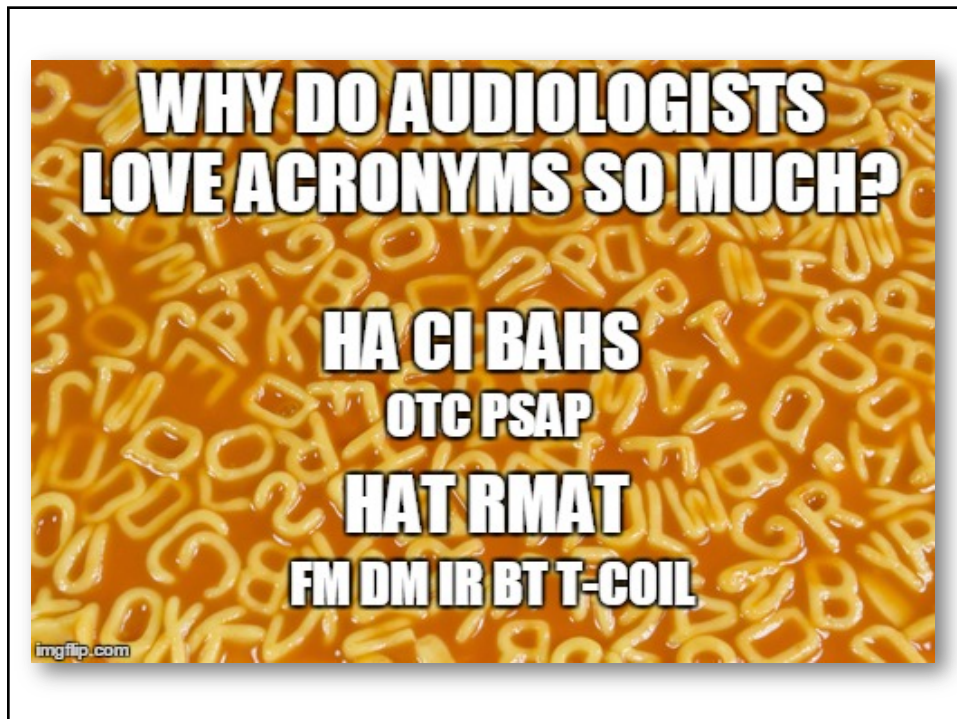




**TRENDS IN
AMPLIFICATION
(DSC TRAINING)**

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BRIDGES CONFERENCE/JUNE 28, 2018
BLOOMINGTON, IL



**WHY DO AUDIOLOGISTS
LOVE ACRONYMS SO MUCH?**

**HA CI BAHS
OTC PSAP
HAT RMAT
FM DM IR BT T-COIL**

imgflip.com

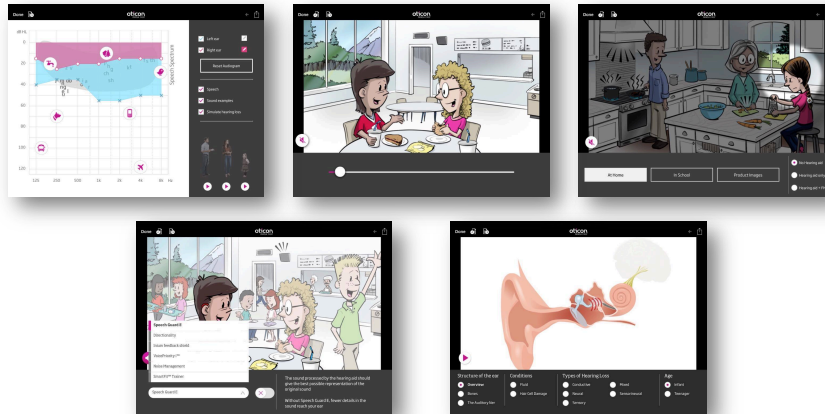
ANSWERS

HA	Hearing Aid
CI	Cochlear Implant
BAHS	Bone Anchored Hearing System
OTC	APPLIES TO ADULTS ONLY
PSAP	
HAT (f/k/a ALD)	Hearing Assistive/Assistance Technology (formerly known as Assistive Listening Devices [ALDs])
RMHAT	Remote Microphone Hearing Assistive/Assistance Technology
FM	Frequency Modulation
DM	Digital Modulation
IR	Infrared
BT	Bluetooth
T-coil	Telecoil

