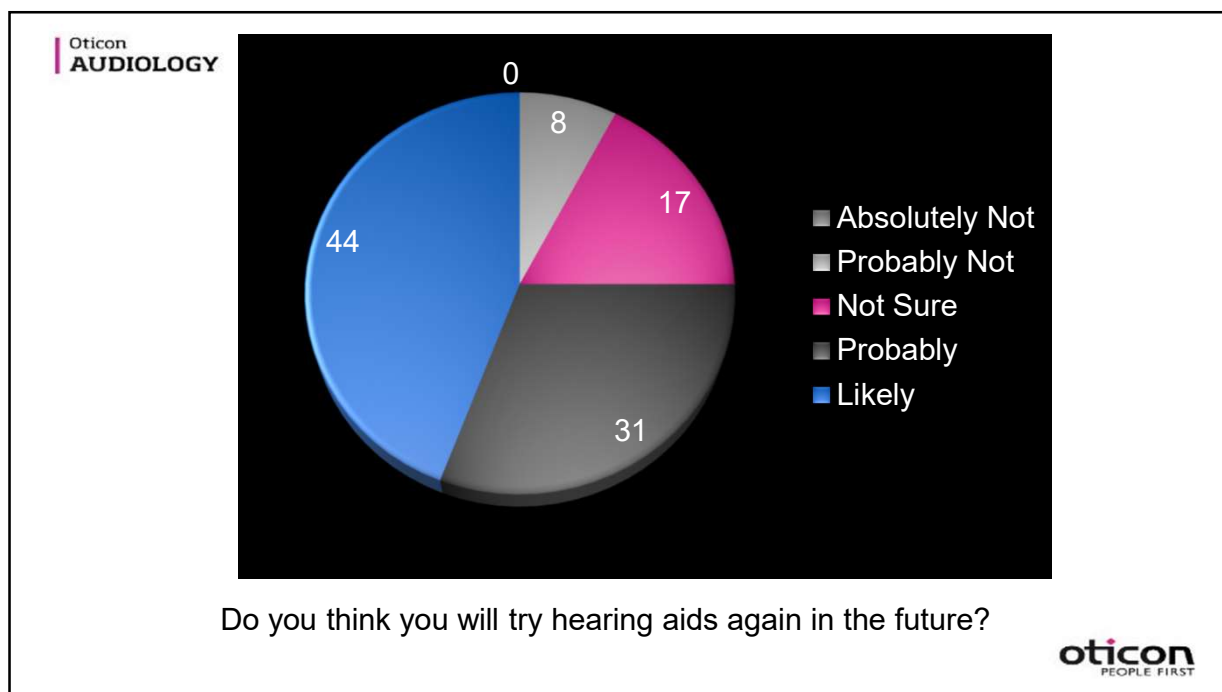
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When did you know the fitting would not work out for you?

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## **Report or Complaint?**

## **Is it an important/common situation?**

## When to Act?

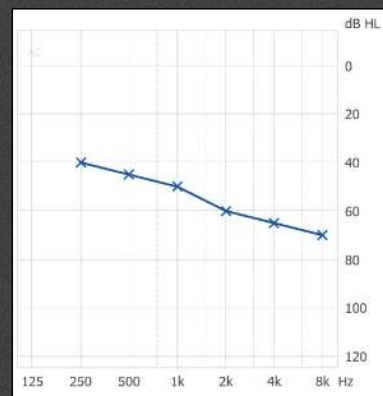
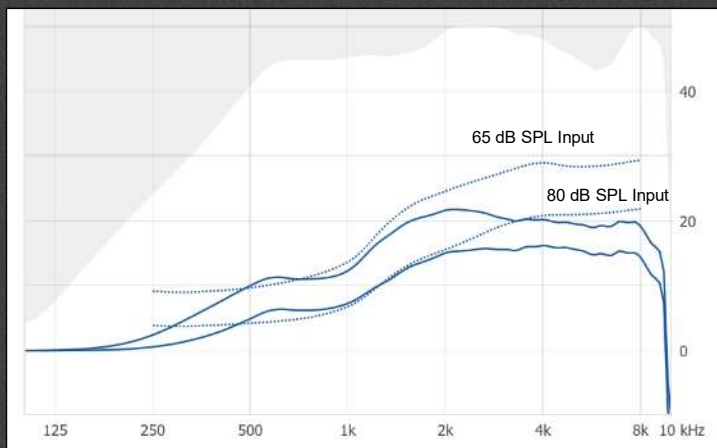
## Approaching the Adjustment Process

## History Lesson:

- ▶ 1980s: multiple programs
- ▶ 1990s: magic in numbers
- ▶ 2000s: magic in automatic systems
- ▶ 20-teens: naturalistic

## The Adaptation Process

## Step 1 vs. Step 3



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## Patient “Bill of Expectations”

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## Patient Expectation Guide

### ► Expectations:

- Functional on a daily basis . . . Repairs in a timely manner
- Free from feedback under normal use conditions
- Physically comfortable to wear
- Loud sounds acceptable
- Improved ability to hear soft and conversational levels of speech in quiet environments.
- Comfortable to wear in louder, noisier environments.



