**Submission Template**

**Educational Audiology**

# **Descriptive Title of Case. Replace this heading with your title.**

*Note: Educational Audiology Cases begin at age 3 and may extend to college students*

# **Authors**

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ACKNOWLEDGMENT: Mary Jane, Au.D., Cool Medical Externship Site, City, State

# **User Agreement**

The user agreement is within the Submission Guidelines ([www.AudCases.com](http://www.AudCases.com)) Type the initials of the authors below to electronically sign the user agreement, most importantly, that you have thoroughly checked that the case is completely de-identified:

# **Table of Content Items**

List the items for your table of content here. Do not indent. Use a separate line per item.

# **Educational Level**

Choose one educational level that most adequately describes your case and delete the others.

 Introductory

 Intermediate

 Advanced

# **Learning / Assessment Objectives**

Replace the list below with your own objectives. Use the format provided.

By completing this case, the student will be able to:

1. Identify the type of loss
2. Describe the loss severity**Case History/Background Information**

Initials, a \_\_ year old (gender if appropriate), . . .

* What question do you want to insert here? Delete if no question is to be used.If a question is given, please provide the answer to the question as it would appear in the Instructor Guide. Delete this bullet if no question is to be used.

# **Audiometric Data**

Mention otoscopy if relevant. Omit tests that were not performed or for which you do not have results.

Create a digital audiogram using this link. <http://www.audsim.com/audgenJS/> . If additional symbols (such as S or A) are needed, use the “annotate” feature. The submission guidelines document details when other formats can/should be used.

* What question do you want to insert here? Delete if no question is to be used.
* If a question is given, please provide the answer to the question as it would appear in the Instructor Guide. Delete this bullet if no question is to be used.

## **Speech in Quiet**

Use this table for speech testing results, inserting child-specific results. Replace SRT with SAT if appropriate.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **PTA (dB HL)** | **SRT (dB HL)** | **WRS** | **WRS Intensity (dB HL)** |
| **Right Ear** | 80 | 80 | 44 | 100 |
| **Left Ear** | 10 | 15 | 100 | 50 |
|  |  |  |  |
| Spondee Technique | MLV | WRS Technique | Recorded |
|  |  | List and Number | NU-6 Right: 1A Left: 2A |
|  |  | Number of Items |  Right: 50 Left: 10 MD |

MLV = Monitored Live Voice PP = Picture Pointing

NU-6 = Northwestern University List 6 CID W-22 = Central Institute of the Deaf, Word List 22.

10 MD = 10 Most Difficult

NU-ChiPS = Northwestern University Children’s Perception of Speech

WIPI = Word Intelligibility by Picture Identification

PB-K = Phonetically Balanced – Kindergarten

## **Speech-in-Noise Assessment**

Use the table below. If a test other than BKB-SIN is used, replace that label with the name of the test(s) used. Delete unneeded rows.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Right Side** | **dB HL** | **SNR** | **%** | **dB HL** | **SNR** | **%** | **dB HL** | **SNR** | **%** |
| **BKB-SIN** |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **Left Side** |  |  |  |  |  |  |  |  |  |
| **BKB-SIN** |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

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# **Immittance and OAE**

Omit tests that are not appropriate to the case

## **Tympanometry**

226 Hz / Y tympanograms should be included in this section

* What question do you want to insert here? Delete if no question is to be used.
* If a question is given, please provide the answer to the question as it would appear in the Instructor Guide. Delete this bullet if no question is to be used.

## **Advanced Middle Ear Analysis**

If multiple types of middle ear analysis are included, please use this ordering

### Multifrequency Tympanometry

Provide traces. The preferred format is for B/G traces to be on the same printout with a separate Y trace.

Ensure that probe frequency is clearly noted.

* What question do you want to insert here? Delete if no question is to be used.
* If a question is given, please provide the answer to the question as it would appear in the Instructor Guide. Delete this bullet if no question is to be used.

### **Wideband Acoustic Immittance (WAI)**

Provide high-quality graphics

* What question do you want to insert here? Delete if no question is to be used.
* If a question is given, please provide the answer to the question as it would appear in the Instructor Guide. Delete this bullet if no question is to be used.

### **Middle Ear Absorption**

Provide high-quality graphics

* What question do you want to insert here? Delete if no question is to be used. Questions can be moved to the subheadings above, they need not appear after all of the middle ear data are provided.
* If a question is given, please provide the answer to the question as it would appear in the Instructor Guide. Delete this bullet if no question is to be used.