OUTCOMES OF CHILDREN WITH HEARING LOSS STUDY

- Trends for longitudinal hearing aid use
 - Age of child (use increased with age)
 - Maternal education (higher levels correlated with increased use)
 - Degree of hearing loss in school-age children only (increased use with more hearing loss)
- What we can do to help
 - Hands-on training with the amplification
 - Individualized problem-based strategies to address challenges
 - Practical demonstrations of the benefits of amplification use
 - Hearing loss demonstrations
 - Examples of listening in noise with and without hearing aids
 - How to do a listening check

OTICON PROFESSIONALS APP



PEDIATRIC HEARING AID USE: PARENT-REPORTED CHALLENGES (MUÑOZ ET AL., 2015)

- Even though the amount of information they received was overwhelming, most (84%) preferred to have all the information at the **beginning**
- 66% said an audiologist taught them how to do a listening check with a stethoscope **but only 33% do it daily**
- Minimal confidence with **troubleshooting** HA problems
- >50% reported **child behavior and activities** as being a challenge
- 35% wore their HAs during all waking hours, **31%** wore them <5 hours/day
- 47% did not feel they had enough time to talk about their **emotions** when speaking with their audiologist(s)
 - 69% reported the audiologist **did not help them know what to expect**
 - 22% reported symptoms of **depression**

<https://www.ncbi.nlm.nih.gov/pubmed/25303862>

CHECKLIST FOR WORKING WITH PARENTS/CAREGIVERS (CHILDRESS)

- Basic care/maintenance/use
 - How to put the device on/take off the device
 - How to turn it on
 - How to change the battery
 - Good vs. bad batteries
 - Waiting for a few minutes after taking off the sticker
 - How to clean their device
 - No alcohol (wipes) on earmolds!



<https://facebook.com/profile.php?id=620755836>



CHECKLIST FOR WORKING WITH PARENTS/CAREGIVERS (CHILDRESS)

- How to do a listening check
 - HA/CI only and with FM/DM
 - Ling sounds
 - Squeeze the case
 - Move the cords/cables around
 - Play with the volume control and program button(s) and check for crackling/ intermittencies
 - Do it WITH the child early on so they can become independent with doing this themselves



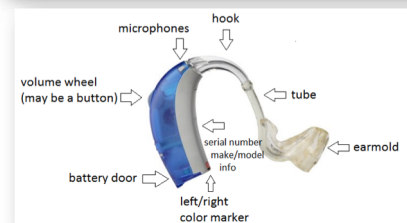
CHECKLIST FOR WORKING WITH PARENTS/CAREGIVERS (CHILDRESS)

- Basic troubleshooting
 - Checking for visible damage
 - Cables, tubing (color, hardness, moisture)
 - What do the lights and error messages mean?
 - Who do they contact when it's not working?
 - HAs → dispensing audiologist
 - CIs → dispensing audiologist and/or CI company
 - Websites, social media, video clips and apps
 - YouTube channels
 - Online communities
 - Facebook



CHECKLIST FOR WORKING WITH PARENTS/CAREGIVERS (CHILDRESS)

- Knowing their device
 - Make and model of their device
 - Name that part
 - Knowing what's on each program slot (may be disabled for young children)
 - Get printout after appointment
 - Enter info on phone



RECOMMENDED FREQUENCY FOR FOLLOW-UP VISITS

Duration of Device Use	Device Type	
	Hearing Aid	Cochlear Implant
0-1 year	Every 3 months	Every 2-3 months
1-2 years	Every 3 months	Every 6 months
2-3 years	Every 3 months	Every 6 months
3-5 years	Every 6 months	Every 12 months
> 5 years	Every 12 months	Every 12 months

RETENTION

- Children's Retention Brochure
- Fantastic resources from Karen Anderson, Jane Madell and Oticon
- Products ranked by age group:
 - 0-12 m/o
 - 12-24 m/o
 - 2-5 y/o
- Not mentioned, floatie armbands or the elbow restraint

Hearing Device Retention Accessory Information


More information on safety recalls and strategies can be found at <http://www.successforkidswithhearingloss.com/hearing-aids-01>. Ratings based on the reports of the Children's Hearing Aid Retention Survey completed by 268 parents, educators & therapists, 2012.