## Patient Expectation Guide

### ► Potential Benefits:

- The hearing aids will allow you to better understand speech in complex, noisy situations.
- The hearing aids will improve your ability to separate the various sources of sound in your environment and focus on the sounds in which you are most interested.
- The hearing aids will improve your ability to understand speech from electronic sources such as telephones, televisions, etc.
- Higher the technology level, the greater the chances of improved performance in complex situations



## Fitting Rationales

Why would someone want something different?

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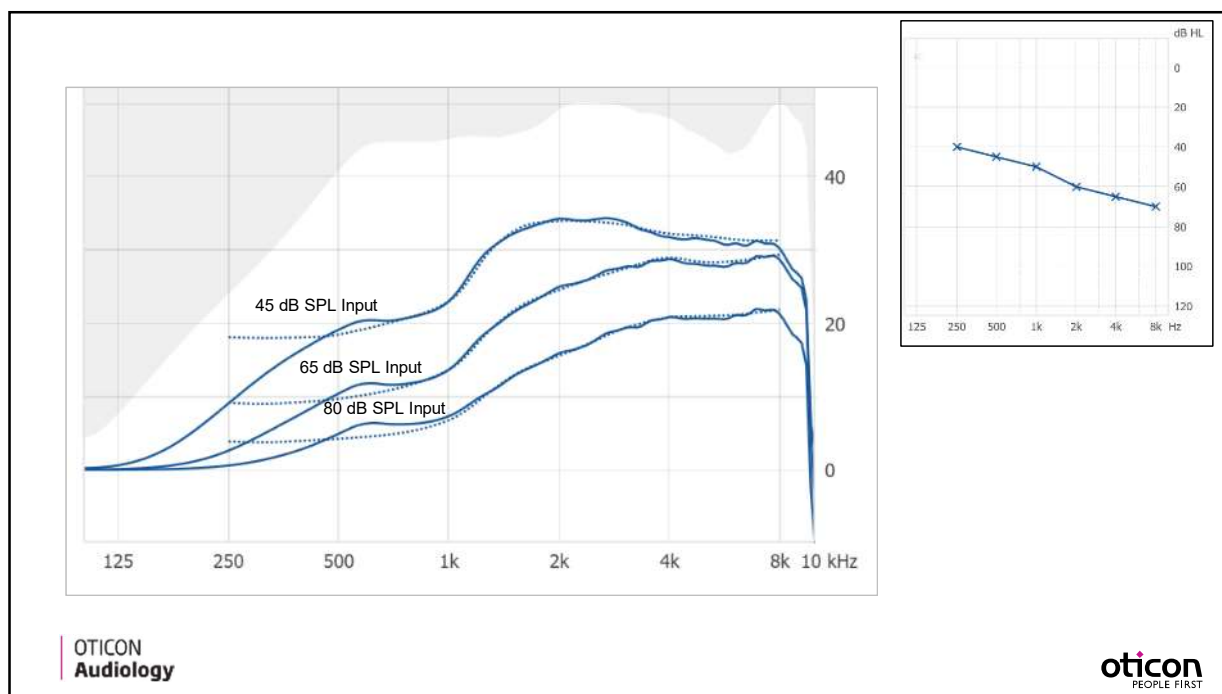
Individual differences in . . .

- . . . spectral preference
- . . . loudness/audibility trade off
- . . . loudness perception
- . . . adaptation process
- . . . signal of interest
- . . . psychoacoustic integrity
- . . . cognitive processing
- . . . preferred device personality
- . . . Etc.