## **Acoustic Reflexes**

### **Thresholds**

Please put acoustic reflex results in the table below. Thresholds are assumed to be in dB HL. If in dB SPL then change the upper left-hand table notation AND note in text.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **(dB HL)****Probe Ear** | **Hz 🡪****Stimulated Ear (Mode)** | **500** | **1000** | **2000** | **4000** | **BBN** |
| Right | Right(Ipsi) | 85 | 105 | 110 | Absent | 95 |
| Right | Left(Contra) | 80 | 100 | Absent | Absent | 90 |
| Left | Left(Ipsi) | 90 | 105 | 110 | Absent | 100 |
| Left | Right(Contra) | 95 | 110 | Absent | Absent | 95 |

* What question do you want to insert here? Delete if no question is to be used.
* If a question is given, please provide the answer to the question as it would appear in the Instructor Guide. Delete this bullet if no question is to be used.

### **Acoustic Reflex Decay**

Insert high-quality reproductions of the test results.

* What question do you want to insert here? Delete if no question is to be used.
* If a question is given, please provide the answer to the question as it would appear in the Instructor Guide. Delete this bullet if no question is to be used.

## **Otoacoustic Emissions**

### **Transient-Evoked**

Insert high-quality reproductions of the test results.

Use of a tabular format, either as a way of presenting the results. Adjust table, adding and removing and relabeling frequencies as appropriate to the case.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Freq (Hz)** | **500** | **1000** | **2000** | **3000** | **4000** | **6000** |
| **Right Ear** | **OE Level** |  |  |  |  |  |  |
|  | **SNR** |  |  |  |  |  |  |
| **Left Ear** | **OE Level** |  |  |  |  |  |  |
|  | **SNR** |  |  |  |  |  |  |

* What question do you want to insert here? Delete if no question is to be used.
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### **Distortion-Product**

Insert high-quality reproductions of the test results.

Use of a tabular format, either as a way of presenting the results. Adjust table, adding and removing and relabeling frequencies as appropriate to the case.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Freq (Hz)** | **500** | **1000** | **2000** | **3000** | **4000** | **6000** |
| **Right Ear** | **OE Level** |  |  |  |  |  |  |
|  | **SNR** |  |  |  |  |  |  |
| **Left Ear** | **OE Level** |  |  |  |  |  |  |
|  | **SNR** |  |  |  |  |  |  |

* What question do you want to insert here? Delete if no question is to be used.
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# **Hearing Assistance Technology**

Describe or ask about technology options for the child.

* What question do you want to insert here? Delete if no question is to be used.
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## **Aided Results – Speech in Quiet**

Add rows as needed. Note: MLV and Recorded in table below are placeholders. Replace if not accurate.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **PTA (dB HL)** | **SRT (dB HL)** | **WRS** | **WRS Intensity (dB HL)** |
| **Right Ear** | 80 | 80 | 44 | 100 |
| **Left Ear** | 10 | 15 | 100 | 50 |
|  |  |  |  |
| Spondee Technique | MLV | WRS Technique | Recorded |
|  |  | List and Number | NU-6 Right: 1A Left: 1B |
|  |  | Number of Items |  Right: 50 Left: 10 MD |

NU-6 = Northwestern University List 6 CID W-22 = Central Institute of the Deaf, Word List 22.

10 MD = 10 Most Difficult

NU-ChiPS = Northwestern University Children’s Perception of Speech

WIPI = Word Intelligibility by Picture Identification

PB-K = Phonetically Balanced – Kindergarten

## **Aided Speech-in-Noise Assessment**

Use the table below. If a test other than BKB-SIN is used, replace that label with the name of the test(s) used. Delete unneeded rows.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Right Side** | **dB HL** | **SNR** | **%** | **dB HL** | **SNR** | **%** | **dB HL** | **SNR** | **%** |
| **BKB-SIN** |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **Left Side** |  |  |  |  |  |  |  |  |  |
| **BKB-SIN** |  |  |  |  |  |  |  |  |  |
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Educational Audiology Assessments

# **Functional Listening Assessment**

## **Functional Listening**

### **Testing Paramaters**

“Close” conditions evaluated at a distance of **## feet** and/or **## dB A**

“Far” conditions evaluated at a distance of **## feet** and/or **## dB A**

Setting: Describe, e.g. Student seated at her regular position at front of the classroom.

Noise Type: Describe, e.g. 3-talker babble from a speaker positioned 3’ away at a level of 55-57 dB A.

Speech Stimuli: Describe, e.g. Children’s Nonsense Phrases, CID W-22 words. Include number of stimuli.

###  **Condition Acronyms**

**AVCQ =** Auditory + visual, close, quiet

**ACQ =** Auditory only, close, quiet

**AVCN** = Auditory + visual, close, noise

**ACN** = Auditory only, close, noise

**AVFQ =** Auditory + visual, far, quiet

**AFQ =** Auditory only, far, quiet

**AVFN** = Auditory + visual, far, noise

**AFN** = Auditory only, far, noise

### **Amplification Systems Tested**

Delete unnecessary acronyms, create one if the list below does not apply. Especially for advanced cases, please give specifics on the devices used.

“FM” is used as a placeholder. Replace with RM or DM/FM as appropriate.

