

The digital transformation: eAudiology incorporating Phonak eSolutions



Engage, Ease, Empower

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Learning Outcomes

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- Participants will be able to summarize how eAudiology is changing the hearing healthcare model for hearing healthcare professionals and patients.
- Participants will be able to describe the eSolutions available with Phonak Marvel.
- Participants will be able to identify the ways in which they can use Phonak eSolutions to differentiate their practice, clinical services and empower patients.

2

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eAudiology and eSolutions agenda

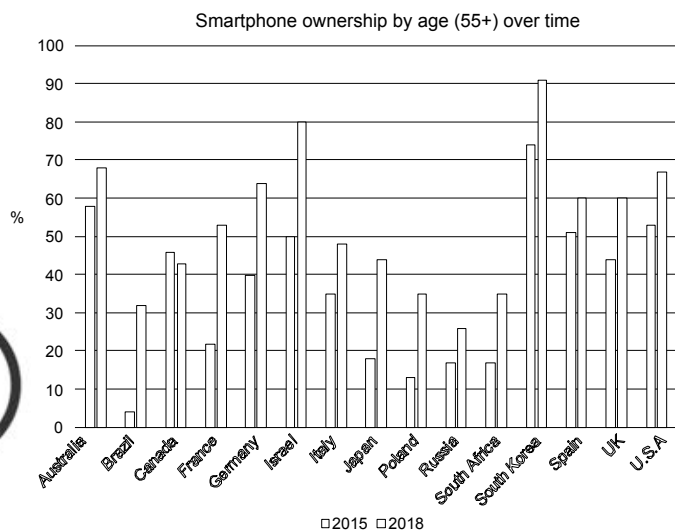
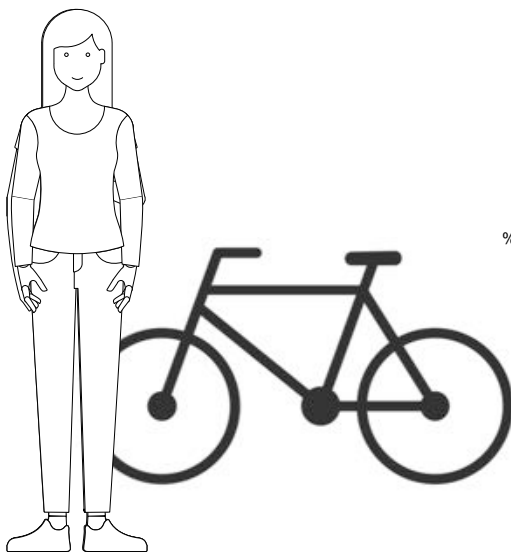
1. Why should you consider implementing eSolutions
2. What are the current eSolutions offered by Phonak
3. How will you and your patients use eSolutions



Nikolas Klakow, AuD
Manager, Clinical Training West - Phonak

3

Health conscious and tech savvy



Realizing the Value., (2016) New approaches in health and care. Available at: <https://www.health.org.uk/sites/default/files/RtVNewApproachesToValue.pdf> (Accessed: 29 April 2019)
Pew Research Center, (February 2019), "Smartphone Ownership Is Growing Rapidly Around the World, but Not Always Equally". Available at <https://www.pewglobal.org/2019/02/05/smartphone-ownership-is-growing-rapidly-around-the-world-but-not-always-equally/>. Accessed 10.05.2019

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eHealth

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Evidence shows that people who are involved in decisions about their healthcare tend to:

Report greater satisfaction with the services they receive

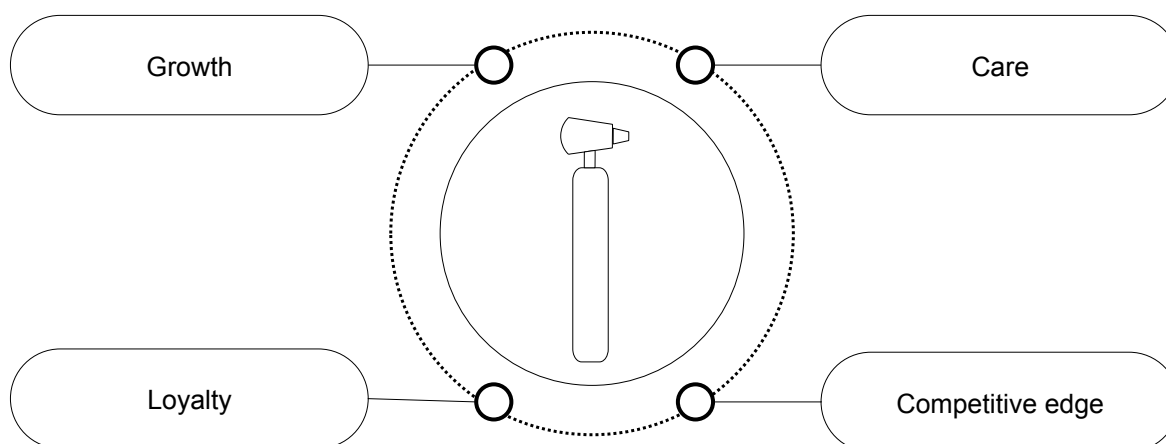
Decisions made were most appropriate for them

Make fewer complaints



Care Quality Commission. (2016) Better care in my hands: A review of how people are involved in their care. Available at: https://www.cqc.org.uk/sites/default/files/20160519_Better_care_in_my_hands_FINAL.pdf (Accessed: 29 April 2019)

eAudiology

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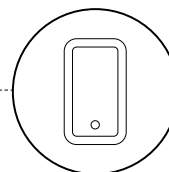
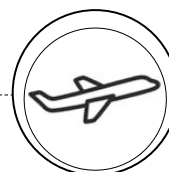
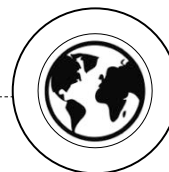
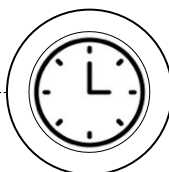
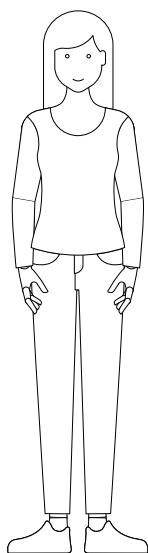
Swanepoel DW, Hall JW LLL. (2010). A systematic review of the telehealth applications in audiology. Telemedicine and e-Health. 16(2): 181-200.

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Needs of the modern hearing aid client

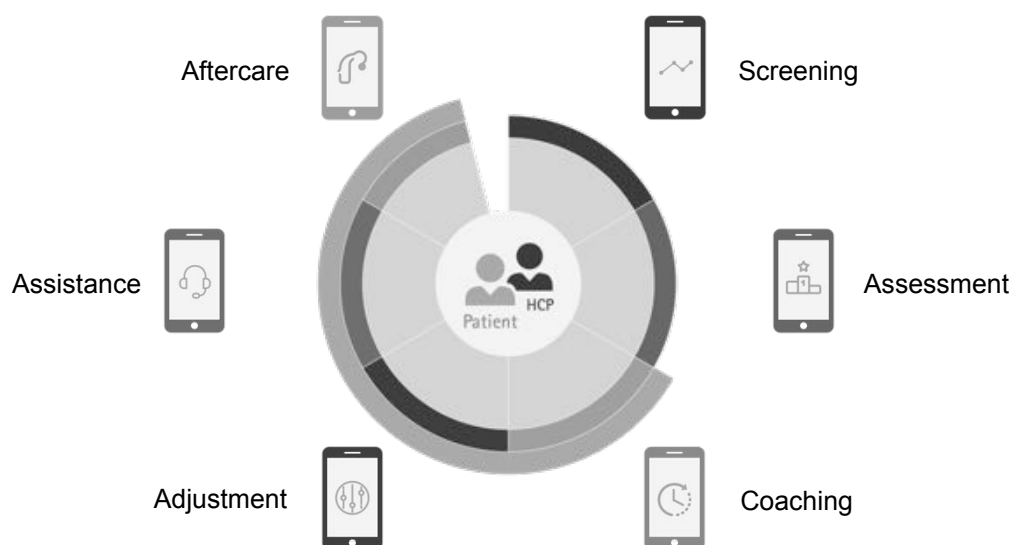
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4 A "Goldilocks" Approach to Hearing-Aid Self-Fitting: User Interactions, Boothroyd A, Mackersie C, Am J Audiol. 2017 Oct 12;26(3S)
5 Explanations for the non-use of hearing aids in a group of older adults. A qualitative study., Guerra-Zúñiga M, Cardemil-Morales F, Albertz-Arévalo N, Rahal-Espejo M., Acta Otorrinolaringol Esp. 2014 Jan-Feb

