

What is Tele-Audiology and what does it look like?

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Learning Objectives

Goal : To understand what Tele-Audiology looks like and what forms it can take.

What do you think of these terms?

Tele-Health
Tele-Medicine
Tele-Practice
Tele-care
e-Health



What about

**Tele-Audiology
Tele-Cardiology
Tele-Dermatology.....**

Do they mean something similar? Do they mean something different to different people?

Tele or E is the common theme

Tele means the use of communications technology and is a product of 20th century interconnectivity. It has therefore become a prefix to many different types of care or even service. Its use as a terminology can be traced back to the 1960's.
ref: [WHO Telemedicine p. 8,9](#)

e as a prefix essentially means the same thing but is a newer term barely used before 1999 that relates to the use of the internet as well as other communication mediums.

ACTIVITY: read: [e-Health](#)

Many people and services interchange these terms which can lead to confusion.

ACTIVITY: read: [combining technology](#)

Let's explore and focus on what Tele-Audiology is.



What is Tele- Audiology?

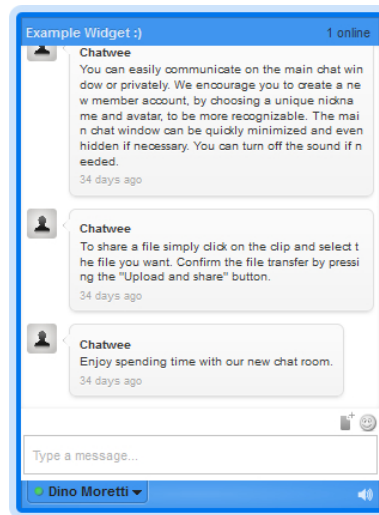
Whenever you see or assist a person with their hearing and communication needs.

That is not occurring Face to Face in the same physical space.



How would you explain Tele-Audiology to someone?

What does this look like?



Emails ? Hearing apps?
Online Chats/Blogs?

Video/Skype calls?

Others?

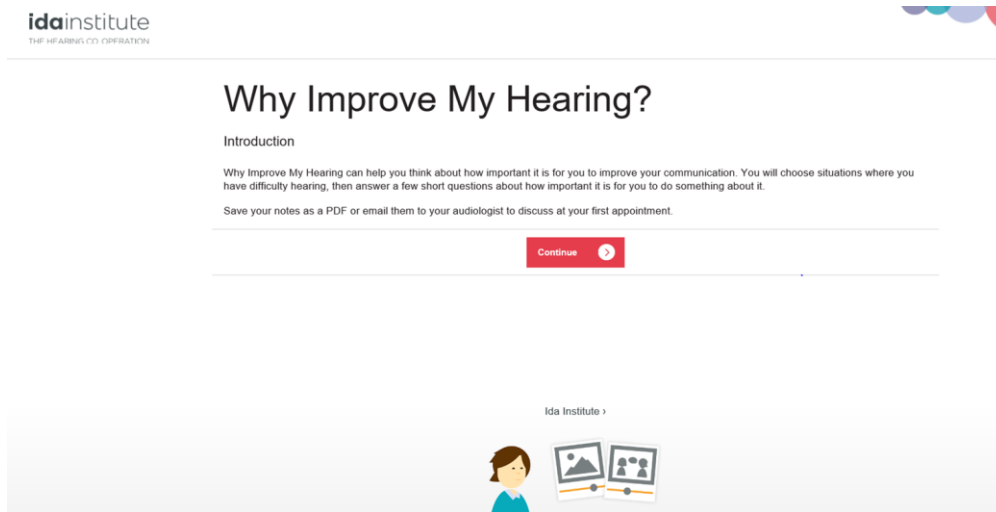
Lets look at 6 recent examples of Tele-Audiology

Example 1: A drop-in service for rural patients that live a long way from their audiologist.



Example 2: An online check to see if you need to organise a formal hearing assessment and online Tools to help you prepare for your upcoming appointments