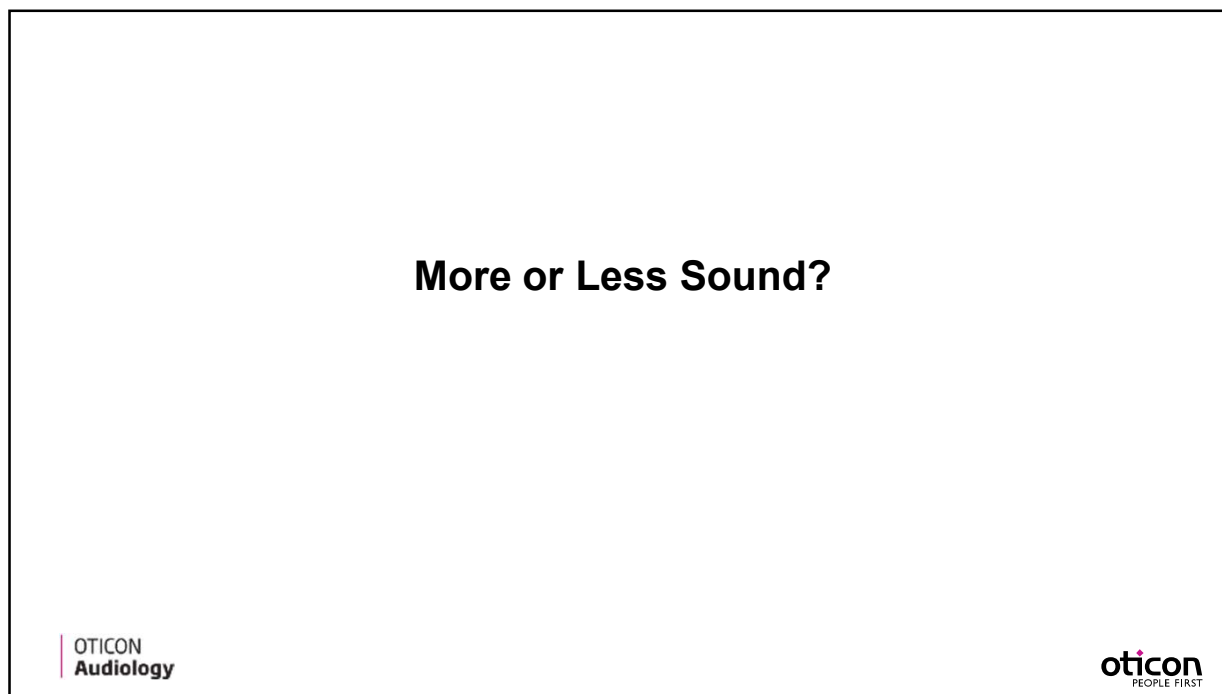
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