# Bridging the Gap: Connecting the Clinic and Early Intervention

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## Abstract

When a child is diagnosed with hearing loss, parents often feel they lack adequate resources required to make educated decisions about their child's future. Although the foundation of making these informed decisions stems from understanding their children's audiologic diagnosis and hearing management options, the support required is multi-dimensional. This is why a team-based perspective, with multidisciplinary providers, yields a more holistic approach to supporting families in making decisions that are right for them. At the University of Miami's Children's Hearing Program, we have recognized the importance of this and cultivated a team including educators, social workers, psychologists, and auditory verbal speech therapists that work alongside the audiologists. However, with a team this big, visits to the clinic can become overwhelming and place additional barriers to care for families. This is why we offer this team-based approach through a variety of telehealth appointments. Offering a variety of services through telehealth reduces absences from work and school, travel time and cost, as well as other barriers that prevent families from receiving early intervention. In this presentation, we will highlight what kinds of telehealth appointments are being provided by the Children's Hearing Program. We will also discuss how this has improved patient access in the State of Florida to our specialized multidisciplinary team.

## **Initial Diagnosis**

- Per EHDI guidelines, following a failed newborn hearing screening infants should have a diagnostic ABR by 3 months.
- This timeline is frequently delayed due to barriers.
- Following diagnosis of hearing loss (ABR or behavioral testing) decisions about hearing devices & communication are the next step.
- These decisions need to be free of provider bias and are most effective when considering parent choice.

## **Barriers to Early Intervention**

Most common barriers that effect consistent follow-up with treatment recommendations include:

- Accepting a diagnosis
- Low health literacy
- Language barriers
- Limited time off from work and school
- Lack of financial resources/insurance or transportation issues
- Cultural beliefs

Utilization and access to a multidisciplinary team assists with overcoming these barriers to access to high quality hearing healthcare.

- Understanding each team member's role and importance to the child's overall development is crucial to obtaining optimal outcomes (see Figure 1).
- Incorporation of innovative service delivery models, including telehealth may also be beneficial (see Figure 2).

### **HEARING LOSS JOURNEY**



#### Hearing Management

Audiologists are typically the first specialist families encounter in the hearing loss journey. Audiologists identify hearing loss and work with the family to make decisions regarding amplification and hearing assistive technology. Audiologists will also help monitor for changes in hearing over time and ensure amplification continues to be beneficial.

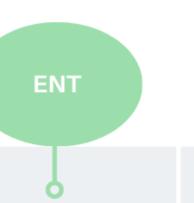


# Intervention

Early interventionists work with families to provide therapies and services from age 0-3 years old. This service line is integral in ensuring children are meeting their global developmental milestones and proving therapies if they are not. These service assist children in achieving their full

potential.

Audiology



#### Medical Speech follow up & **Development**

If families identify surgery spoken language Ear, Nose, and as a goal for their Throat specialists child, AVTs teach assist in the families how to diagnosis and cultivate a management of anguage enriched hearing loss. environment for ENTs help identify their child. AVTs the etiology of also evaluate if a hearing loss and child is making manage the expected speech overall health of and language the ears. ENTs progress with also make medical their amplification recommendations devices regarding surgical



## **School Support**

Educational specialists help families navigate the complex intricacies of the school system and acquiring necessary support in the classroom. These specialists help bridge the gap between the clinic and the classroom by providing information to teachers and school and by advocating for families and students in educational

planning meetings.



## Socioemotional

support Psychologists help families cope with the initial diagnosis of hearing loss, as well as decision making for treatment options. They are also specialized in developmental and psychoeducational evaluations to rule out coexisting learning and behavioral disorders. They also provide

individual and/family therapy for mental health or retention concerns.

**Social Work** 



#### Care Coordination

Social workers are mental health specialist that support families in minimizing treatment barriers. Services provided including coordinating multiple appointments, assessing transportation needs,

assisting with insurance access, working through financial difficulties and proving additional community resource support.

Figure 1

#### Needs assessments

- Insurance inquiries
- Transportation arrangement
- Community resources
- Coordination of care



Education

- IEP meetings
- Weekly sessions
- · Student check ins
- School placement discussions
- Training and support for school



- · Result review
- Initial intake
- ENT genetic consult





#### Figure 2

### **Benefits of Telehealth**

As part of a funded research study, the University of Miami Children's Hearing Program conducted a study to evaluate the effectiveness of remote programming and integration of a team-based model (Sanchez, et al., under-review).

