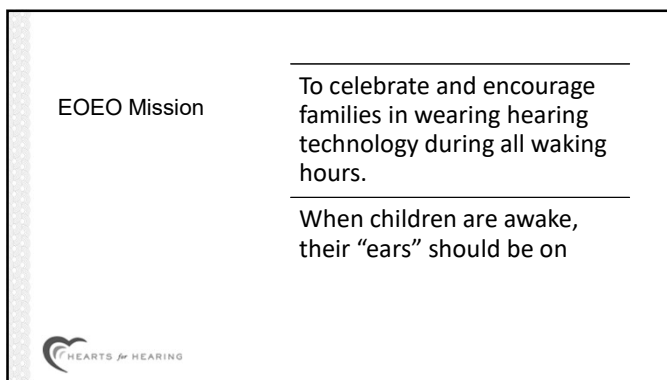




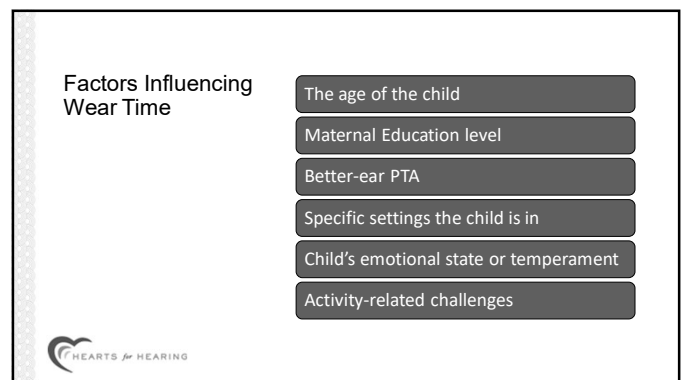
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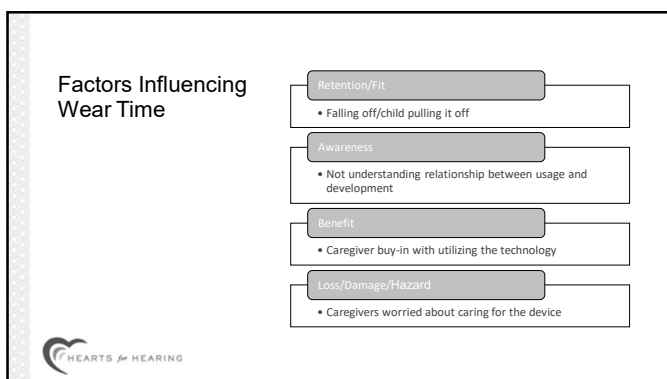
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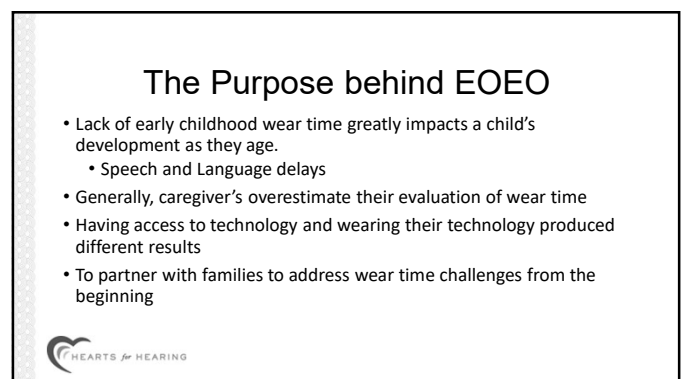
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## The Four Pillars of EOEO



Assessment



Retention



Education



Coaching, Advocacy,  
and Support



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## Assessment



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## What is Assessment?

- The objective measure of determining how often a child has their hearing technology on during the day



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## Why is Assessment Needed?

56% of children under 5 years old wear their Hearing technology less than 6 hours per day

Lack of awareness of ideal hearing technology usage



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## Wear Time Goals

Age	Hours Awake (Average)	Wear Time Goal
Newborn (0-3 months)	7-10	8 hours
Infant (3-11 months)	9-12	9 hours
Toddler (12-24 months)	10-13	10 hours
Preschooler (3-5 years)	11-14	11 hours
School-Age (6-13 years)	13-15	12 hours



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## What are some common struggles with assessing wear time?