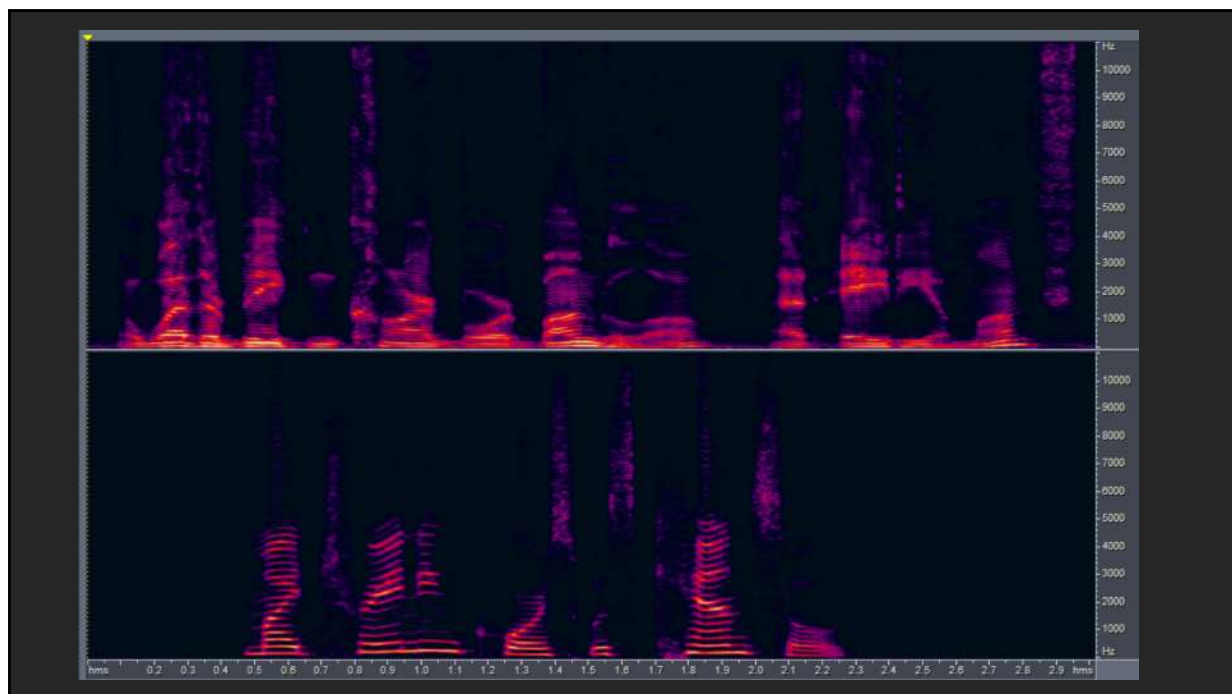
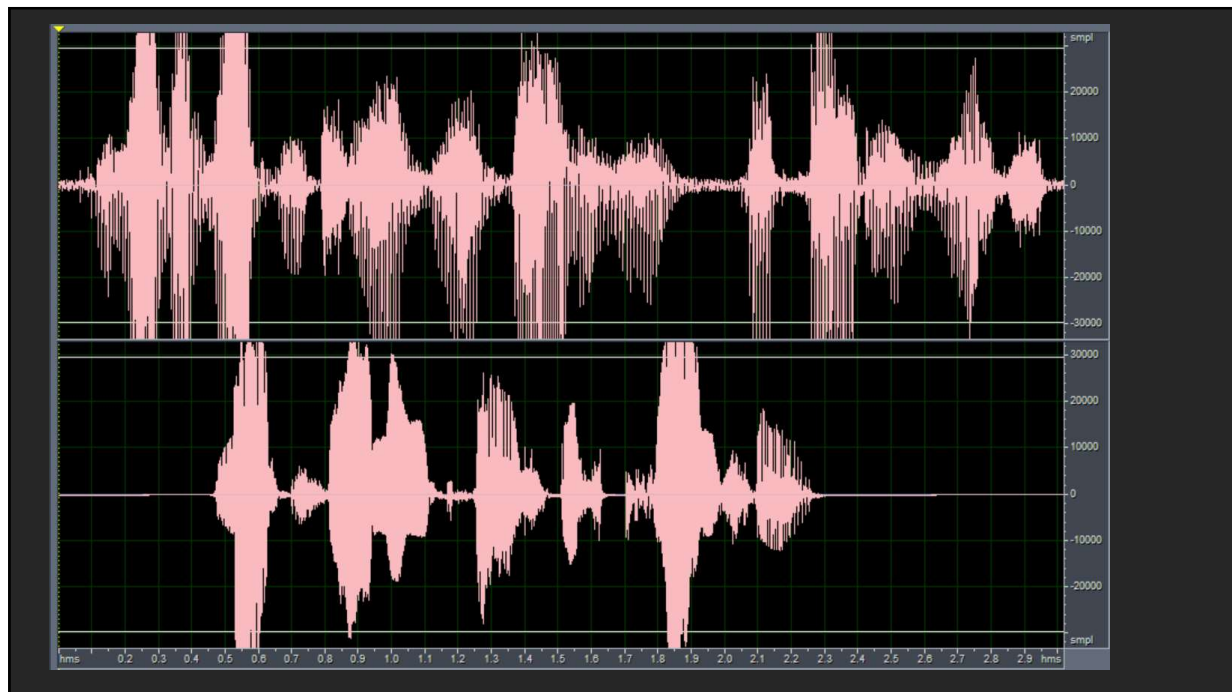
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