Phonak eSolutions

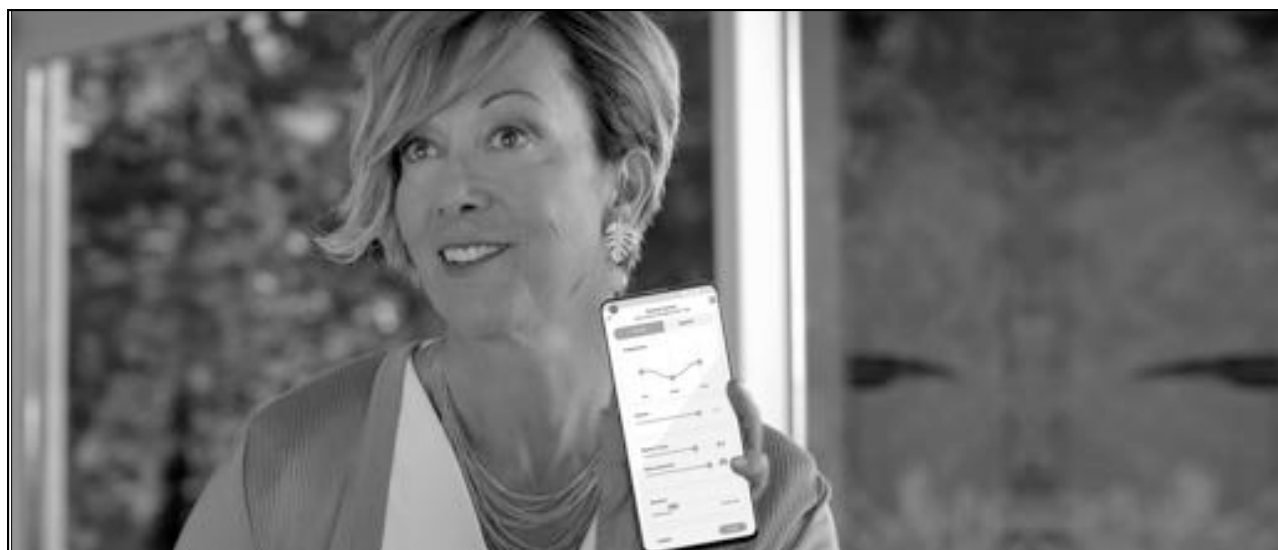
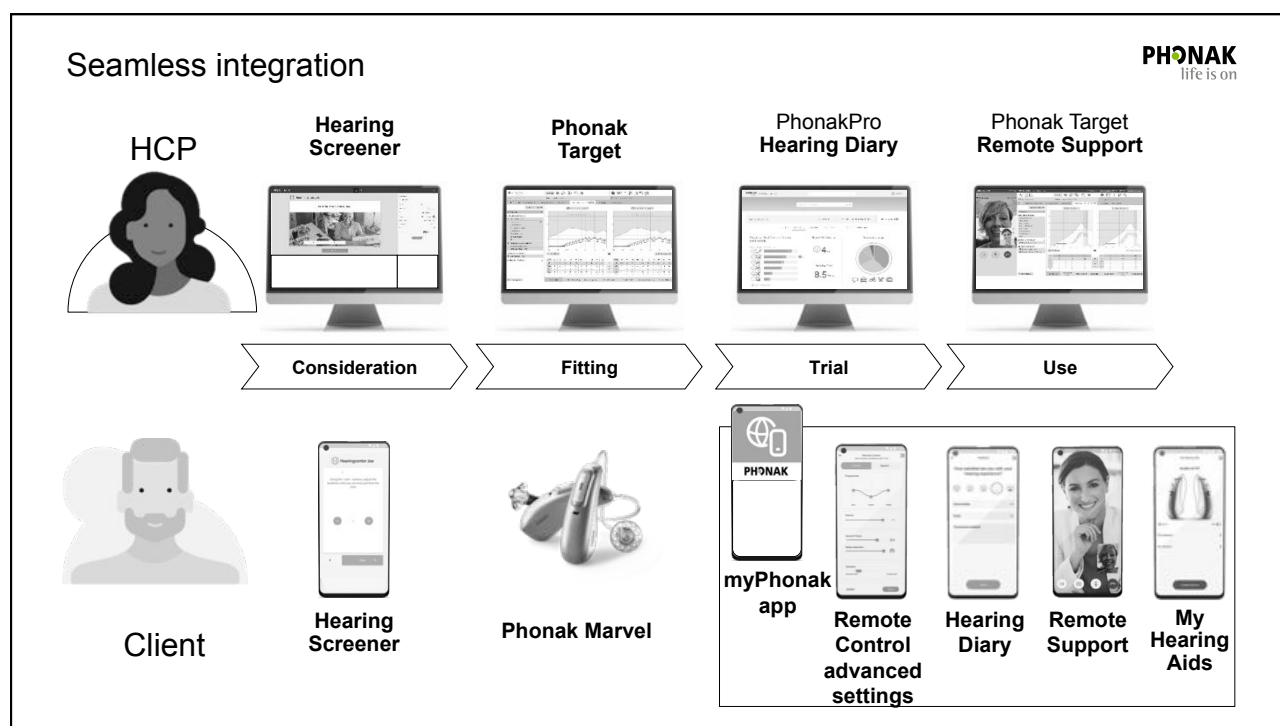
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myPhonak app – more than just an app

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Client expectations

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29%

 Self-adjust via device
 (e.g. smart phone, tablet)

27%

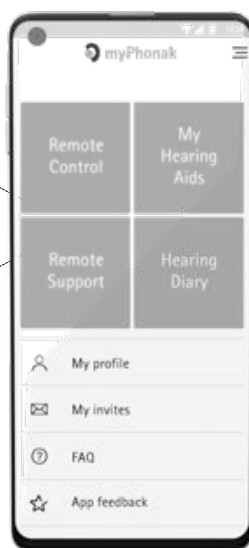
 Personally
 optimized
 settings

 Knorr, H. (2016). Market Research ID669. Please contact marketinsight@sonova.com if you are interested in further information.

The smartest way to get the most out of Phonak hearing aids

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Customize your sound

Get support on the go

View hearing aid set up

Rate your experience

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myPhonak app

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Volume

Program change

Environmental Balance

Remote Control
Cite-vibration-ActiveSense OS™ 3.0

Bass and treble weighting

Strength of the noise canceller

Focus

New

New

New

13

MORE personalized hearing experience

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Remote Control

Program selection

AutoSense OS™ 3.0 ✓

Roger

Restaurant

Watching TV

Music

My Livingroom

Sports

Remote Control

Frequencies

Bass Middle Treble

Volume

Noise reduction

Speech Focus

Dynamic

Decrease loud Increase soft

Update Save

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Research

Comparison of
eSolutions fitting to
Traditional fitting in
New Hearing Aid
Users



Sound influencers of the advanced settings

The fundamentals

POS

Ear piece

Acoustic parameters

Receiver
S, M, P, UP

- Vent / AOV
- Dome type

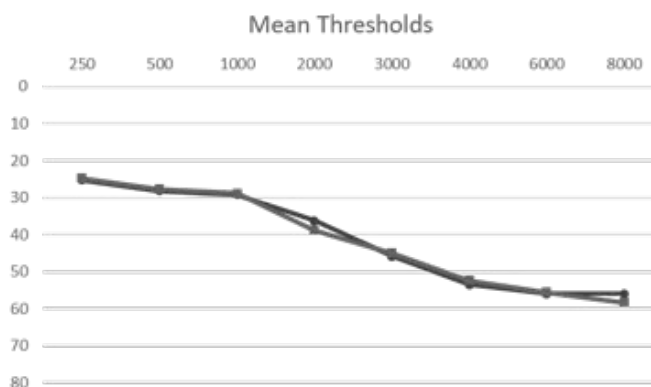
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Comparison of eSolutions fitting to Traditional fitting in New Hearing Aid Users