- Knowing how to model hearing technology management
- Caregivers overestimating child's wear time
- Caregiver's self-efficacy in creating and maintaining schedule for daily usage



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## The Case for Active Datalogging

01

Training clinicians to help evaluate accurate wear time

02

Setting goals that are appropriate for the needs of the family

03

Minimizing judgement regarding struggle with wear time



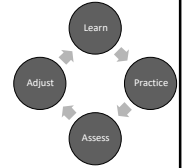
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## Continual Assessment

4. How often does your child usually wear his/her hearing device(s) when he/she is awake in these situations?

	Never	Rarely	Sometimes	Often	Always	Doesn't apply to us
a) At home						
b) In the car						
c) In daycare or school						
d) When cared for by family or friends outside the home						
e) Playing outside						
f) On outings (e.g., store, zoo, children's museum)						

Ambrose, S. E., Appenzeller, M., & Deslardin, J. L. (2019). Scale of Parental Involvement and Self-Efficacy – Revised (Assessment Instrument). Omaha, NE: Boys Town National Research Hospital.



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## Datalogging Frequency

0 to 12 months	1 to 3 years	4 years +
Data Log at each LSL session. (Can decrease frequency of data logging to monthly if child has consistently met wear time goals for 2 months)	Data Log at each LSL session until full-time use has been documented for 4 consecutive sessions.	For New Dx or Newly fit with hearing technology, data log at each LSL session until full-time use has been documented for 4 consecutive sessions.
	If data logging at routine audiology appointment does not meet wear time goals and/or caregiver or child report new challenges in wear time, begin data logging at each LSL session again (until full-time use is measured 4 sessions in a row).	



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## Highlighting Success



- Wall of Fame
- Incentives
  - Social Media
  - Gift cards
- Short term vs long term goals



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## Accountability

- Datalogging Protocol
- Caregiver surveys
- Rack cards for goals



**KNOWLEDGE:** Parents must learn a lot of new information and skills when their child has a hearing loss. This process takes time. We are interested in how much you currently know about each topic.

	A little	Some	A great deal				
1. How to manage my child's hearing device(s)	1	2	3	4	5	6	7
2. Strategies to use to keep my child's hearing device(s) on him/her	1	2	3	4	5	6	7
3. What my child can and cannot hear <u>without</u> his/her hearing device(s)	1	2	3	4	5	6	7
4. What my child can and cannot hear <u>with</u> his/her hearing device(s)	1	2	3	4	5	6	7
5. How to do the Ling 6-Sound test (ah, ee, oo, m, sh, s)	1	2	3	4	5	6	7
6. The sounds, words, or sentence types my child should be learning to say	1	2	3	4	5	6	7
7. How to help my child learn to communicate	1	2	3	4	5	6	7
8. How my child's learning is affected by his/her hearing loss	1	2	3	4	5	6	7
9. How to share a book with my child in a way that helps him/her learn to communicate	1	2	3	4	5	6	7
10. Strategies the interventionist recommends using to help my child learn to communicate	1	2	3	4	5	6	7



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## Applying Assessment Within Our Work

- Importance of training clinicians on datalogging
- Understand barriers or needs

### Basic Needs Screener

Are you worried or concerned that in the next 2 months you may not have stable housing that you own, rent, or stay in as part of a household?

Yes No

Do problems getting childcare make it difficult for you to work or study?

Yes No

Do you have support and can talk to someone when you are down?

Yes No

In the last 12 months, did you ever eat less than you felt you should because there wasn't enough money for food?

Yes No



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## Critical Thinking

In the last 12 months, did you skip a doctor's appointment to save money?

Yes No

In the last 6 months, have you had to go without health care because you didn't have a way to get there?

Yes No

In the past 12 months, has the electric, gas, oil, water company threatened to shut off services in your home?

Yes No

Write out some stressors that could impact you coming to medical appointments:



- How can we make datalogging accessible within our clinic?
  - Data logging stations
- Survey utilization
  - Self-efficacy: SPISE-R
  - Basic needs

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## Retention



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## What is Retention?

- The ability to keep a child's technology on during the waking hours of their day



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## Why is Retention needed?