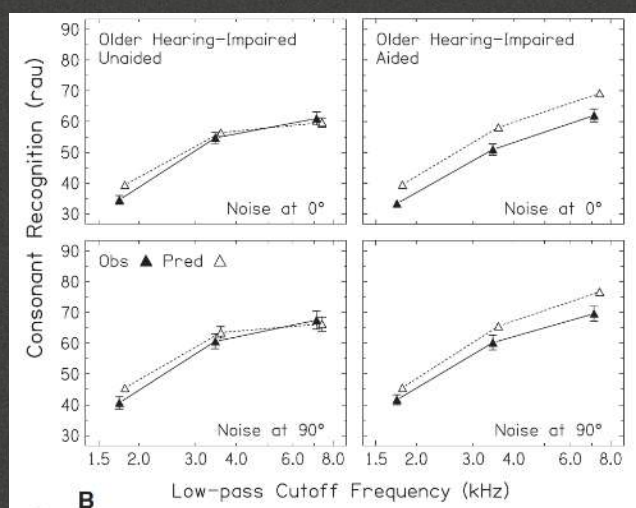
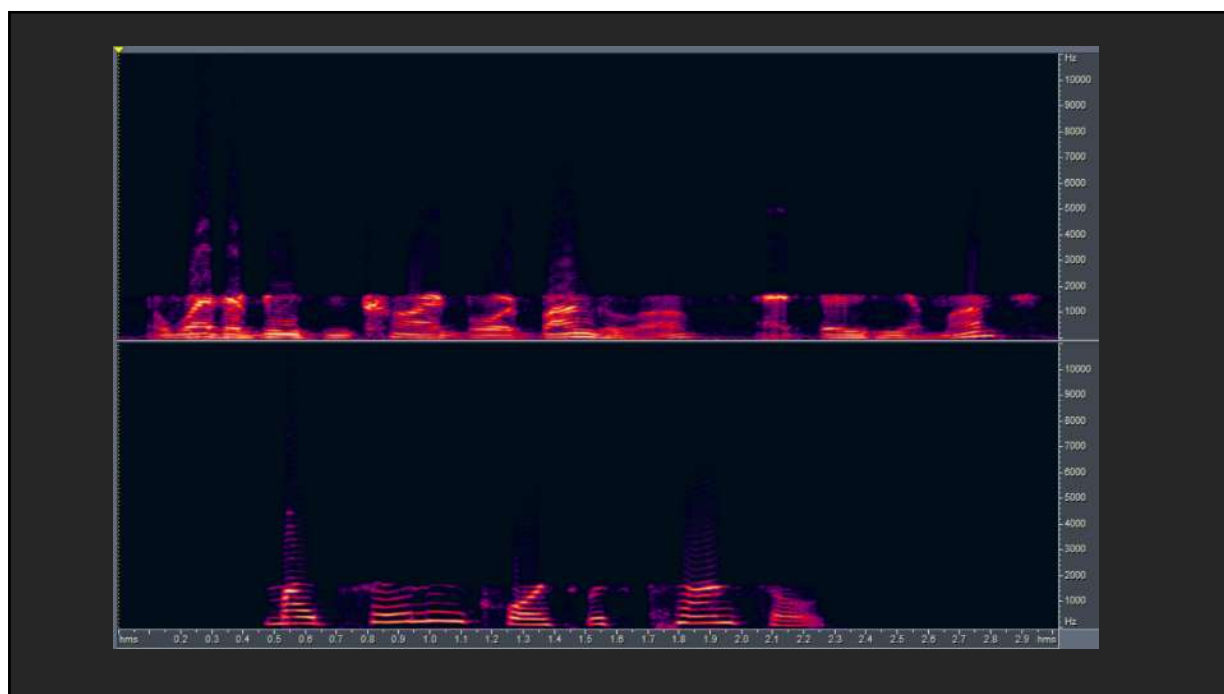