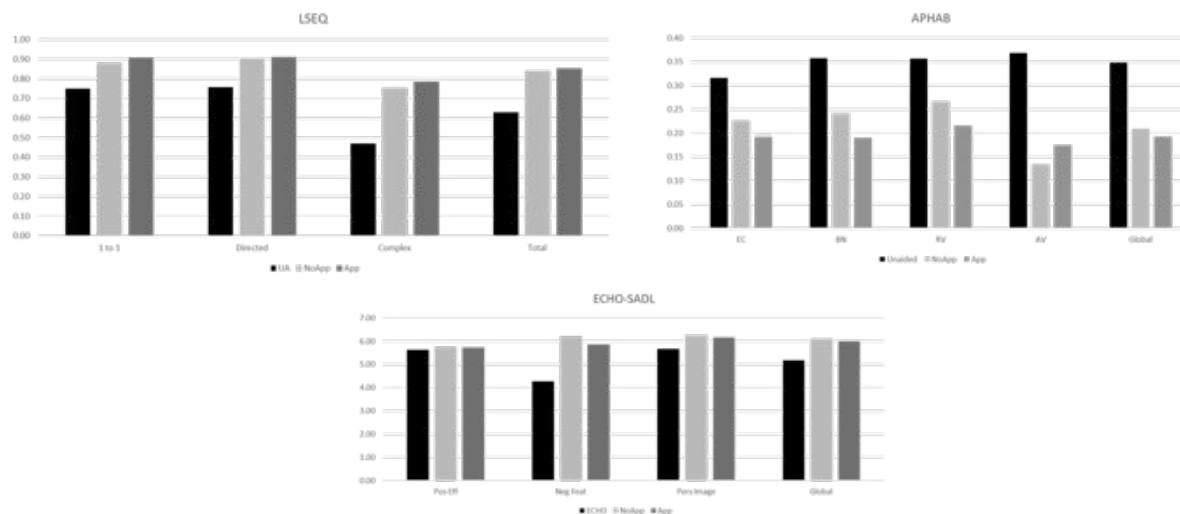


- The purpose of this study was to evaluate new users' hearing aid satisfaction with and without the use of the MyPhonak app
- Subjective measures included
 - APHAB
 - ECHO/SADL
 - LSEQ
 - COSI
- 19 New Hearing Aid Users
 - 10 males
 - 9 females
 - Age range 33-81 years



17

Subjective measures



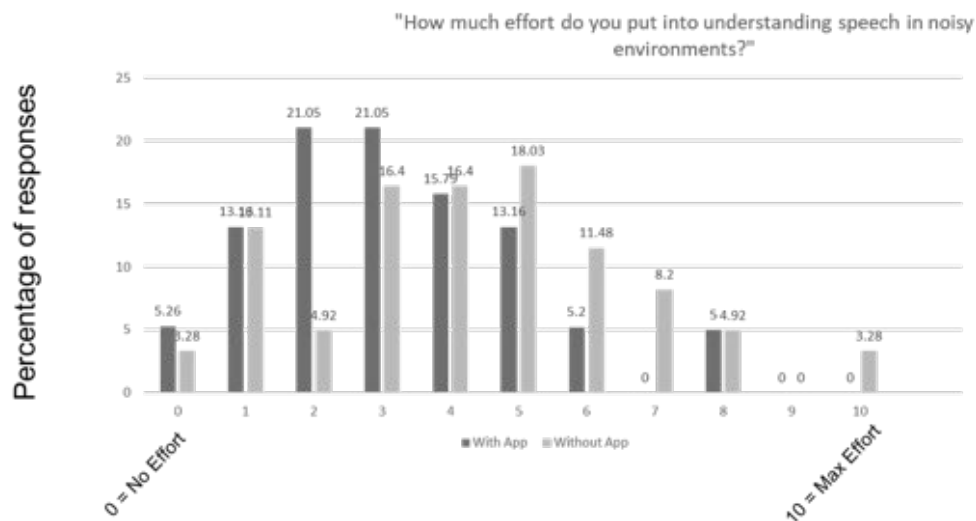
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Perceived Listening effort

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19

Summary

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- Participants were satisfied with hearing aids from the first fitting
- Most participants used the app and could improve certain environments
- Most participants felt the app was easy to use and convenient
- Most participants would prefer remote appointments or combination of face to face and remote appointments.
- Participants who did not often use remote control function still preferred idea of remote appointments



20

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Research

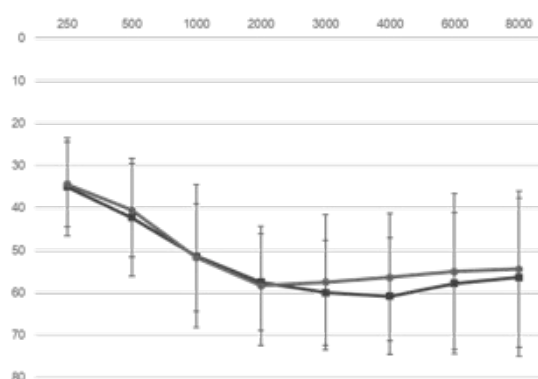
Remote Control App and Teens

Participants

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- 18 participants
- Average age: 13
- SD: 2
- Youngest: 10
- Oldest: 17
- Experienced HA users

Average Audiogram



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Protocol



- **Lab appointment 1:**
- Initial fitting based on audiogram, fit to DSL pediatric targets and matched via REMs
- Installation of App and introduction of myPhonak App
 - Remote Control
 - Practice with the app in the office. Explanation of capabilities and sliders, creating custom programs, saving program name
 - Speech in Noise scene and music scene presented with participant sitting in the middle of array
 - Participant is able to manipulate the app and listen to changes in each scene to better understand parameters available
- **Home Trial- 1 week in duration**
- Hearing diaries filled out each time participant created a new custom program
 - Participant created an unlimited number of custom programs
 - Diary described the environment, changes made, and why

23

Protocol cont'd

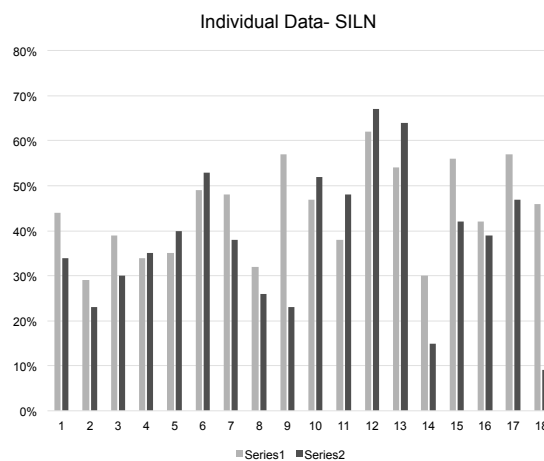
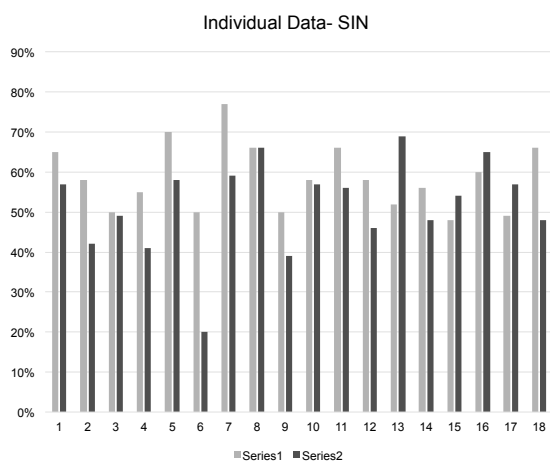


- **Lab appointment 2 :**
- Read out data logging
- Went over diaries
- Interviewed about experiences/custom programs made with the Remote Control App
- Lab testing:
 - Real Ear measures comparing customized programs made during the home trial and AutoSense environment selected.
 - Objective speech in noise testing between customized program and AutoSense program
 - Participant adjusted settings in the following controlled lab environments
 - Speech in Car scene
 - Speech in Noise
 - Speech in Quiet
 - Blinded A/B comparison between customized program they created (above) and default program (AutoSense)

