NCHAM Tele-Audiology Learning Community Introductory Guide

This Introductory Guide to the NCHAM Tele-Audiology Learning Community identifies the resources that may be most beneficial as you prepare to conduct tele-audiology services (Evaluations and/or Hearing Aid/Cochlear Implants troubleshooting/adjustments). Please review some of the articles listed on pages 2-6. In addition to the articles listed in this Introductory Guide, the NCHAM Tele-Audiology Learning Community has over 65 additional tele-audiology resources available. See below for instructions to self-enroll in the Tele-Audiology Learning Community.

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### Instructions to Self-Enroll in the Tele-Audiology Learning Community

Step 1: Follow this link [https://ncham-moodle.eej.usu.edu/moodle/](https://ncham-moodle.eej.usu.edu/moodle/)
Step 2: Click on “Tele-Audiology Learning Community” located under “Available Courses”
Step 3: Click on “Create new account” located under “Is this your first time here?”
Step 4: Fill out the information needed to create an account, and click on “Create my new account”
Step 5: Check your email for an email titled “NCHAM Moodle: account confirmation”
Step 6: Follow the link in the email to confirm your new account
Step 7: Click on “Continue”
Step 8: Self-enroll in the course using the enrollment key: 1898

NCHAM: Tele-Audiology
Key Introductory Learning Community Articles

General Resources

ASHA: Telepractice: An Overview and Best Practices
This article presents a general overview of telepractice, including terminology and definitions; ethical considerations; privacy and security; reimbursement policy and trends; considerations for client selection; and telepractice resources.

Hearing Review - eAudiology: Shifting from Theory to Practice
This article provides recommendations to hearing healthcare providers for integrating eAudiology into their current practices.

International Journal of Audiology – Applied Tele-Audiology Research in Clinical Practice During the Past Decade: A Scoping Review
The purpose of this scoping review was two-fold, (1) to provide information about the characteristics, type of service delivery, participant information and outcomes related to tele-audiology in clinical populations, and (2) to describe documented facilitators and barriers to tele-audiology delivery from the perspectives of practitioners and service recipients. Knowledge of these findings can assist audiologists in considering remote service delivery options for their practices.

How to Do a Telemedicine Visit the Right Way: A Checklist
This article provides helpful checklists regarding technology for both providers and patients to use before their first tele-audiology visit.

Hearing Review - Telehealth
This link will lead you to the latest tele-audiology updates and resources.

Examples of Tele-Audiology

NCHAM JEHDI: South Dakota Early Hearing Detection and Intervention Program: Using Teleaudiology to Conduct Infant Diagnostic Assessments
This article describes the South Dakota EHDI program's tele-audiology project. They describe their use of a synchronous, hub-and-spoke, tele-audiology service delivery model used to complete infant hearing assessments.

NCHAM JEHDI: Infant Diagnostic Evaluation Via Teleaudiology Following Newborn Screening In Eastern North Carolina
This article describes a pilot Tele-Audiology project which aimed to provide diagnostic evaluations to infants via tele-audiology in eastern North Carolina.
**ASHA SIG 18 - Audiological Care and Telehealth in Remote Alaska**
This article discusses the provision of tele-audiology services in remote Alaska used to provide hearing healthcare to patients across the lifespan with applicable information for providing pediatric tele-audiology services.

**Telehealth-enabled auditory brainstem response testing for infants living in rural communities: the British Columbia Early Hearing Program experience**
This article describes a study by the British Columbia Early Hearing Program which implemented diagnostic ABR assessments for infants in rural communities.

**Developing a Tele-Audiology Program**

**Hearing Review - Critical Steps in Establishing a Teleaudiology Practice, Part 1**
This article discusses several critical aspects to consider when thinking about tele-audiology including the importance and the benefits of tele-audiology, and the article also provides a guide to developing a successful tele-audiology program.

**Hearing Review - Critical Steps in Establishing a Teleaudiology Practice, Part 2**
This article addresses considerations for implementing tele-audiology such as software requirements, equipment needs, and billing and coding.

**ASHA - Telepractice Resources During COVID-19**
This resource provides ASHA links for planning and providing tele-audiology services.

**ASHA - Getting Started with Teleaudiology**
This article provides information about tele-audiology, and it also explores helpful aspects to consider when planning for and implementing tele-audiology.

**AAA - The ABCs of Establishing a Remote Clinic**
This resource provides an outline of basic steps and considerations for starting tele-audiology practice.

**Hearing Review – Phonak ABC Guide**

**Hearing Review (Phonak 6) - Ten Steps to Technology & Connectivity for eAudiology**
This resource from Phonak ABCs step-by-step guide outlines steps to follow to help you ensure that you have the proper technology and connection capabilities needed to provide tele-audiology services.

