

# Features of eHealth Platforms to Promote Hearing Technology Use in Children

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2023 EARLY HEARING DETECTION & INTERVENTION CONFERENCE  
CINCINNATI, OH | DUKE ENERGY CONVENTION CENTER



The  
University  
of Akron

# DISCLOSURES

## **Presenter: Morgan Ross, B.A.**

Graduate Audiology Specialization Program Scholar

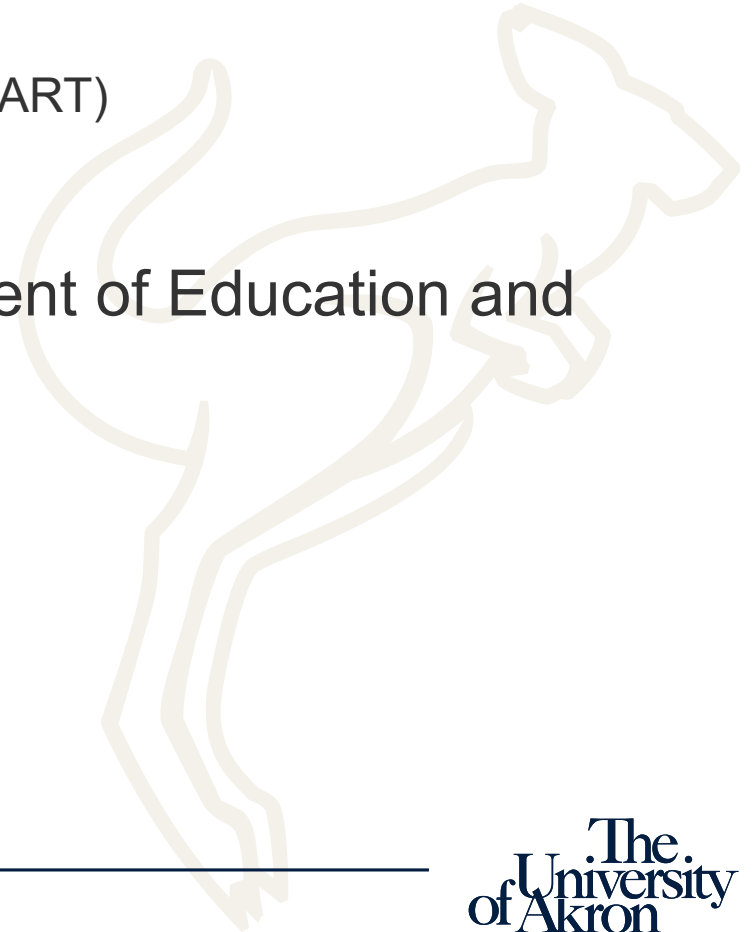
Interprofessional-Hearing Early Access Response through Telepractice (I-HEART)

### **Financial Disclosure:**

- Receives Grants for Other activities from U.S. Department of Education and The University of Akron.

### **Non-Financial Disclosure:**

- No relevant nonfinancial relationship exists.



# DISCLOSURES

## **Co-Author: Alex Meibos, Au.D., Ph.D., CCC-A**

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### **Financial Disclosure:**

- Receives Grants for Other activities from The Office of Special Education and Rehabilitative Services at the U.S. Department of Education.
- Receives Salary for Employment from The University of Akron.

### **Non-Financial Disclosure:**

- No relevant nonfinancial relationship exists.

# DISCLOSURES

**Co-Author: K. Todd Houston, Ph.D., CCC-SLP**  
Professor, The University of Akron

## **Financial Disclosure:**

- Royalty recipient, Ownership interest (stocks, stock options, other ownership interest)
- I receive royalties for three books published by Plural Publishing.
- I am a Founding Partner and CEO of the 3C Digital Media Network.

## **Non-Financial Disclosure:**

- No relevant nonfinancial relationship exists.

# eHealth Platforms Defined:

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Electronic link of: patient owned technologies to clinic managed technologies – creating opportunities for:

- a) Real-time synchronous videoconference appointments
- b) Asynchronous exchange of health information
- c) Online social networking/peer support group development





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New – Feb 2023



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myPhonak Junior  
Medical



Oticon Companion  
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AudioKey 2  
Medical



Ponto Care  
Health & Fitness



Baha Smart App  
Medical



Baha 5 Smart  
Medical



Nucleus Smart  
Medical



AB Remote  
Medical





# Remote Support: Crucial Connections Delivered Via Teleaudiology

Neumann, Sara AuD; Wolfe, Jace PhD, CCC-A; Roberts, Jillian AuD; Hendricks, Dayton AuD; Smith, Joanna MS, LSL; Manning, Jacy AuD, PhD

