



Working Together:
The Information Exchange Between
Families, Pediatric Audiologists and Early
Interventionists to Maximize Outcomes

Teresa Caraway, Ph.D. CCC-SLP, LSLS Cert. AVT

Jessica Ballard, Au.D. CCC-A

Hearts for Hearing

The Hearts for Hearing Team



Audiologists

Jace Wolfe, Ph.D., CCC-A

Jessica Ballard, AuD., CCC-A

Heather Kasulis, AuD, CCC-A

Speech-Language Pathologists

Joanna T. Smith, M.S., CCC-SLP, LSLS Cert. AVT

Teresa H. Caraway, Ph.D., CCC-SLP, LSLS Cert. AVT

Wendy DeMoss, M.S., CCC-SLP, LSLS Cert. AVT

Tamara Elder, M.S. CCC-SLP, LSLS Cert. AVT

Darcy Stowe, M.S. CCC-SLP, LSLS Cert. AVT

Natalie O'Halloran, M.S. CCC-SLP, LSLS Cert. AVT

Amber McLean, M.S. CCC-SLP, LSLS Cert. AVT

Lindsay Steuart, M.S., CCC-SLP, LSLS Cert. AVT

Krissa Cummins, M.S., CCC-SLP



Additional Team Members

Kris Taylor

Pati Burns

June Cashion

Sheryl Gamblin

Kerri Brumley

Dick Bates



The Information Exchange Between Partners



- Consider what information must be shared with collaborating early intervention professionals
- Collective minds are better than one
- Greater continuity of care is established through communication
- Timely access to necessary intervention
- Team members learn from each other
- Collaboration leads to a full understanding of child's current overall functioning and development
- Insights shared maximize listening and spoken language outcomes



Critical Communication

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The Information Exchange Between Partners



- **Information Exchange:**
 - Team members should provide consistent information to avoid confusion and misunderstanding
 - Discuss and share activities that motivate the child
- **Understand the Hearing Loss:**
 - Unaided and aided audiometric thresholds
- **Technology and Follow-up:**
 - Encourage HA/CI use all waking hours!
 - Help with troubleshooting of equipment
 - Is the child tolerating the hearing aids or CI?

The Information Exchange Between Partners



- **Access to Sound:**
 - Detection and discrimination of 6 Ling Sounds
 - Establishing a conditioned responses to sound
- **Auditory, Speech & Language Progress:**
 - Is the child demonstrating that sound has meaning?
 - Is the child following familiar commands through audition only?
 - Is the child able to produce target speech sounds through audition only?
 - Is the child's speech development / articulation relative to hearing age and chronological age?

Jacob



- Birth: Failed newborn hearing screen.
- 1 Month: Profound SNHL
Fit with Bilateral H.A.
AVT initiated
- 12 Months: Right ear: Nucleus Freedom
- 14 Months: Family & Professionals pursue 2nd CI
Medicaid DENIED
Battle begins
- 23 Months: Left ear: Nucleus Freedom
- Equivalent performance between devices:
 - Assessment at 1-year post-activation 2nd ear
 - LNT Open-set (recorded)
 - Right: 100%
 - Left: 96%
 - Bilateral: 96%



Jacob

CA: 13 Months



Jacob

CA: 13 Months



Jacob

CA: 13 Months



Jacob

CA: 13 Months

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Jacob

CA: 3 yrs. 11 mons.



Nora

- Birth: Failed newborn hearing screen
- 1 Month: Tone burst ABR
Immediate HA fitting
Began AVT
Enrolled in EI program at 6 wks
- SoundGene Screen: positive Connexin-26 & Connexin-30 mutations
- Continue to monitor hearing