**Hearing Review (Phonak 10) - Ten Steps to Record Keeping & Data Protection for eAudiology**
This resource from Phonak ABCs step-by-step guide discusses strategies to consider in order to ensure proper security when maintaining patient records and other health information when using tele-audiology service delivery.
**Equipment**

(This Learning Community topic also includes links for diagnostic equipment)

**Hearing Review - How to Use Teleaudiology Technologies in a New Setup or in an Existing Office**
This article provides specific details of tele-audiology equipment options as well as delivery modalities and how to set them up.

**Telehealth Video Conferencing Resources**
(This Learning Community topic also includes links for specific platforms)

**ASHA SIG 18/ Everything SLP - It's All About the Platform**
This article compares several tele-practice platforms (G Suite, WebEx, GoToMeeting, doxy.me, Zoom, and Microsoft Teams. While written for SLPs, this information may also be applicable for audiological interventions, troubleshooting, and counseling.

**Remote Connectivity Technology: Privacy Considerations for eAudiology Applications**
This article from *Canadian Audiologist* describes pertinent information regarding tele-audiology such as privacy, privacy legislation, technology, telemedicine platforms, and ethics.

**Regulations, Licensure, & Reimbursement**

**ASHA: COVID-19: TRACKING OF STATE LAWS AND REGULATIONS FOR TELEPRACTICE AND LICENSURE POLICY**
This ASHA document provides state-by-state laws and regulations regarding telepractice and licensure policies.

**AAA: CODING AND REIMBURSEMENT | Specialty Series: Telehealth**
This resource provides information on billing, coding, and reimbursement for tele-audiology. The article also gives helpful examples for coding and billing for tele-audiology services.

**ADA - Procedures Which May Be Provided Via Telehealth with Existing Technologies 03/23/20**
This document provides a list of procedures that may be delivered via tele-audiology, also including applicable billing codes.

**AAA: COVID-19 Telehealth Update and Guidance**
Many audiologists are wondering if remote services can be billed and reimbursed. This guide will help you understand options that are available to audiologists at the present time
**Protocols**

**EHDI/UNHS Program Guidelines and Websites by State**
Links to web sites having information related to the various facets of early (newborn/infant) hearing detection and intervention programs in U.S. states, territories and commonwealths, including their guidelines.

**2019 JCIH Position Statement**
This is the latest Joint Committee on Infant Hearing Position Statement which outlines best practice in infant hearing screening, diagnostics and early intervention.

**Training for Remote Sites**

**South Dakota - Training Videos File**
This PDF document provides a list of videos from the Communication Support Through Aids and Technology YouTube channel that teach various skills such as ABR electrode placement and removal, insert placement and removal, bone oscillator placement, and swaddling. *(List and training video are available by signing into the Tele-Audiology Learning Community.)*

**Hearing Aids**
*(This Learning Community topic also includes information about some specific manufacturers)*

**ASHA/AJA - Stories From the Webcams Cincinnati Children's Hospital Medical Center Audiology Telehealth and Pediatric Auditory Device Services**
This article reviews the benefits of tele-audiology, and it also describes multiple case studies which bring to light the usefulness of tele-audiology in providing device support to pediatric patients and their families.

**AAA - Remote Hearing Aid Support: The Next Frontier**
This article describes a study which analyzed the effectiveness and patient satisfaction of tele-audiology hearing aid appointments. Though this study focused on serving an adult population, the results of the study are relevant to pediatric tele-audiology hearing aid services.

**Cochlear Implants**

**Remote Programming for Cochlear Implants**
This study investigated the safety and efficacy of remote programming of cochlear implants for patients 12 years and older.

**ASHA - Pediatric Cochlear Implant Mapping Via Telepractice**
This article describes a research study which looked at the validity of performing cochlear implant mapping with young children using tele-audiology.
**AJA – Have Cochlear Implant, Won’t Have to Travel: Introducing Telemedicine to People Using Cochlear Implants File**

This article describes a study which analyses the effectiveness of tele-audiology for cochlear implant appointments for adults. Though the study was conducted with an adult population, the information covered is helpful and can be applied to pediatric tele-audiology.

**Use of Telehealth for Research and Clinical Measures in Cochlear Implant Recipients: A Validation Study**

This is an interesting research article comparing cochlear implant measures obtained during face-to-face appointments versus tele-audiology appointments with both adult and pediatric patients.

**Quality Improvement**

**NCHAM eBook: Chapter 27 Quality Improvement: Small Changes That Can Make a Big Difference**

This resource discusses EHDI’s quality improvement method, the Model for Improvement, used to reduce loss to follow-up in newborn hearing screening programs and how small changes have made a big difference.

**PDSA Worksheet**

*(Worksheet is available by signing into the Tele-Audiology Learning Community.)*