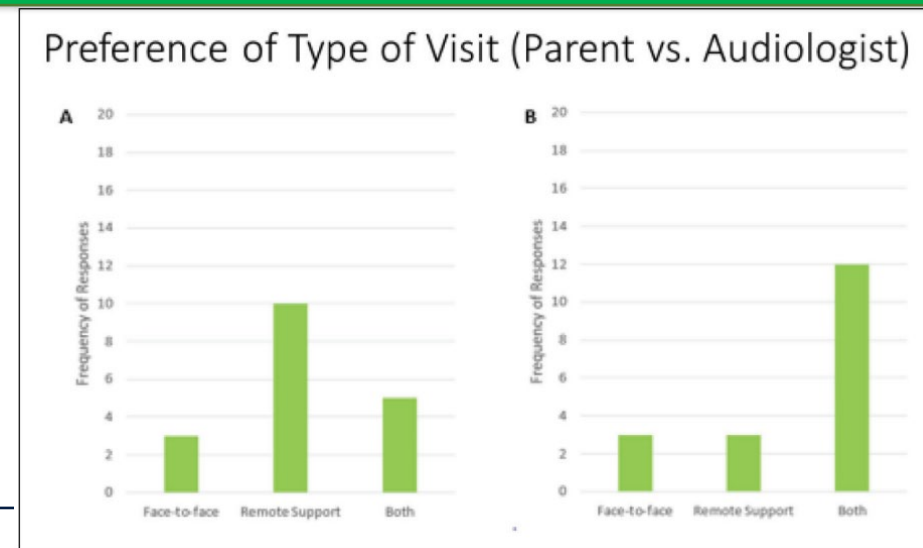
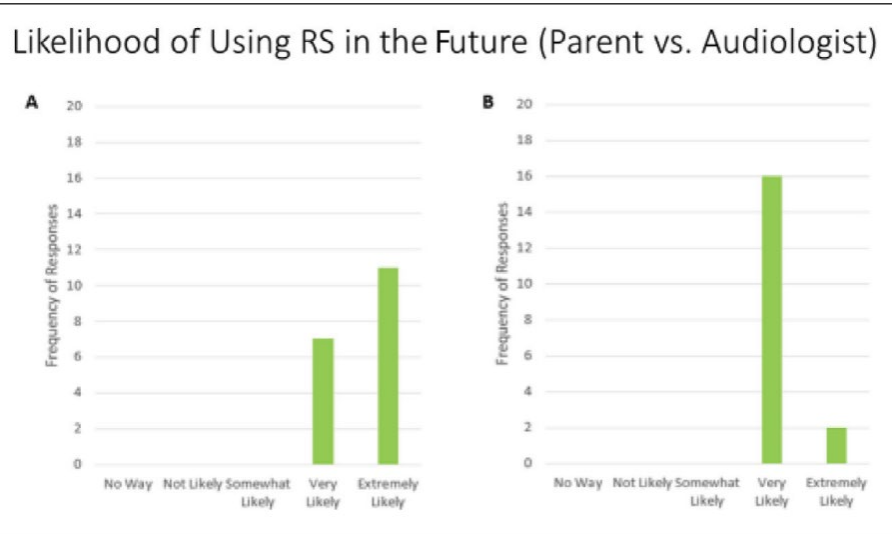
Author Information 

The Hearing Journal: November 2021 - Volume 74 - Issue 11 - p 40-44

doi: 10.1097/01.HJ.0000800740.59296.a4



After 3 remote visits (for children ages 5-17), parents (n = 18) and audiologists (n = 18) reported the myPhonak app was easy to use/convenient and were confident it met the child's needs. Most also indicated they were very or extremely likely to use remote services again in the future, and >50% parents (10/18) reported they preferred a remote support visit over a face to face or hybrid visit.



2022; 7(2): 33–40

## **A Review of Current Pediatric Tele-Audiology eHealth Platforms**

Alex Meibos, AuD, PhD<sup>1</sup>

<sup>1</sup>The University of Akron, Akron, OH

<https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=1172&context=jehdi>

**The purpose of this review study was to identify current pediatric tele-audiology hearing technology platforms for young children who are deaf or hard of hearing and their families.**

# Age Ratings



**myPhonak Junior** 4+  
Sonova AG

★★★★★ 4.6 • 105 Ratings

Free



**ReSound Smart 3D** 4+  
ReSound

#176 in Medical

★★★★★ 4.7 • 18.3K Ratings

Free

## Information

**Seller**  
Sonova AG

**Compatibility**  
**iPhone**  
Requires iOS 13.0 or later.

**iPod touch**  
Requires iOS 13.0 or later.

**Copyright**  
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**Size**  
88 MB

**Languages**  
English, Arabic, Bulgarian, Croatian, Czech, Danish,  
Dutch, Finnish, French, German, Greek, Hebrew [more](#)