To address barriers to wearing technology

To support families in problem solving wear time challenges

To take into consideration child's age and stage of development

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## What are some common setbacks in wearing technology?

- Child's activity level
- Caregiver's perception of benefit from hearing technology
- Confusion about strategies



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## SPISE-R: Beliefs

A. BELIEFS: These items describe things that some parents of children with hearing loss may believe or be concerned about. Please indicate how much YOU share these beliefs or concerns.

	Not at all			Somewhat			A great deal
1. "If children are given the right supports, they can overcome the effects of hearing loss."	1	2	3	4	5	6	7
2. "How my family talks to and interacts with my child will have a big impact on how my child develops."	1	2	3	4	5	6	7
3. "No matter what we do as a family, my child's development will be delayed compared to children with normal hearing."	1	2	3	4	5	6	7
4. "My child's hearing devices help him/her learn to communicate."	1	2	3	4	5	6	7
5. "If people see my child wearing his/her hearing device(s), they will judge my child or family."	1	2	3	4	5	6	7
6. "If I keep my home too quiet, my child won't learn to listen in noise."	1	2	3	4	5	6	7
7. "If children wear their hearing device(s) all the time, they will become overly dependent on them."	1	2	3	4	5	6	7



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## The Case for Retention Options

Increase wear time  
Build confidence in various settings  
Address concerns about losing technology

**C. CONFIDENCE:** Knowledge alone doesn't always make us confident or comfortable doing something. We may need more time or practice to build confidence. Please indicate how **confident** you are in your ability to do each thing.

	Not at all	Somewhat	Very				
1. Determine if my child's hearing device(s) are working okay	1	2	3	4	5	6	7
2. Put and keep my child's hearing device(s) on him/her	1	2	3	4	5	6	7
3. Help my child hear by making changes in his/her environment	1	2	3	4	5	6	7
4. Help my child hear and understand new speech sounds or sounds in his/her environment	1	2	3	4	5	6	7
5. Find out if my child is hearing okay by using the Ling 6-Sound test (ah, ee, oo, m, sh, s)	1	2	3	4	5	6	7
6. Help my child learn to say new sounds, words, or sentences	1	2	3	4	5	6	7
7. Help my child communicate what he/she wants and needs	1	2	3	4	5	6	7
8. Communicate with my child in a way that is appropriate to address his/her hearing needs	1	2	3	4	5	6	7
9. Share books with my child in a way that helps him/her learn to communicate	1	2	3	4	5	6	7
10. Do the things I learned during intervention sessions when the professional is not there to help me	1	2	3	4	5	6	7



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## Enhancing Retention

- Problem solving modifications in settings where wear time is a struggle
  - Ex: Fear of taking the device on and off
- Strategizing day to day routines that prompts child to wear device



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## Normalize challenges

- Discuss developmental milestones
  - Autonomy and exploration
- Troubleshooting common interruptions with device



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## Develop Ownership of Device

Importance of being persistent  
Making it a positive experience

**D. ACTIONS:** We know daily lives are busy. There are many responsibilities that parents have. It is not possible to always do everything we would like to do each day. Given other responsibilities, we are interested in how often you are able to **do** the following things:

Interested in how often you are able to give the following training:		Never	Sometimes	Always				
1.	Daily listening checks on my child's hearing device(s)	1	2	3	4	5	6	7
2.	Make sure other people caring for my child know how to manage my child's hearing devices	1	2	3	4	5	6	7
3.	Make sure I, or someone else, puts my child's hearing device(s) on immediately after he/she wakes up	1	2	3	4	5	6	7
4.	Make sure I, or someone else, puts my child's hearing device(s) on immediately if they fall off or my child takes them off	1	2	3	4	5	6	7
5.	Make sure my child's environment makes it as easy as possible for him/her to hear	1	2	3	4	5	6	7
6.	Draw my child's attention to sounds in speech or the environment that he/she is still learning or might not have heard	1	2	3	4	5	6	7
7.	Daily check of my child's listening with the Ling 6-Sound test (ah, ee, oo, m, sh, s)	1	2	3	4	5	6	7
8.	Use strategies during our daily activities to help my child learn to say new sounds, words, or sentences	1	2	3	4	5	6	7
9.	Use strategies to help my child communicate his/her wants and needs	1	2	3	4	5	6	7



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## Applying Retention Within Our Work

- Naming barriers to wearing technology
- Strategizing new options available



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## Education



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### What is Education?