24

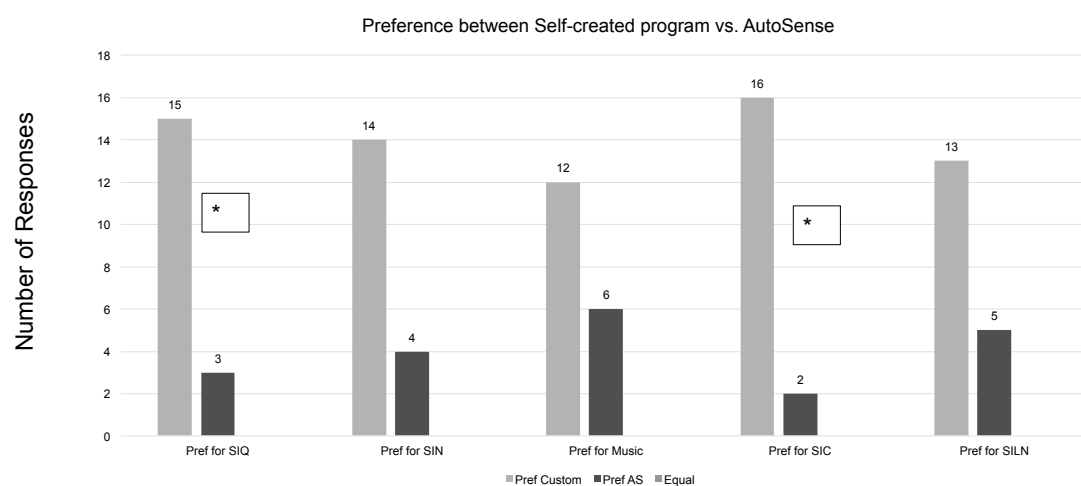
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25

Subjective A/B comparisons

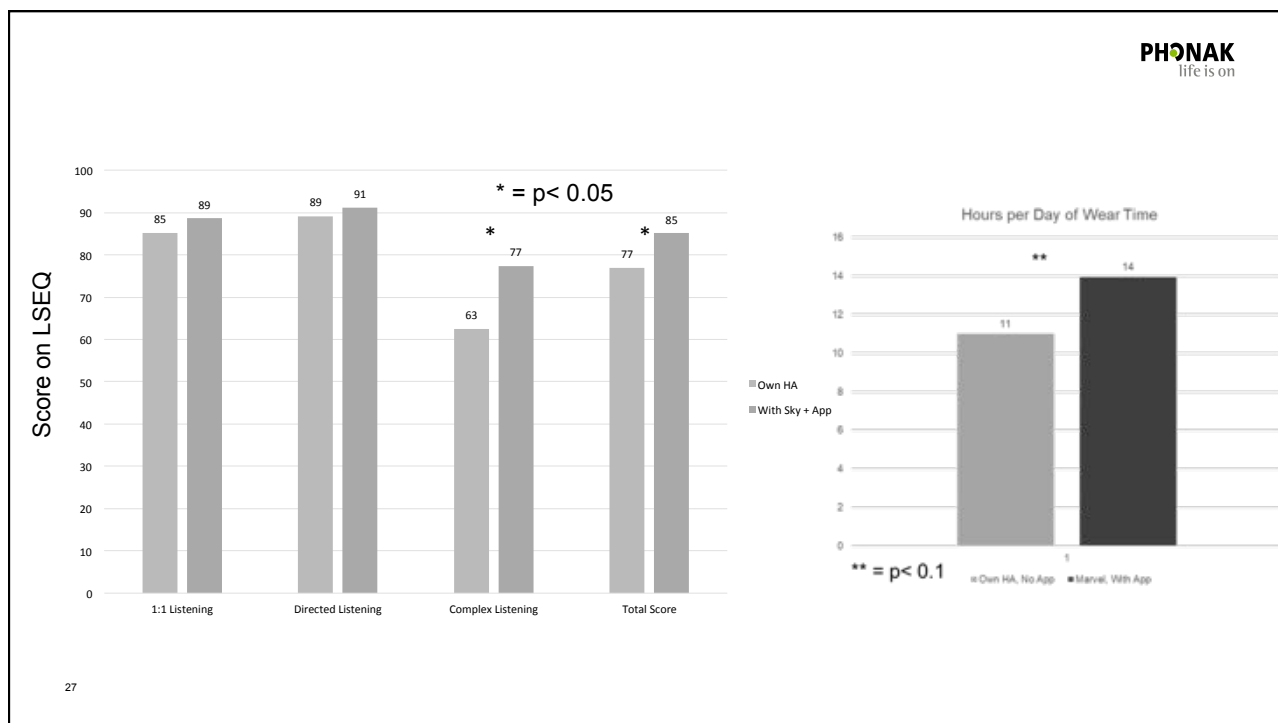


* = significant difference in preference, based on binomial test ($p < 0.05$)

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Outcomes

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- Teens/pre-teens use the app, and really like it (control)!
- They seem very averse to any background noise, and wanted to eliminate it as much as possible
- Lab programs seemed to reflect custom programs made at home, with more reduction in gain made at home
- Datalogging and LSEQ indicate very positive changes with the app, in terms of perceived self-efficacy and wear time
- Modifier training, age, and number of custom created programs may be good indicators of who could be a good candidate for the RC app

28

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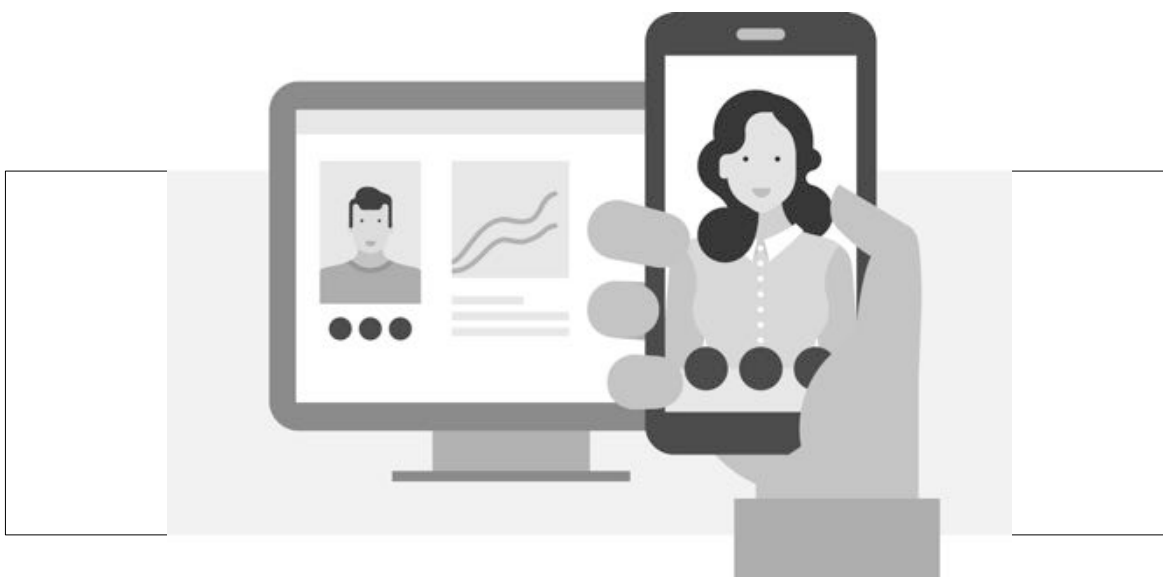
Summary



1. What is eAudiology?
2. 1/3 would prefer to have control
3. Evidence shows that people who are involved in decisions about their healthcare tend to:
4. Remote Control app has five user fine-tuning controls