## More or Less Sound?







**Consonant Recognition in Speech Shaped Noise**  
(Ahlstrom, Horwitz & Dubno, 2013)

## What Matters in the Performance of the Devices?

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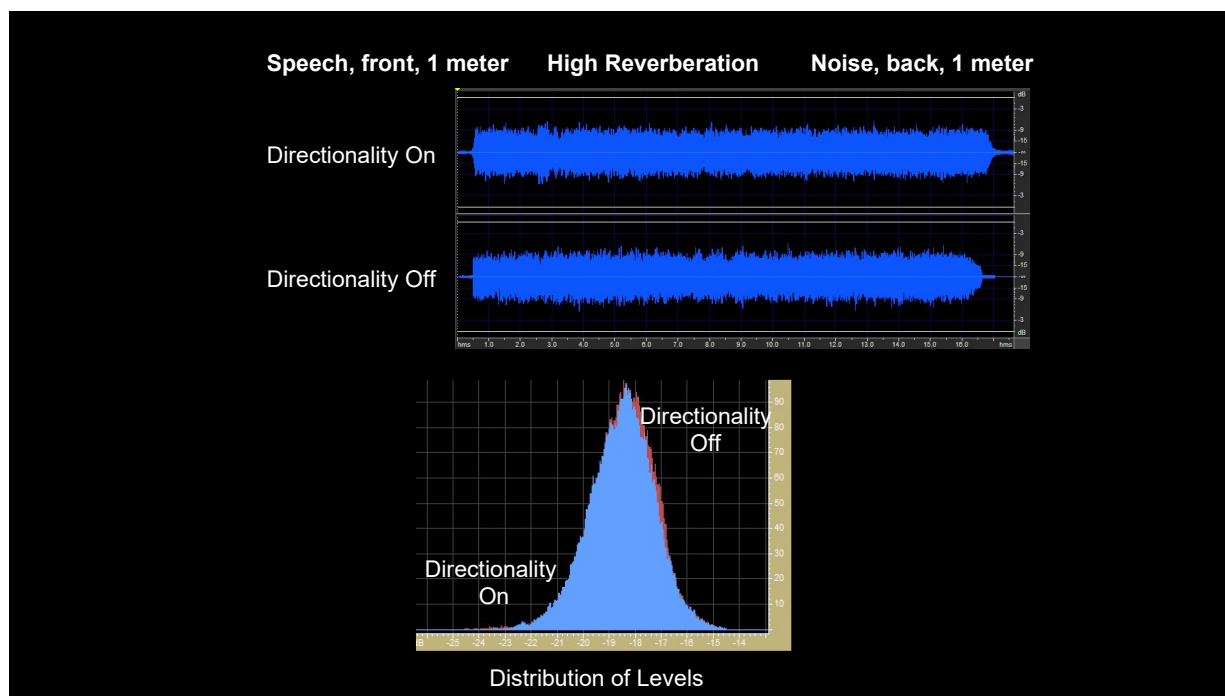
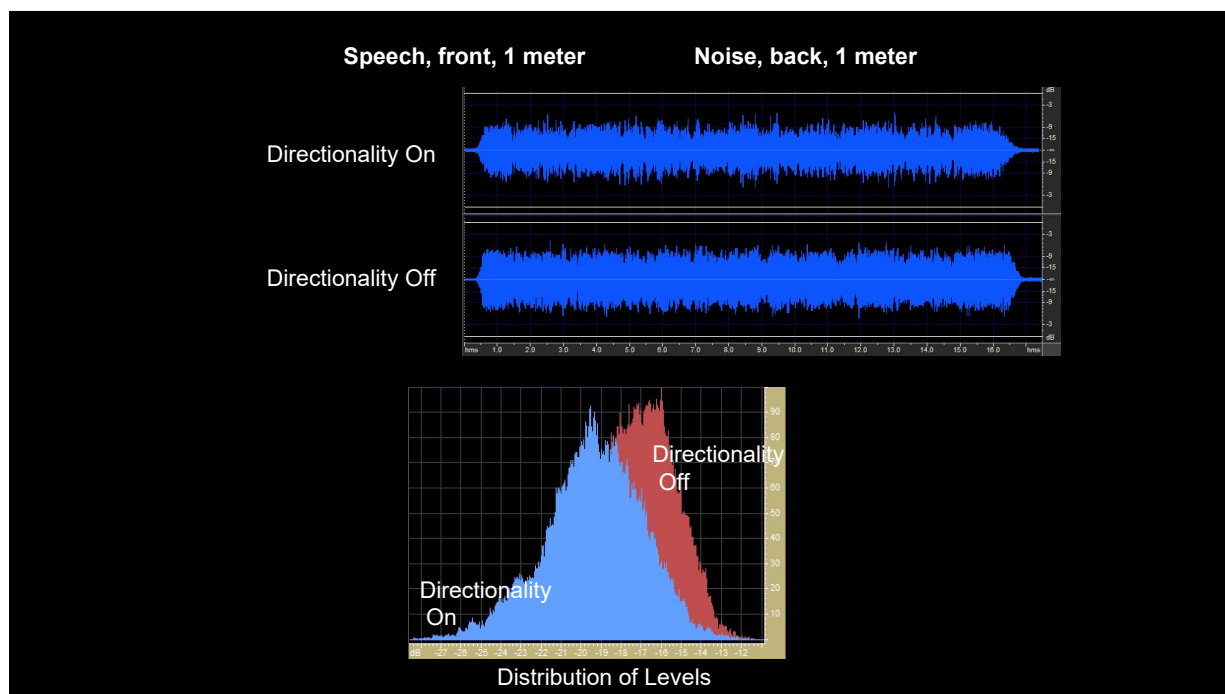
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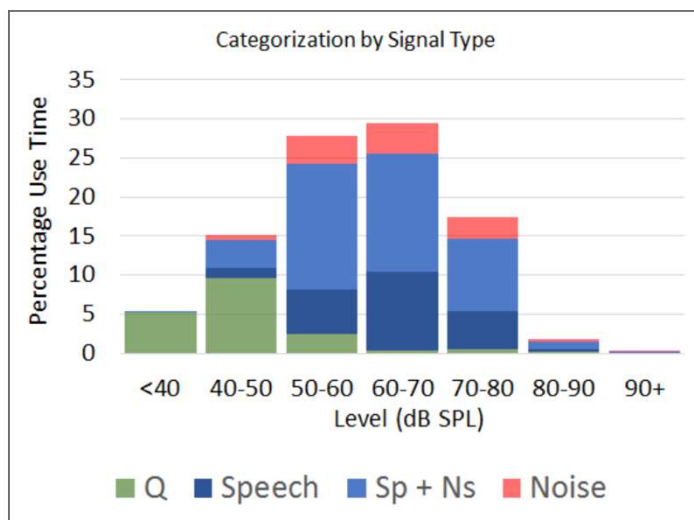
### Complex Environments