Linking wear time to outcomes  
Explaining hearing loss to families  
Supporting technology maintenance



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### Why is Education Needed?

- Impacts Language development
- Increase confidence in explaining hearing and technology to others
  - Address insecurities
- Advance skills in managing child's hearing healthcare



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### What are some common misconceptions?

The child can hear without technology because they responded to a noise

That babies do not need therapy since they can not talk or read yet

That caregivers will accept the hearing loss diagnosis and accept recommendations without question



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### The Case for a Providing Education



- Helping caregivers become empowered to advocate and explain their child's hearing loss
- To minimize the overwhelming feelings caregiver may have upon receiving a diagnosis of hearing loss



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### Learning Styles

- Multiple ways to educate parents
  - Simulations
  - Handouts
  - Videos
- Support caregiver's overwhelming feelings at initial diagnosis



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### Coaching, Advocacy, and Support



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## What is Coaching, Advocacy, and Support?

- Understanding babies' brain development in the first 3 years
- Normalizing reactions and responses of the child and family
- Knowing your resources
- Assessing a family's physical and emotional support systems
- Learning how to make things predictable for the child



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## Why is Coaching, Advocacy, and Support needed?

- A collaborative approach, including the caregivers and child
- Awareness of external factors that can be barriers
- Peels back layers that often are unnoticed



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What are some common worries from caregivers?

Will my child do well in school?

Will they get teased?

Will they make friends?

Will they be able to talk?



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## The Case for a Supportive Caregiver

- Positive emotional expression is correlated to positive social skills
- Builds resiliency in children
- Learns to regulate and manage emotions



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## Caregiver-Child Relationship Lessons

The importance of:

1. *Knowing How the Emotional Brain is Regulated*
2. *"Being with" Big Feelings*
3. *Following Your Child's Lead in Play*
4. *Being Attuned to Your Child's Needs*
5. *Fostering Resiliency*



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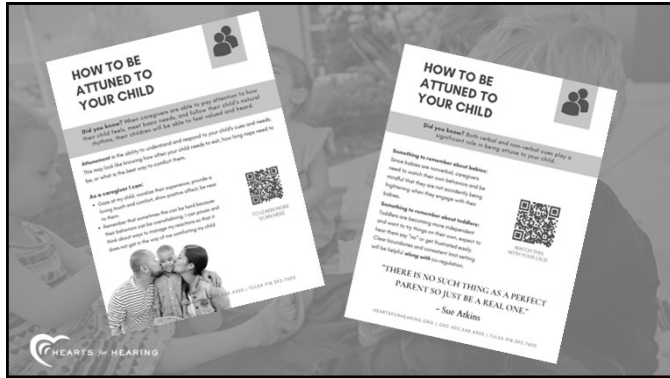
## Attunement



- A caregiver's capacity to understand and respond to their child's cues
- Helps manage stress and teach routine
- Acknowledging how your child's behaviors impact your own feelings and reactions



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**E. HHH SUPPLEMENT – CAREGIVER-CHILD INTERACTION:** We know caregivers have an important role in their child's development. It takes time to learn strategies that work for you and your child when interacting and learning. Please indicate how often you implement the following strategies. Note: We recognize that not everyone uses these all these approaches at once as caregivers use different strategies for different situations.

	Not at all	Somewhat					Very
1. Follow my child's lead in play	1	2	3	4	5	6	7
2. Help my child calm down when they are upset	1	2	3	4	5	6	7
3. Read my child's nonverbal cues (e.g., knowing when they are done eating or engaging, when they are tired, etc.)	1	2	3	4	5	6	7
4. Supporting my child during transitions (e.g., finishing playing and going to bed, moving from one activity to another)	1	2	3	4	5	6	7
5. Know when to help vs. when to let my child try on their own	1	2	3	4	5	6	7
6. Share delight in my child based on enjoying each other's presence rather than delighting in what they are doing or their accomplishments	1	2	3	4	5	6	7
7. Describe my child's emotions and experiences to them	1	2	3	4	5	6	7

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