29

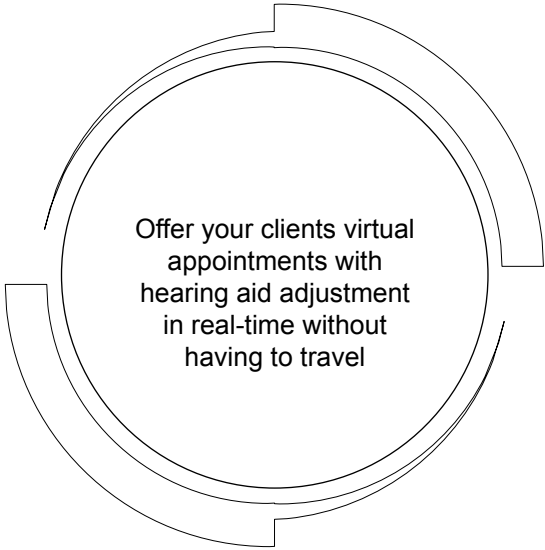
myPhonak app Remote Support




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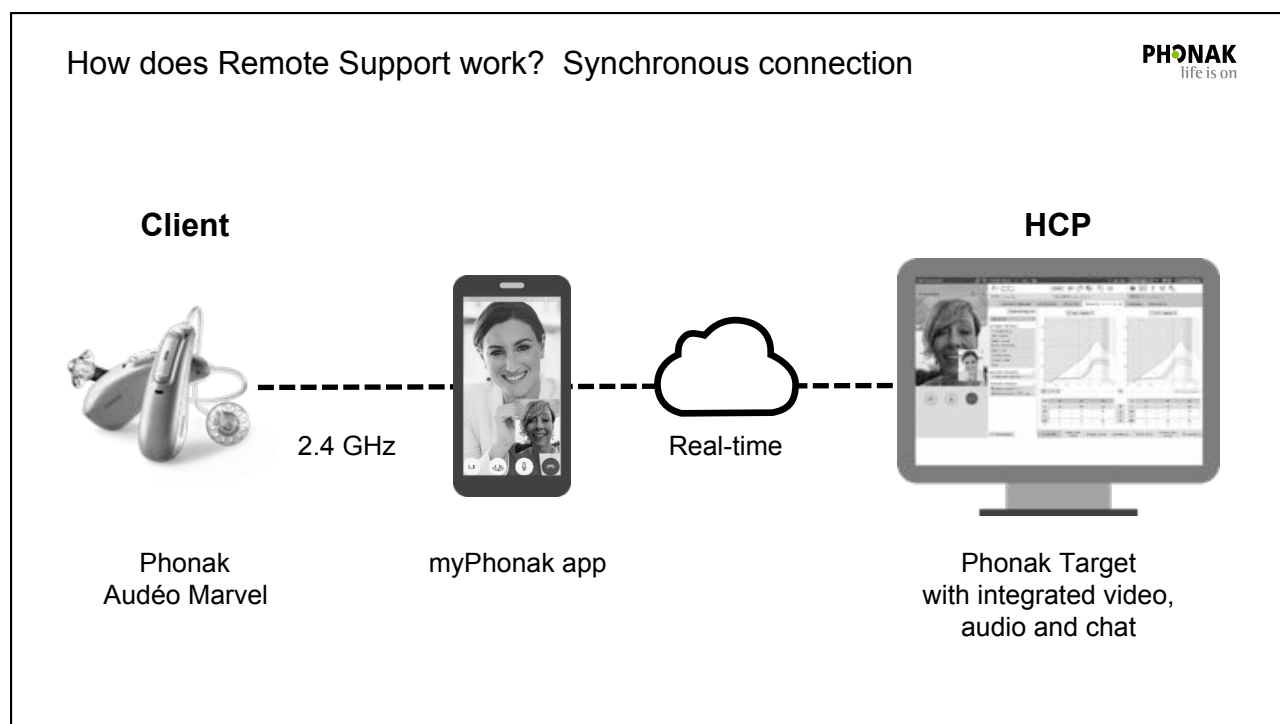


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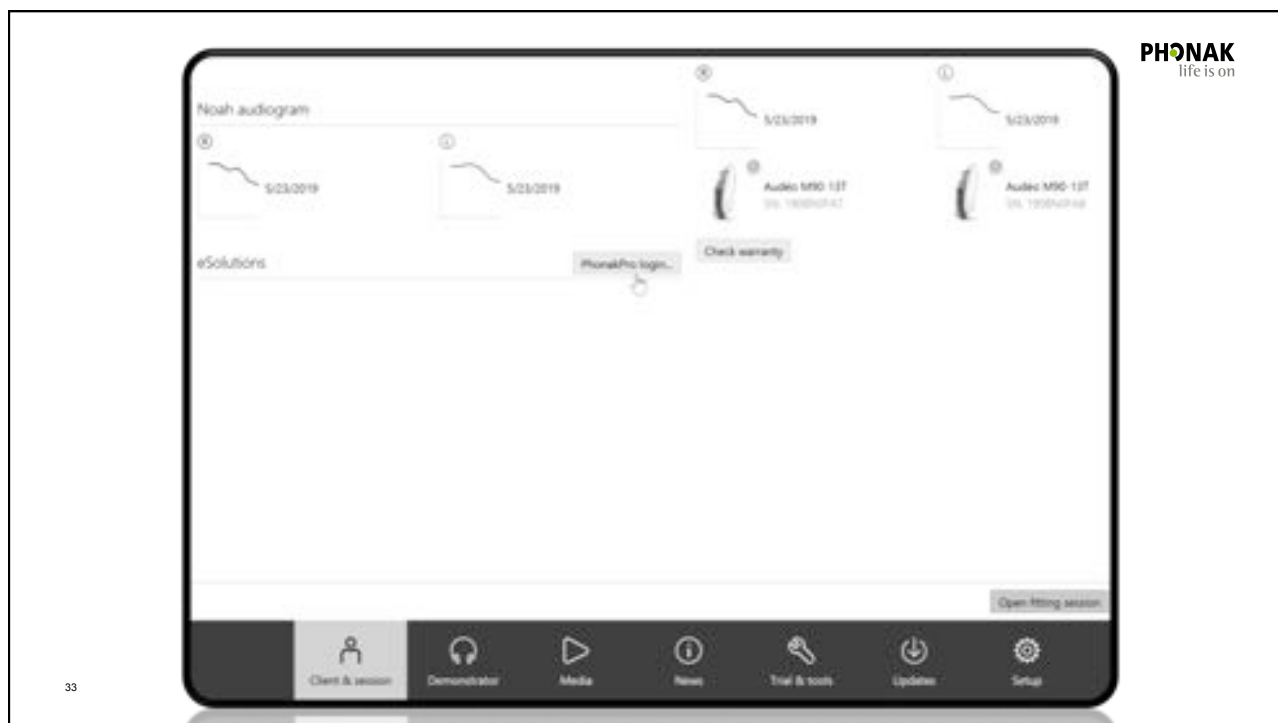
Offer your clients virtual appointments with hearing aid adjustment in real-time without having to travel





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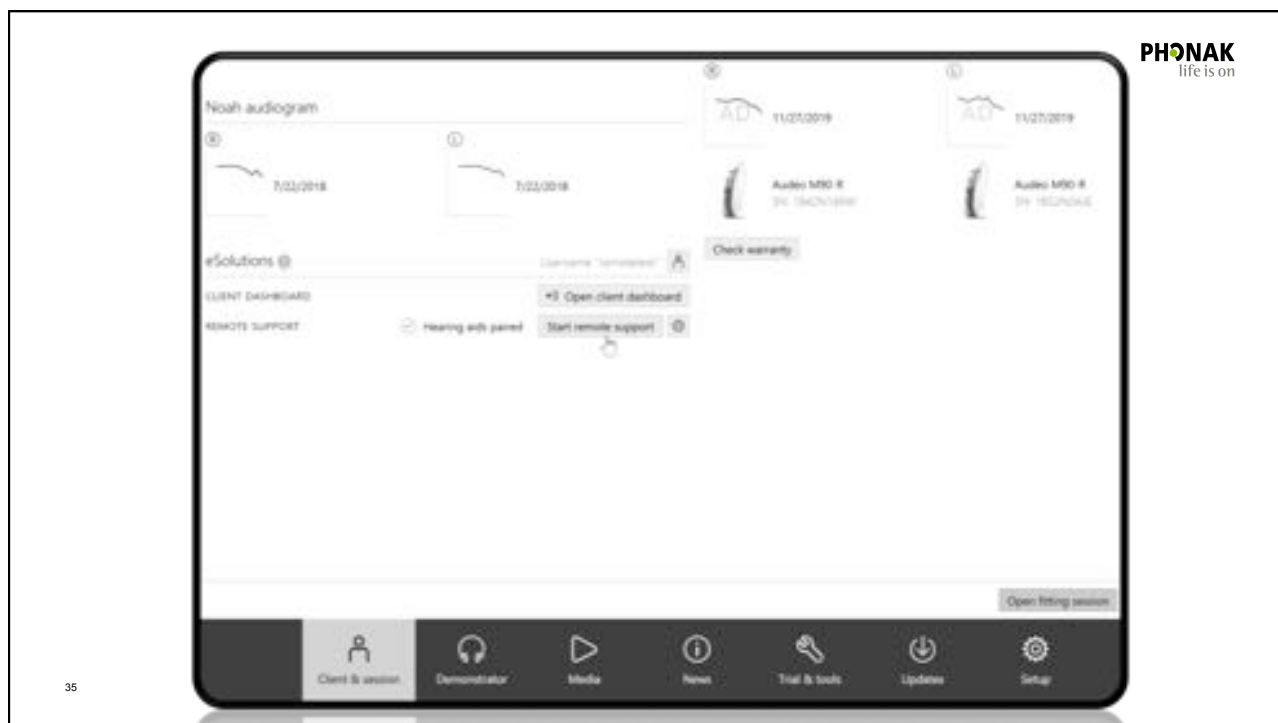
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34