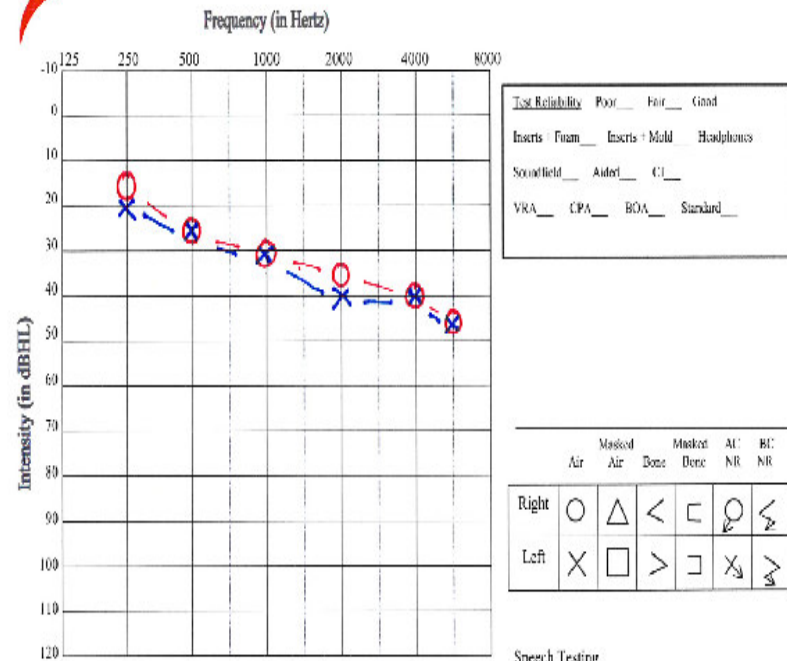


aimee adams photo



Name _____

Date _____ DOB _____ Age _____



Nora

CA: 8 Months

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Kirsten



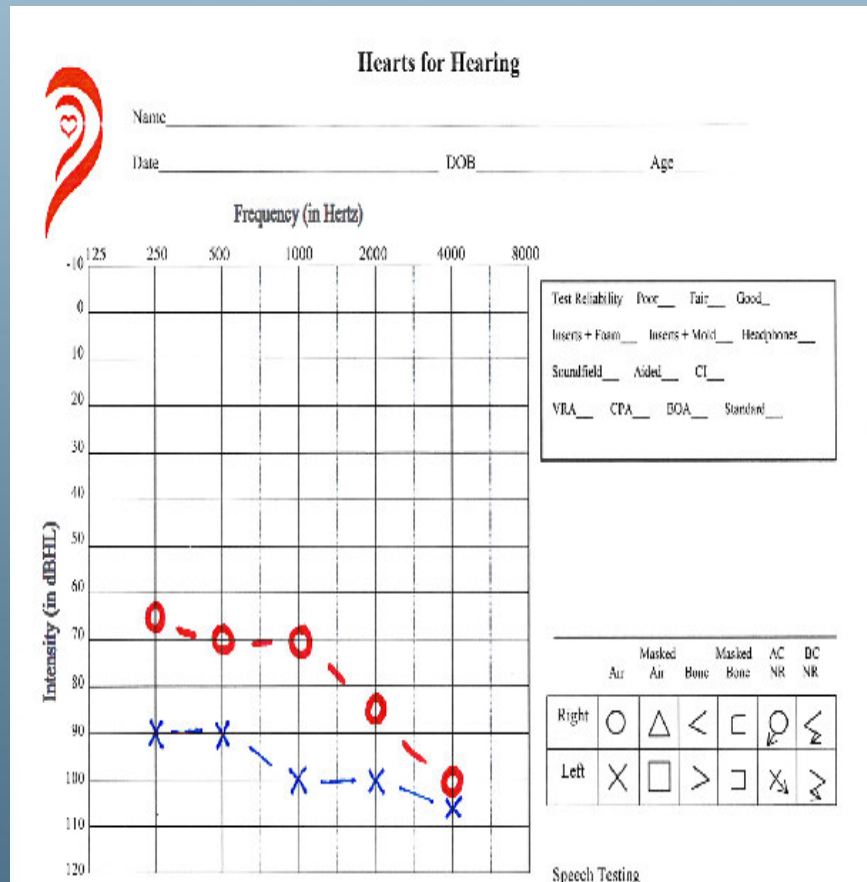
- Birth: Passed newborn hearing screen
- 14 months: Hearing evaluated prior to placement of PE tubes
Elevated behavioral thresholds pre and post tubes
- 18 months: ABR conducted (Click & 500 Hz)
Reported “borderline normal sloping to severe HL in right ear and normal to profound HL in left ear”
- 20 months: Fit with HA’s
- 24 months: Referred to H4H by another parent for consultation
At initial visit parent reports only wearing HA’s 1 hr/day,
limited sound awareness