Ear Gear	Caps	Safe-N-Sound	Wig / Toupee Tape	Ota / Critter Clips
<p>Specialize above the ear hearing device. Use critical and/or piece locking clip.</p> <p>PROS: Specialty caps allow total range of head motion. Specialty over-ear caps are easiest to use and require no adjustment.</p> <p>CONS: Specialty caps are difficult to adjust. Specialty caps are difficult to adjust. Specialty caps are difficult to adjust.</p> <p>OTICON: Use the Oticon Specialty caps for all hearing devices.</p> <p>www.oticon.com</p>	<p>Cap cover hearing device. Specialty caps with safety features.</p> <p>PROS: Specialty caps allow total range of head motion. Specialty over-ear caps are easiest to use and require no adjustment.</p> <p>CONS: Specialty caps are difficult to adjust. Specialty caps are difficult to adjust.</p> <p>OTICON: Use the Oticon Specialty caps for all hearing devices.</p> <p>www.oticon.com</p>	<p>Plastic tape clips over hearing device. Use critical and/or piece locking clip.</p> <p>PROS: Specialty caps allow total range of head motion. Specialty over-ear caps are easiest to use and require no adjustment.</p> <p>CONS: Specialty caps are difficult to adjust. Specialty caps are difficult to adjust.</p> <p>OTICON: Use the Oticon Specialty caps for all hearing devices.</p> <p>www.oticon.com</p>	<p>Specialize above the ear hearing device. Use critical and/or piece locking clip.</p> <p>PROS: Specialty caps allow total range of head motion. Specialty over-ear caps are easiest to use and require no adjustment.</p> <p>CONS: Specialty caps are difficult to adjust. Specialty caps are difficult to adjust.</p> <p>OTICON: Use the Oticon Specialty caps for all hearing devices.</p> <p>www.oticon.com</p>	<p>Specialize above the ear hearing device. Use critical and/or piece locking clip.</p> <p>PROS: Specialty caps allow total range of head motion. Specialty over-ear caps are easiest to use and require no adjustment.</p> <p>CONS: Specialty caps are difficult to adjust. Specialty caps are difficult to adjust.</p> <p>OTICON: Use the Oticon Specialty caps for all hearing devices.</p> <p>www.oticon.com</p>



<https://successforkidswithhearingloss.com/for-professionals/hearing-aids-on-2/>

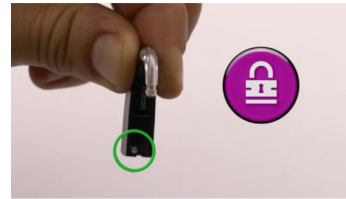
- BTEs
- CIs
 - Ear level
 - Free-worn
 - All-in-one
- BAHS
 - Softband
 - Magnet
 - Abutment
 - Adhesive



HEARING AIDS

SELECTING HEARING AIDS

- Style, including pediatric-sized earhooks
- Programmability
- Nonlinear signal processing
 - Allows for audibility of soft sounds
- FM/DM system compatibility
- Locking mechanism or deactivation of the volume control and other controls
- Tamper resistant battery doors
- Find a pediatric audiologist who does verification via Real Ear Measures



EARMOLDS

- Should be checked every month during the first 6-8 months, then every 6 months
- Soft material
- Tubing is most vulnerable where it enters the earmold



OTHER TOPICS

- Should we use FM/DM on littles before they reach school age?
- Is it possible to have too many features?
 - How do the hearing aid programming features interact with FM/DM?
- Funding
 - HB 4516 has passed BOTH chambers and is awaiting the governor's signature so write to Gov. Rauner in support! This bill would require insurance companies to cover the cost of replacing hearing aids every 3 years.
 - <https://www2.illinois.gov/gov/contactus/Pages/VoiceAnOpinion.aspx> to contact Governor Rauner
 - <https://app.raindrop.io/?#/collection/2663069/%5B%7B%22key%22%3A%22tag%22%2C%22val%22%3A%22FinancialAid%22%7D%5D> (Financial Aid resources)