**Price**  
Free

**Category**  
Medical

**Age Rating**  
4+

[Developer Website](#) ↗ [App Support](#) ↗ [Privacy Policy](#) ↗

# eHealth Apps Found (Dec. 2021)

Only 4 eHealth app platforms (from Phonak, Oticon, ReSound, and Widex) were found to have comprehensive capabilities of being used with young children age birth to 5 years, including remote care/support

- Only one was a pediatric specific platform (myPhonak Junior app)



**myPhonak Junior** 4+

Sonova AG

★★★★★ 4.6 • 105 Ratings

Free



**Phonak Sky™ Marvel**

Combining world's first technological innovations and child-specific designs to support children of all ages.

# eHealth Apps Found (*Dec. 2021*)

Apps found rated for older ages on Apple App store were ***excluded:***

- Starkey Thrive app
- Signia app
- Oticon Medical Ponto Care™ app
- Cochlear BAHA apps
- MED EL AudioKey 2
- Cochlear Nucleus Smart App



**Table 1**

*Summary of eHealth Platforms and Pediatric Hearing Devices Available as of December 2021*

eHealth Platform	Manufacturer Compatible Pediatric Device(s)	Name of Mobile App (OS)	Cost
<b>Phonak Remote Support</b>	Phonak Sky M, Sky Link M, Naida P UP	myPhonak Junior (iOS, Android)	Free
<b>Oticon RemoteCare</b>	Oticon Xceed Play, Opn Play <b>Play PX (new 2022)</b>	Oticon ON (iOS) Oticon Remote Care (Android) <b>Oticon Companion (new 2023)</b>	Free
<b>ReSound Assist Live</b>	ReSound* <b>OMNIA (new 2023) ONE (new 2022)</b> LiNX Quattro, LiNX 3D, ENZO Q, ENZO 3D, Key	ReSound Smart 3D (iOS, Android)	Free
<b>Widex Remote Care</b>	Widex* MOMENT, EVOKE, BEYOND, UNIQUE, DREAM	Widex Remote Care (iOS, Android)	Free

*Note:* \*indicates a non-pediatric line specific device.

## eHealth Platform Features Deemed Important for Young Children and Families

Telecommunication Support	Feedback Measurement
Telecommunication Feedback	Manual/Volume Controls
Additional Remote Accessory Requirements	Firmware Upgrades
Remote Programming/Fine Tuning Features	Datalogging
Remote Battery Status Monitoring	Apple Operating System (iOS) Compatibility
Remote Diagnosis of Hardware Issues	Android Operating System (OS) Compatibility

*(Adapted from NCHAM & Copithorne)*

**Table 2**  
Summary of Pediatric Design Features Available in Reviewed eHealth Platforms

	Phonak	Oticon	ReSound	Widex
Telecommunication Support	✓	✓	✓	✓
Telecommunication Feedback	✓	-	✓	-
Additional Remote Accessory Not Required	✓	✓	✓	-
Synchronous Remote Programming	✓	✓	✓	✓
Remote Battery Status	✓	✓*	✓*	✓
Remote Diagnosis	-	-	-	✓
Remote Feedback Measurement	-	-	✓	✓
Manual/Volume Controls	✓	✓†	✓	✓†
Remote Firmware Upgrades	-	-	✓	✓
Datalogging	✓	✓	✓	✓
iOS Compatible	✓	✓	✓	✓
Android OS Compatible	✓	✓	✓	✓

Note: \*indicates rechargeable models only.

†indicates a separate app is required.





## GOOD

## NEEDS IMPROVEMENT

## POOR

- Existing platforms are early-intervention ready:
  - ✓ Datalogging
  - ✓ Remote troubleshooting
  - ✓ Basic programming support
  - ✓ Videoconferencing
  - ✓ Software, Cloud Storage, Privacy, & Security supported by manufacturers
- Remote support for technologies may vary
- State licensure, clinic site logistics, and other telehealth laws may limit use of eHealth platforms for families
- Unknown whether platforms meet recent telehealth standards for accessibility for individuals with disabilities (WHO-ITU, 2022)
  - <https://www.who.int/publications/i/item/9789240050464>

*Keep your eyes on them – they update/change fast!*



ReSound Smart 3D  
Medical



Signia App  
Medical



Thrive Hearing Control  
Health & Fitness



myPhonak Junior  
Medical



Oticon Companion  
Medical



Widex Remote Care  
Medical



AudioKey 2  
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Ponto Care  
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Baha Smart App  
Medical