- ▶ Multiple talkers
- ▶ Stable, non-speech sources
- ▶ Unstable, non-speech sources
- ▶ Movement
- ▶ Distractions
- ▶ Shifting focus
- ▶ A little bit of everything

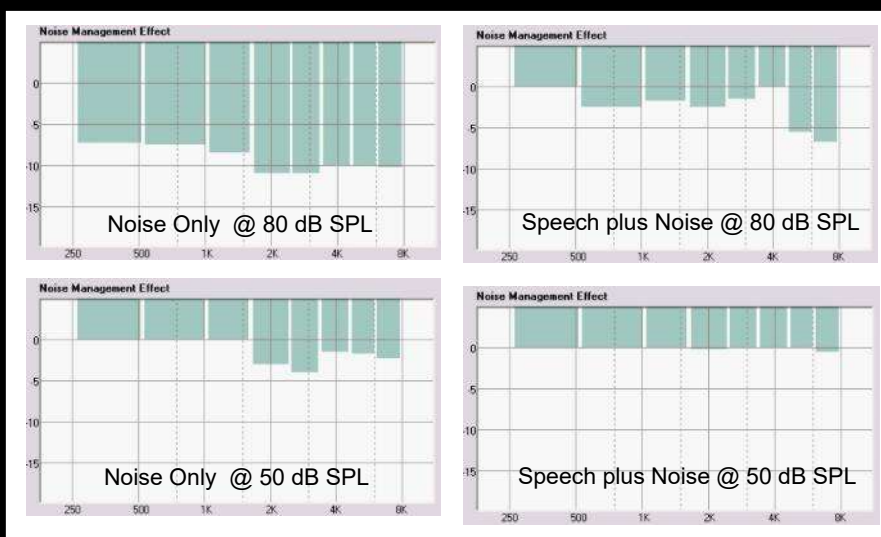
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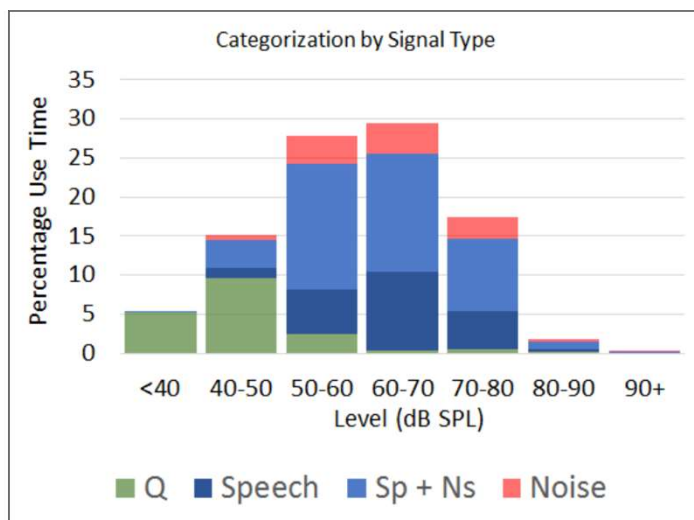