Kirsten: H4H History



- 26 months: Family transferred services to H4H
Repeated unaided and aided behavioral testing
Verification of HA settings w/ RECD– significant increase in gain
Began AVT - immediate auditory, speech and language concerns
- 27 months: Performed sedate ABR
Immediate referral to CI surgeon
- 28 months: CT scheduled but cancelled due to illness and rescheduled
- 29 months: CT revealed Mondini
CI Recommended
PARENT says “WHOA!!!!!!”
- 30 months: H4H arranges parent to meet with another parent of a child with a CI
- 31 months: CI Surgery
- 32 months: Left CI Activated!

Kirsten: Pre-CI Audiogram



- Pre-CI:
 - Behavioral results were inconsistent, limited sound awareness
 - Limited vocalizations
- Breakdowns in early communication



Kirsten

- Communication from all team members was critical in the journey to her CI:

- Family
- Audiologist
- AV therapist
- Otologist
- Parent support network



- Post-CI, Left Ear:
 - Behavioral Measures: Demonstrating improved responsiveness to sound and improved vocal quality
 - Objective Measures: Excellent Evoked Stapedial Reflexes and NRT confirm good access to sound
 - **Bilateral scheduled for activation this week!**

The Information Exchange Between Partners



Shared Appointments



Telephone

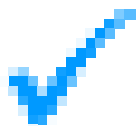


Email

Timely exchange of reports



Meetings



Mutual development of a checklist or form for systematic exchange of functional information

Conclusion

When we work together children have access to acoustically intelligible speech, benefit from auditory based intervention and **CAN** develop spoken language skills equal to that of typical hearing peers.



Contact Information

Hearts for
Hearing
FOUNDATION



Heart for Hearing

3525 N.W. 56th Street

Building A, Suite 150

Oklahoma City, OK 73112

USA



Teresa.Caraway@heartsforhearing.org

Jessica.Ballard@heartsforhearing.org

405.548.4300

Appendix: Helpful Questions



- **Helpful questions the Audiologist should ask the SLP, EI or Educator of the Deaf and Parent continued:**
 - What inside and outside environmental sounds has the child responded to?
 - What Ling 6 Sounds can the child detect through audition only? What activity was used and how were you able to determine the child was detecting the sounds?
 - What Ling 6 Sounds can the child repeat through audition only? What activity was used and how were you able to determine the child was identifying the sounds?

Appendix Continued



- **Helpful questions the Audiologist should ask the SLP, EI or Educator of the Deaf and Parent cont.:**
 - What Learning to Listen sounds or single word comprehension is the child demonstrating through audition only? What activity did you use and how you were able to determine the child understood what was said?
 - What one step familiar commands is the child following through audition only? What activity did you use and how you were able to determine the child understood what was said?

Appendix Continued



- How is the child's speech development relative to his or her hearing age and chronological age?
-Example: manner or place cue errors
- Are common components (ie phonological processes) present or absent in a child's production?
-Example: nasality or fricative turbulence
- Can the child produce target speech sounds through audition only?

Appendix Continued



- **Helpful questions the SLP, EI, Educator of the Deaf or Parent should ask the Audiologist:**

- What are the child's unaided and aided thresholds?
- What is the audibility of speech across the frequencies? (ie. Does the child have full acoustic access to intelligible speech?)
- What are the correct settings of the hearing technology?
- What are the troubleshooting steps of the child's amplification and assistive technology?
- What are indications for a referral back to the Audiologist before the scheduled return?
- What is the return schedule for aggressive audiological management of the child's hearing loss?

Appendix Continued

- **Helpful questions the SLP, EI, Educator of the Deaf or Parent should ask the Audiologist continued:**
 - What specific audiology concerns has the parent expressed?
 - What specific topics would it be helpful to address in ongoing parent education and counseling?
 - What specific behaviors or vocabulary concepts would it be helpful to be targeted during intervention sessions to prepare for the next audiological visit?
(ie Conditioned play response to sound;
Concepts of loud vs. soft)