Baha 5 Smart  
Medical

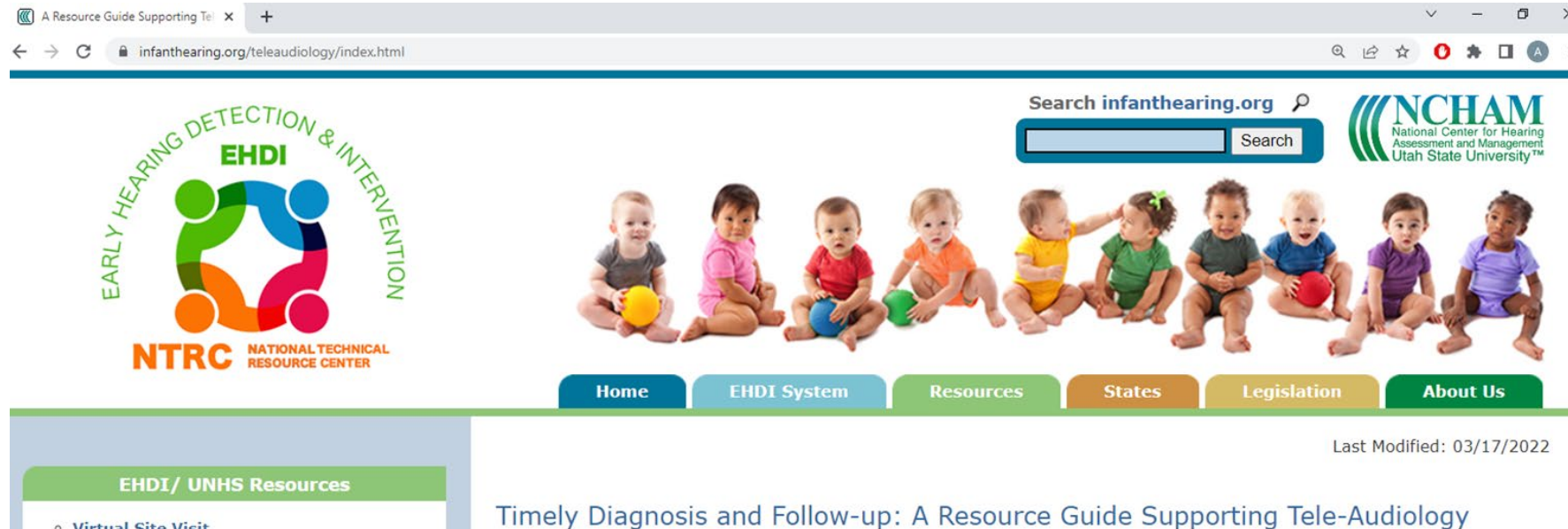


Nucleus Smart  
Medical



AB Remote  
Medical





Interested in Getting Started with Tele-Audiology in your practice?  
<https://www.infanthearing.org/teleaudiology/index.html>

- Educational & Training Videos
- NCHAM Materials
- EHDl Learning Center
- Telehealth
  - Tele-Intervention Courses
  - Tele-intervention Guide
  - TI Resources for Families and Providers
    - Fact Sheets with Videos
  - TeleAudiology Guide
- EHDl Web Resource Guide
- Deaf and Hard of Hearing Adult Involvement With Families of Deaf and Hard of Hearing Children
- Events & Webinars

a challenge for families who live in rural and remote areas, hours from a pediatric audiologist.

This barrier to accessible hearing healthcare also exists for the families of children needing ongoing audiological care. Therefore, the aim of this guide is to provide tele-audiology support to providers serving children birth to 5 years of age.

**Role of Tele-Audiology**

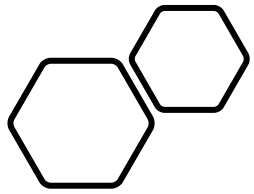
Tele-audiology (T-A) - the implementation of audiological services via telehealth technologies - has great potential to ensure that infants and children who need diagnostic and follow-up audiology services can receive them in a timely manner with ease.

Resources that describe the value of tele-audiology:

**Tele-Audiology Resources**

*Tele-Audiology Technical Support sessions*

- [Introduction to Technical Support Series](#)
  - [Introduction to Technical Support Series Slides \[PDF\]](#)
- [Remote Infant ABR](#)
  - [Remote Infant ABR Slides \[PDF\]](#)
- [Remote Cochlear Implant Mapping](#)
  - [Remote Cochlear Implant Mapping](#)



## References and access to Original Article:



<https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=1172&context=jehdi>



The background features a repeating pattern of light gray speech bubbles with dark teal question marks inside, set against a dark teal background. The speech bubbles are arranged in a staggered, overlapping grid.

# QUESTIONS?

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