N = 103 Alta/Alta Pro Users    Average HPD = 11.2 hrs



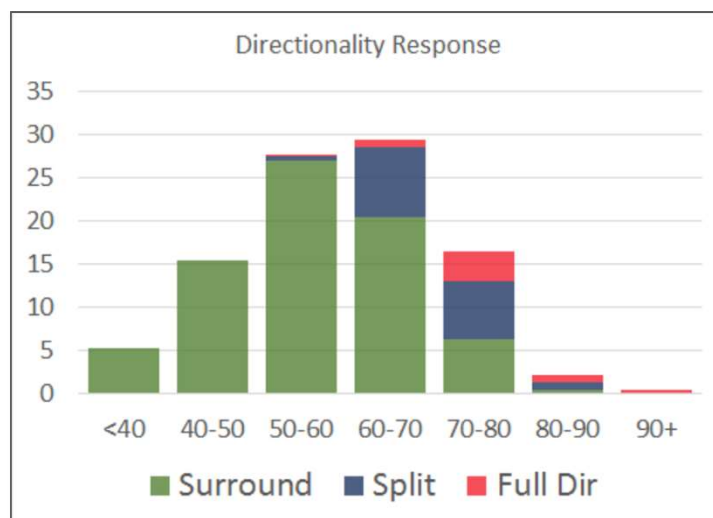
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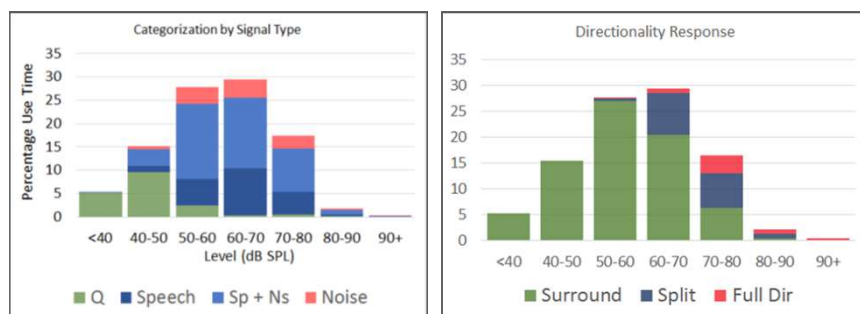
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## Over-used Approaches (DJS Opinion)

## Over-used Approaches (one man's opinion):

- ▶ Too Soon / Too Quick

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- ▶ Excessive Faith in Targets

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## The Top Ten

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### Top Ten Best Suggestions:

1. Give it time

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### Top Ten Best Suggestions:

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2. Expectations Guidelines

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3. Are the physical components correct? Does the software know?

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4. Provide immediate solution to loudness discomfort



### Top Ten Best Suggestions:

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2. Expectations Guidelines
3. Are the physical components correct? Does the software know?
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5. Respect sound quality & acceptance requests



### Top Ten Best Suggestions:

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2. Expectations Guidelines
3. Are the physical components correct? Does the software know?
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5. Respect sound quality & acceptance requests
6. Review data-logging with patient



### Top Ten Best Suggestions:

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2. Expectations Guidelines
3. Are the physical components correct? Does the software know?
4. Provide immediate solution to loudness discomfort
5. Respect sound quality & acceptance requests
6. Review data-logging with patient
7. Use the full range of usable hearing



### Top Ten Best Suggestions:

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3. Are the physical components correct? Does the software know?
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7. Use the full range of usable hearing
8. If the problem is in noise, start with “systems” controls



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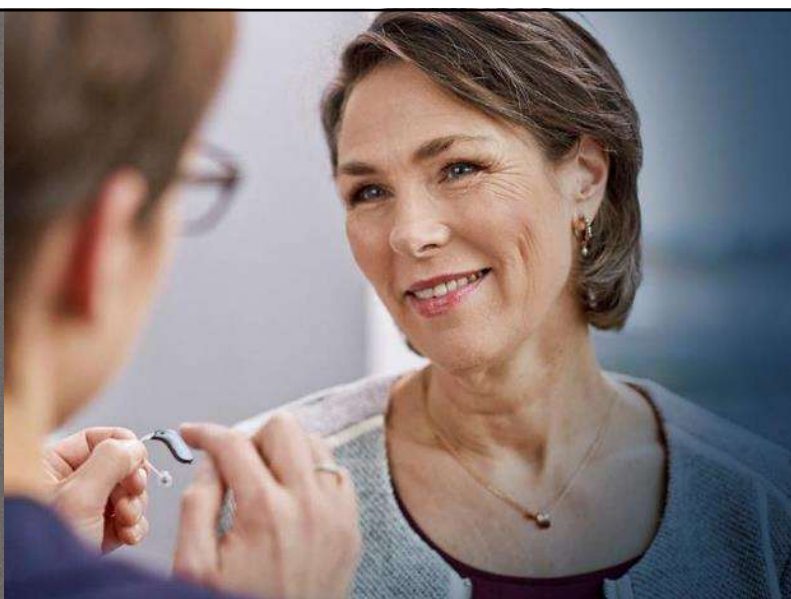
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