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35

Requirements for Remote Support session

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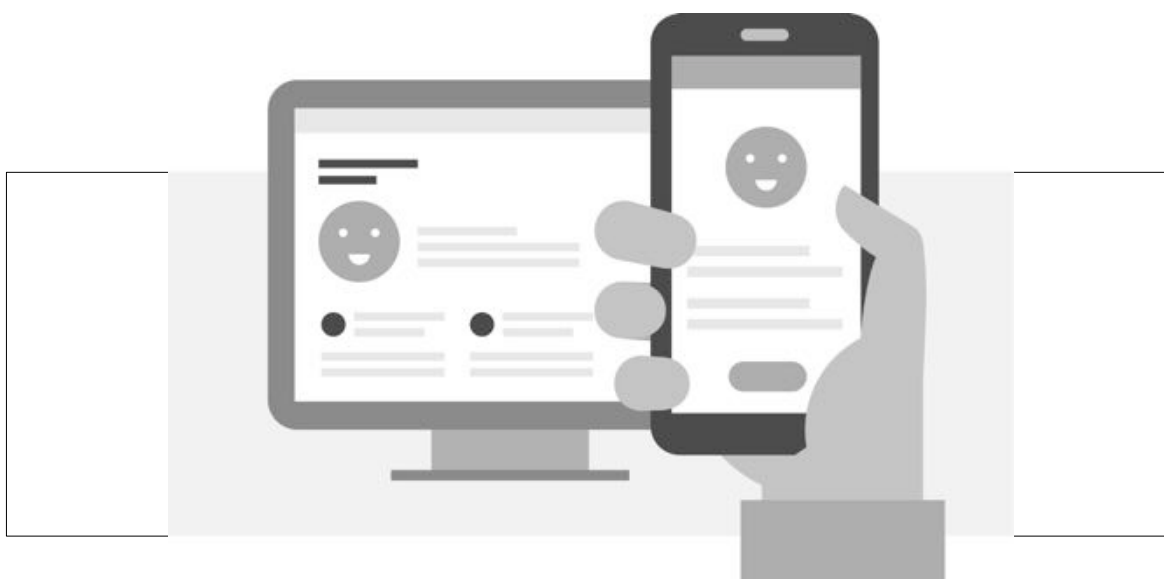
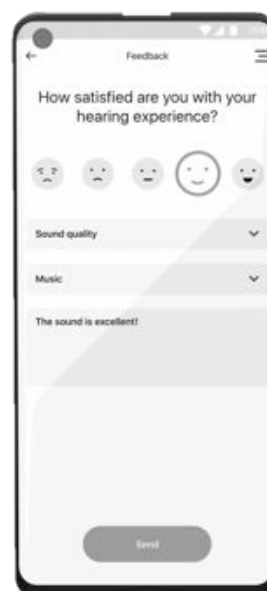
- Computer with Phonak Target installed
- Video camera and a microphone
- Stable internet connection

The screenshot shows the Phonak Target software interface. On the left, there is a video call window showing a woman's face. On the right, there are two audiogram graphs. Below the graphs, there are several tables of data. A white arrow points from the "Computer with Phonak Target installed" requirement to the software interface.

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myPhonak app Hearing Diary

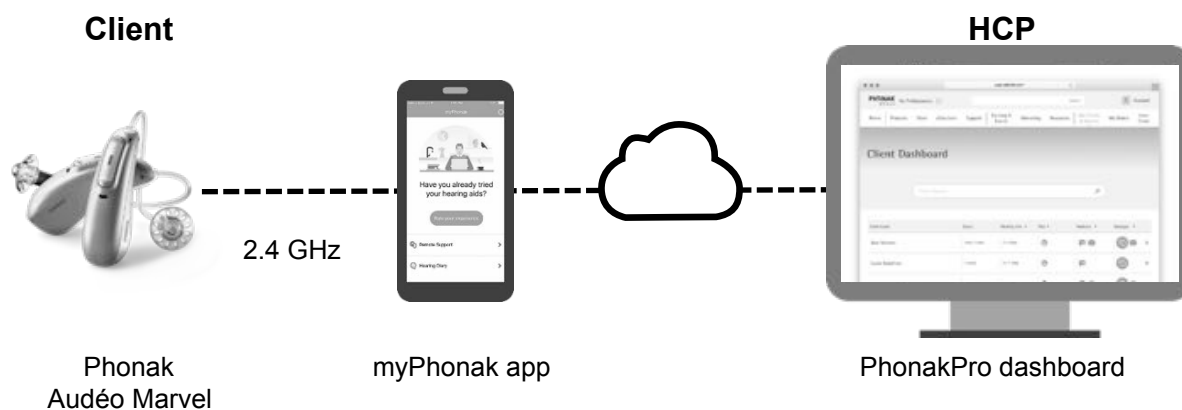
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How does Hearing Diary work