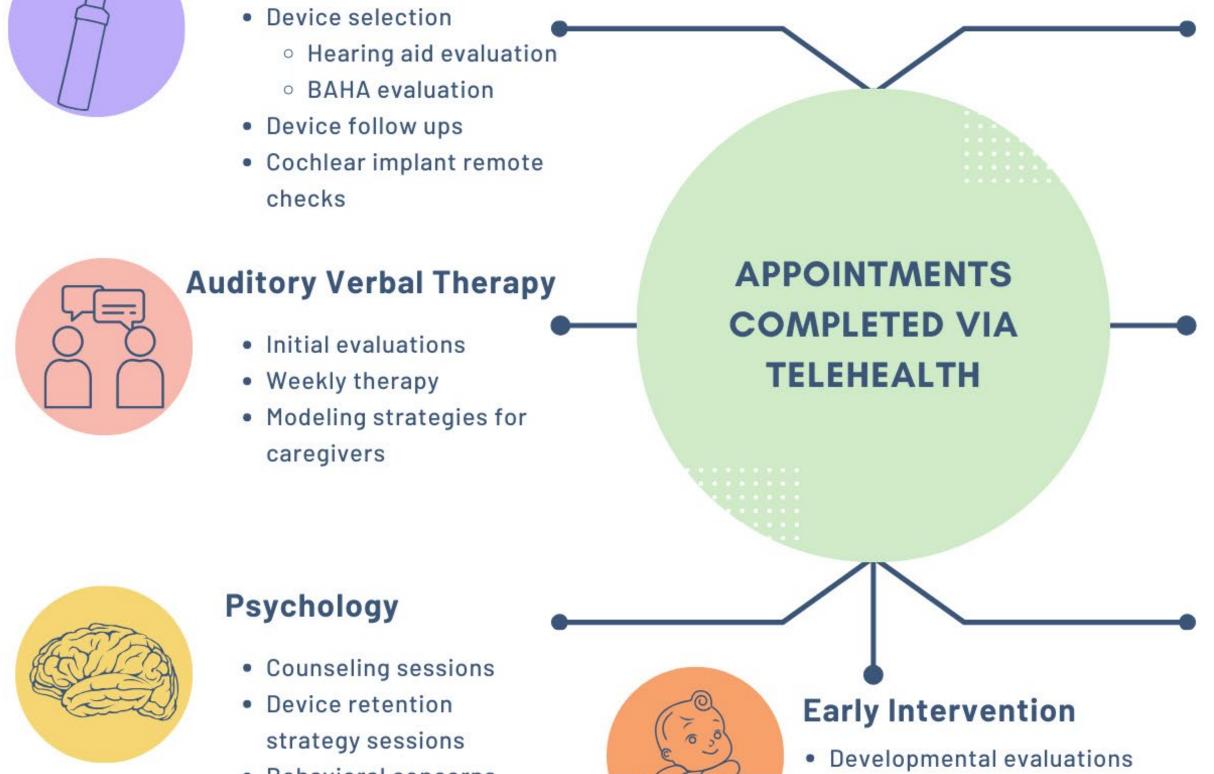
- All parents in the study found the meeting with the multidisciplinary team to be extremely beneficial.
- Interestingly, this study identified families who needed additional support (e.g., emotional or learning concerns).
- Overall we also found a lower no-show rate and parents reported decreased family burden.

The use of telehealth began during the COVID-19 pandemic; however, continues to be used to improve access to specialized professionals.

- While some audiology visits may not be conducted remotely, telehealth remains a viable option for counseling and accessing providers who are not directly on the team.
- Accessing qualified professionals who are trained in hearing loss can be difficult especially in rural settings. In these situations, telehealth is not only effective, but efficient.
- Telehealth also provides the option for community providers and early interventionists to learn about the child's hearing loss and participate in treatment discussions

## Conclusion

- Children with hearing loss have the potential to achieve similar outcomes to their hearing peers if early diagnosis and intervention are provided.
- Access to specialized multidisciplinary teams is crucial to meeting the needs of the "whole" child.
- Given the lack of specialized providers in some disciplines (psychology, education, social work), creative strategies to access these professionals is warranted.
- Use of collaboration within your organization
- Consultation of community providers and/or organizations
- Telehealth to access these providers
- Clinical teams need to consider involving early intervention providers to provide families with more cohesive care.
- Bridging the gap between the clinical and early intervention teams will help alleviate family stress and improve child outcomes.



intervention.

- · Behavioral concerns
- Educational assessments