HA = Hearing aid (List specifics e.g. Binaural Phonak ZYB model

HA + FM = Hearing aid (Binaural Phonak ZYB model with YadaYada FM)

CI = Cochlear Implant (Advanced Bionics, bilateral)

CI + FM = Cochlear Implant + FM (Cochlear Corp bilateral with YadaYada FM.)

None = No amplification used

CI R, HA+FM L = Cochlear Implant (Cochlear Corporation) right ear, Hearing aid (Binaural Phonak ZYB model with YadaYada FM) left ear

BiM = Bimodal (Oticon hearing aid left, Cochlear Corporation Implant right)

Hybrid=Hearing aid and CI (Oticon hearing aid + short array Advanced Bionics)

### **Test Results**

Use this table for monosyllabic test results.(Table below is for sentence / phrase test material.) Delete unused rows, delete the table not used, these instructions, and sample comments/observations. Use the “Amp” conditions appropriate to your case, using the acronyms above (as modified to fit the case.).

|  |  |  |
| --- | --- | --- |
| Condition / Amp  | % Correct | Comments / Observations |
| AVCQ / HA |  | “That was easy.” |
| AVCQ / HA + FM |  | “Super easy.” |
| AVCN / HA |  | “I had to listen hard.” |
| AVCN / HA + FM |  | “Much better, thanks!” |
| AVFQ / HA |  | “I think I did OK.” Child’s face showed concentration. |
| AVFQ / HA + FM |  | “I liked that way better.” |
| AVFN / HA |  | “That’s not going to work, use the mic” |
| AVFN / HA + FM |  | “Can you turn the noise down?” |
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Use this table to report both sentence and individual word scores. If “phrases” were used instead of sentences, change the table column heading. Delete table not used and these instructions.

|  |  |  |  |
| --- | --- | --- | --- |
| Condition / Amp  | % Words Correct | % Sentences Correct | Comments / Observations |
| AVCQ / HA |  |  |  |
| AVCQ / HA + FM |  |  |  |
| AVCN / HA |  |  |  |
| AVCN / HA + FM |  |  |  |
| AVFQ / HA |  |  |  |
| AVFQ / HA + FM |  |  |  |
| AVFN / HA |  |  |  |
| AVFN / HA + FM |  |  |  |
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* What question do you want to insert here? Delete if no question is to be used.
* If a question is given, please provide the answer to the question as it would appear in the Instructor Guide. Delete this bullet if no question is to be used.

## **Teacher /Parent Observations and Questionnaires**

Use this section for classroom observation, teacher questionnaires (e.g. SIFTER) and parent input/questionnaires.

* What question do you want to insert here? Delete if no question is to be used.
* If a question is given, please provide the answer to the question as it would appear in the Instructor Guide. Delete this bullet if no question is to be used.

## **Classroom Observations**

Use this section for the audiologist’s observation of student classroom listening performance.

## **Self-Assessments**

* What question do you want to insert here? Delete if no question is to be used.
* If a question is given, please provide the answer to the question as it would appear in the Instructor Guide. Delete this bullet if no question is to be used.

# **Classroom Acoustics Measurements**

Include observational notes and when possible, sound level meter measurements to estimate noise levels, reverberation time, SNR and resulting critical distance recommendations; compare to ANSI S12.60.2010 recommendations for unoccupied and occupied ambient noise levels, reverberation time. Use of the Classroom Acoustics Screening Worksheet from the AAA Remote Microphone Hearing Assistance Technologies for Children and Youth from Birth to 21 Years, Supplement B: Classroom Audio Distribution Systems-Selection and Verification is recommended to conduct these measurements.

* What question do you want to insert here? Delete if no question is to be used.
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# **Educational Plan**

Provide a discussion of the educational placement and planning considerations including services and supports needed based on data collected.

## Individual Family Service Plan

* What question do you want to insert here? Delete if no question is to be used.
* If a question is given, please provide the answer to the question as it would appear in the Instructor Guide. Delete this bullet if no question is to be used.

## Individual Educational Program

* What question do you want to insert here? Delete if no question is to be used.
* If a question is given, please provide the answer to the question as it would appear in the Instructor Guide. Delete this bullet if no question is to be used.

## 504 Plan

* What question do you want to insert here? Delete if no question is to be used.
* If a question is given, please provide the answer to the question as it would appear in the Instructor Guide. Delete this bullet if no question is to be used.

# **Summary and Discussion**

Omit this category if not appropriate to the case. You may reorder this heading vs recommendations as fits your case.

* What question do you want to insert here? Delete if no question is to be used.
* If a question is given, please provide the answer to the question as it would appear in the Instructor Guide. Delete this bullet if no question is to be used.

# **Recommendations**

Omit this category if it is not appropriate to your case.

* What question do you want to insert here? Delete if no question is to be used.
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