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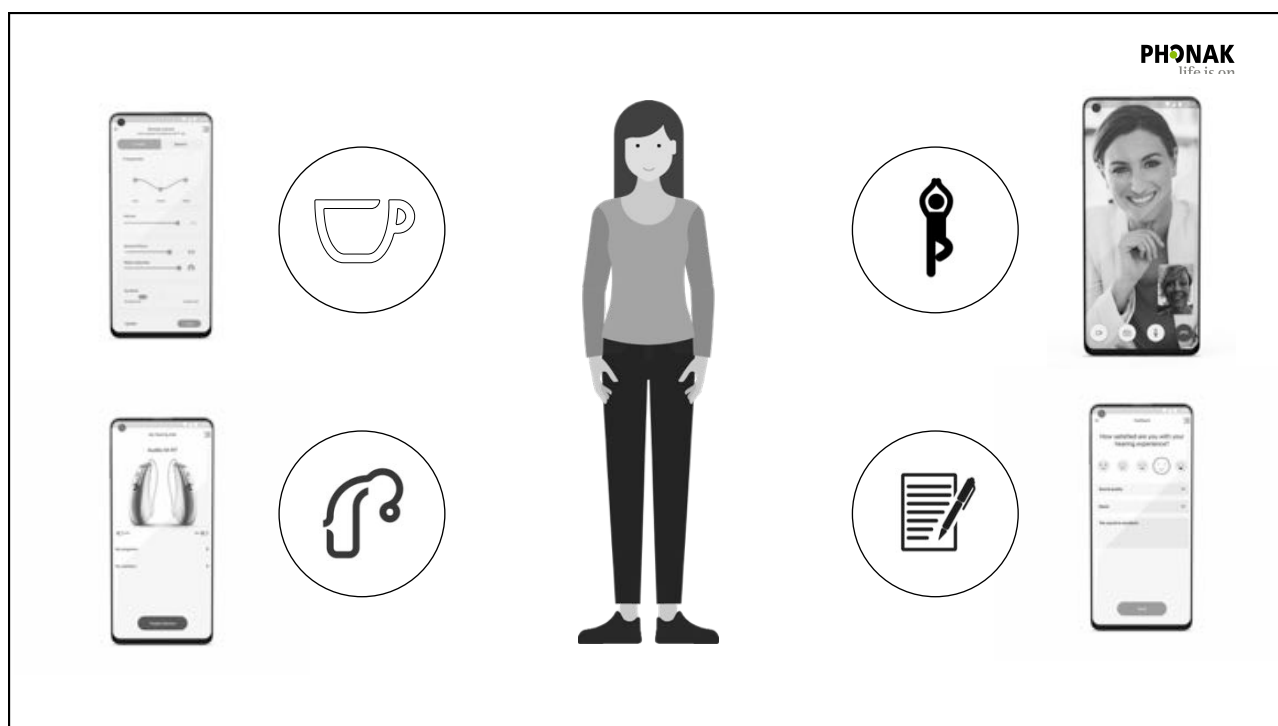
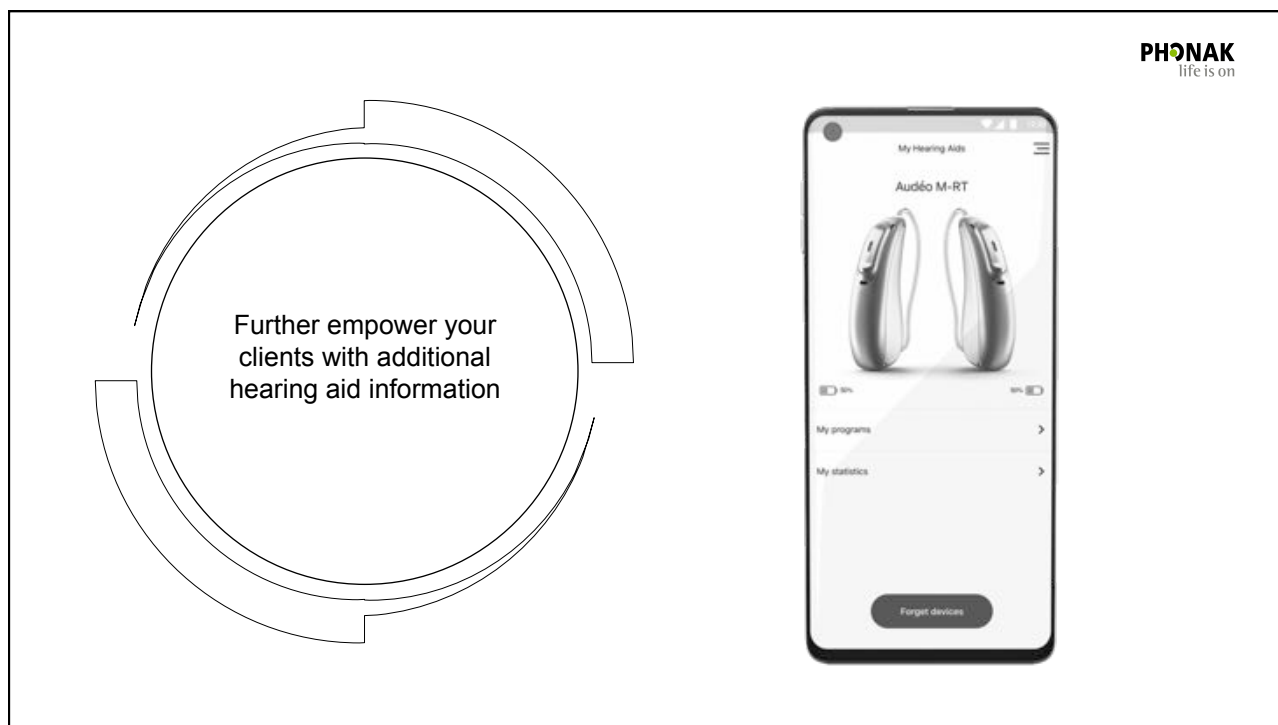
myPhonak app My Hearing Aids

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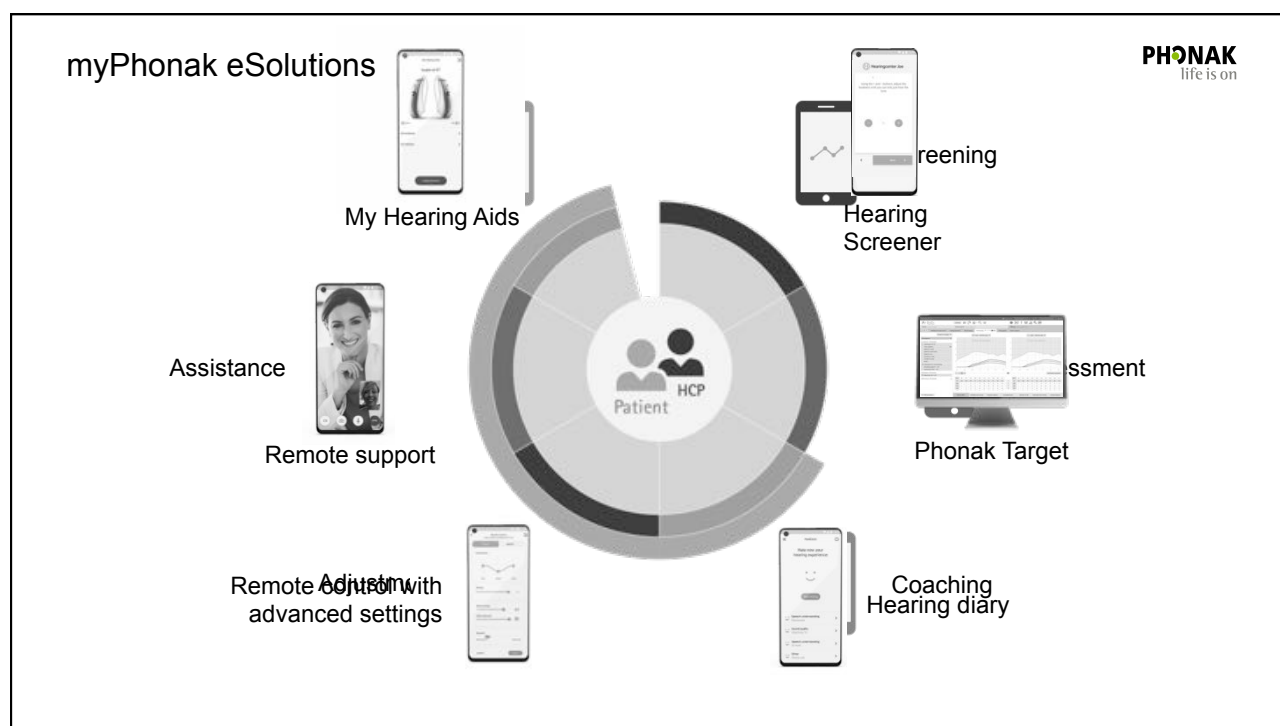
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Tips and Resources