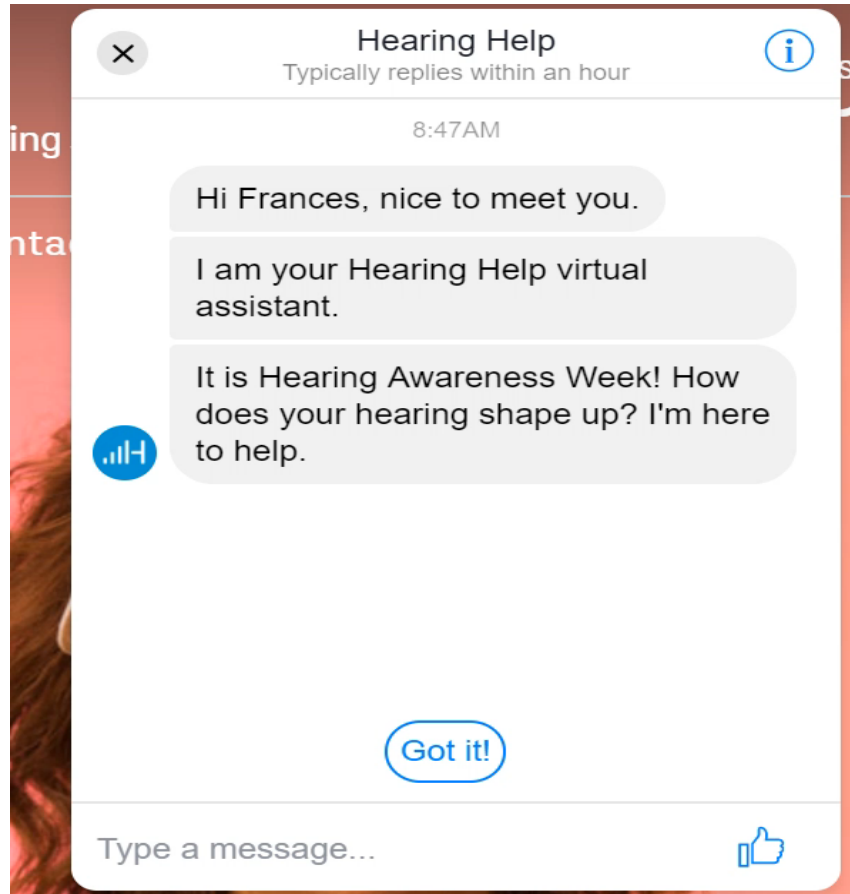
Ida Hearing Check



The screenshot displays the 'Ida Institute' logo at the top left, with the tagline 'THE HEARING CENTRE' below it. The main heading is 'Why Improve My Hearing?'. Underneath, there is an 'Introduction' section. The text reads: 'Why Improve My Hearing can help you think about how important it is for you to improve your communication. You will choose situations where you have difficulty hearing, then answer a few short questions about how important it is for you to do something about it. Save your notes as a PDF or email them to your audiologist to discuss at your first appointment.' A red 'Continue' button with a right-pointing arrow is positioned below the text. At the bottom of the page, there is a small illustration of a woman's head and shoulders next to two icons representing a photo and a document, with the text 'Ida Institute >' above them.

Example 3: A Web chat service from HearingHelp

Hearing Help



Example 4: A regular Appointment to check your hearing when you need specialist audiology treatment.



Example 5: Ready when you are checks? And learning about ways to keep your hearing healthy.

 **Hearing Help**™ AN INITIATIVE OF  **Australian Hearing**

Monday to Friday from 9am – 7pm AEST
Talk to a hearing specialist:  **1800 740 301**



**Take our
7 step hearing
loss quiz**

And discover ways to keep your hearing

Example 6: online and smartphone Apps

- ❖ The hearZA app www.hearza.co.za :a strategic public awareness tool for accurate detection of hearing loss that allows for personalized hearing health tracking, in-app decision support, and a referral network to link people to their closest hearing health providers
- ❖ Soundlog Noise Dosimeter (by NAL/Australian Hearing)[sound log](#) Measures your noise exposure and estimates how long you can stay in your environment before reaching your maximum noise exposure limit. It also records sound duration and peak sound level using a simple results screen iOS Free
- ❖ Animal Sounds,[animal sounds](#) A handy app for those with hearing aids or a Cochlear Implant. Learn to distinguish between over 100 different animal sounds, using flashcards. Great for auditory training iOS and Android Free
- ❖ Ava (by 'Transcense') [AVA](#) This instant captioning app is great for group conversations. It uses your smartphone microphone to transcribe what is said word by word in real time. Colour coded and easy to follow iOS and Android Free

And so much more

ACTIVITY:

Explore ‘Google play’ :
And/or your ‘App store’:

Type in “Hearing” then “Hearing loss”
and see what else you can find.

Would any of these be useful to refer patients
to compliment your audiology services?

So now that we know what tele-audiology looks like, how can we understand it better?

Tele Audiology as you can see can take many forms. In addition, Audiology's dependence on technology, make it uniquely suited for telehealth.

Most of these forms of service delivery can be broken into 3 categories however which we will use going forward.

1: Synchronous

2: Asynchronous

3. Hybrid

Types of Tele-Audiology

Synchronous:

Describing events that occur within the same time window. Those occurring in “real-time”, as demonstrable in two-way consult between a patient in concert with their audiologist and at a distant site. ...

Asynchronous: (Also called store and forward), is the opposite of Synchronous and is **.Describing events that may occur within different time windows.** So in this case the patient and clinician may communicate at times that suit them both via email or chat or website interaction, but not necessarily at the same time.

HYBRID: Just a mix of 1 and 2

Activity: Divide these scenarios into Synchronous/Asynchronous/Hybrid

- A patient emails you for advice
- *You call a patient and talk to them over the phone about some tactics they might use to help them further in noise.*
- Your patient sends you online tools they have filled in to prepare for your appointment.

Activity: Divide these scenarios into Synchronous/Asynchronous/Hybrid

- *Your patient spends time researching and reading the pros and cons of hearing aids on your website.*
- *Your patient sends you a message and asks questions which you reply to straight away using web chat.*
- *A patient writes about their experiences with hearing aids on an online forum you own and you reply to their comments.*

Activity: Divide these scenarios into Synchronous/Asynchronous/Hybrid

- Individual and group aural rehabilitation and tinnitus counselling.
- Hearing aid fittings.
- Aftercare services.
- Remote diagnostic testing.

Activity: Divide these scenarios into Synchronous/Asynchronous/Hybrid

- Remote programming of cochlear implants
- The use of video and mobile technology to make hearing aid programming adjustments in the home or at remote clinics.
- Your patients tests their hearing using an automated pure tone hearing test via an app on their phone and sends you the results.

ACTIVITY: Research-

Go online and start researching what additional Tele-Audiology services are available in your country.

- List each one according to which patient group it is available to and what form it takes with a brief description.
- Alternatively if there aren't many available, explore what other Tele-Health services are available. Who runs them and which patient groups do they service?
- Check whether there are costs involved or are they free or government funded?