44

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Remote Support tips



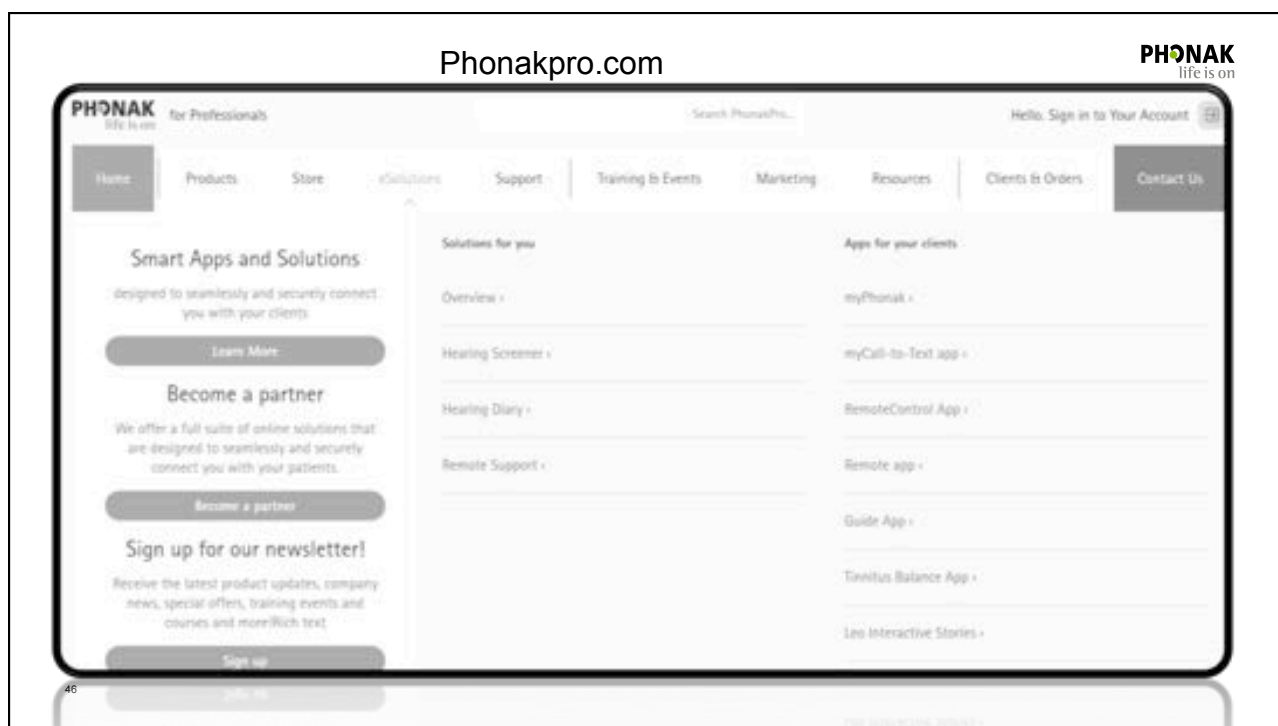
Make sure everyone involved is trained in their roles

- Patient – Do they know what to do?
- HCP – Do you know how to get all the equipment working?
- Support staff – Is there a protocol for contacting the patient and having a remote “waiting room” plan?

Remote Support communication suggestions:

- Introduce everyone in the room
- Practice in front of a camera – How do you look? Body language!
- Don't forget to talk! – They can only see your face, not what you are doing.

Is there a backup plan?



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Phonak eAudiology

Client Profiling Tool

Step 1

The first step in determining how likely it is that the use of eAudiology technologies and services will be successful with a given client is to discuss their willingness and attitudes towards using them.
Consider asking the following questions to prompt your discussion.

How important is it to you to...?

	Not at all	Somewhat	Important	Extremely important
<input type="checkbox"/> Obtain an appointment quickly				
<input type="checkbox"/> Reduce travel and waiting times for appointments				
<input type="checkbox"/> Access appointments from your home/ workplace/ vacation				
<input type="checkbox"/> Have face-to-face appointments only				

Step 2

Use the following checklist to understand the technological efficacy of potential candidates for eAudiology technologies and services or as an entry point to a discussion around the availability of these new services you offer.

1. Which of the following electronic devices do you use on a regular basis?

- ☐ Smartphone with e-mail and Apps (iOS/Android)
- ☐ Tablet (NFC to NFC)
- ☐ Other Bluetooth-enabled mobile phone
- ☐ Simple flip phone that just makes calls
- ☐ None of the above

2. Which of the following programs / apps / websites do you use on a regular basis?
(Out of all listed, it is recommended:)

- ☐ Online banking
- ☐ Online booking of journeys and flights
- ☐ Video Conferencing, e.g. with Skype or Facetime etc.
- ☐ Social media, e.g. Facebook, Instagram, Twitter etc.
- ☐ Router and send text messages, e.g. WhatsApp, Viber, Messenger etc.
- ☐ Online Shopping, e.g. Amazon etc.

Step 3

3. How would you rate your readiness to use any app / technology?

None
1 - 2 (iOS/Android)
3 - 4 (iOS/Android)

4. How do you troubleshoot issues with any app / technology?

I stop altogether
I try to figure it out, e.g. use Google/ YouTube to do research (iOS/Android)
I ask for help (iOS/Android)
I call a helpline / go to a shop with help desk (iOS/Android)

5. How interested is the following for you?

I want to use my Smartphone, tablet or computer to optimise my hearing aid with settings myself
(e.g. features, filters, tone, noise on speech, etc.)
I want a hearing aid that optimises all settings for me

Once a candidate has been identified, proceed to Step 3.

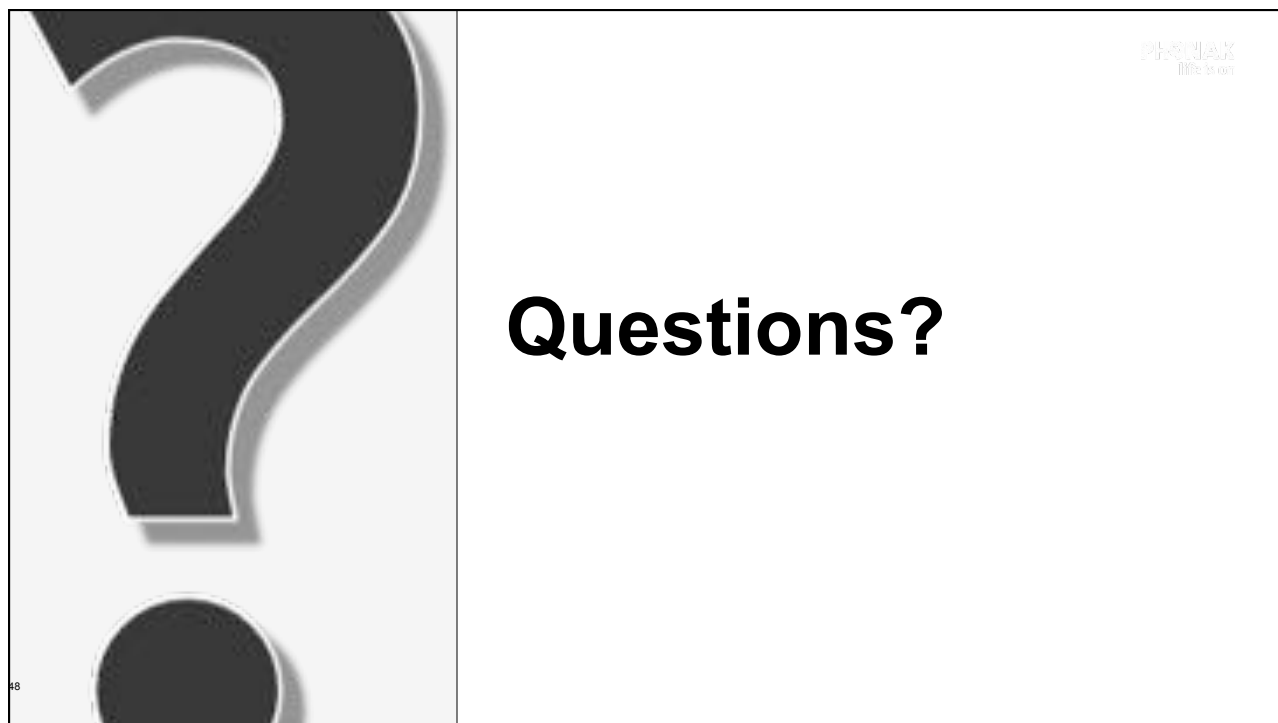
We have a new app that offers you the ability to enter feedback information on hearing aid satisfaction or remotely connect to your HCP online when an adjustment is required without having to visit the HCP clinic.
Would you be interested in trying the myPhonak app?

Step 3

The client is identified as a candidate and is willing to access remote services, the next step is to have them check the Wi-Fi speed / 4G availability in their zone using the following app or website (Mobiix is recommended):
☐ Speedtest by Ookla for iOS and Android
<http://www.speedtest.net/laptop/mbdx>

Phonak eAudiology

47



48

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So what's next for you after this presentation?

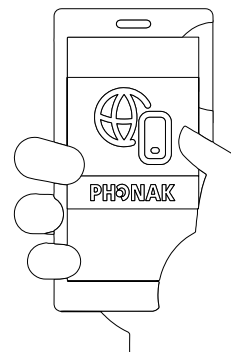
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Have a look in your client database



Use the Phonak profiling tool and select clients who fit the criteria for using Phonak eSolutions



Make appointments and start using Phonak eSolution tools!

Together,
we change lives

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