

Rehabilitation

MED⁹EL

Telephone Training Tips

hearLIFE



Acknowledgements

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Telephone Training Tips

“I found success with talking on the phone because I wanted it and I practised regularly. I practised with my T-Coil, with my direct connect cable, in different environments, with different people, and with streaming technology. Daily practice is the key to success!”

Keri, CI User

The telephone is an integral part of our lives. We use the telephone for communication at home, for work, and socially. Inability to use the telephone can affect our functioning in daily activities and our quality of life. Many potential cochlear implant users state that they hope to regain telephone use with a cochlear implant to support their independence and social connectedness. MED-EL conducted a survey into telephone use by MED-EL cochlear implant users¹. One hundred and eighty-six cochlear implant users from around the world responded to the survey.

Results demonstrated a significant shift from preoperative non-use of a telephone to use of a telephone postoperatively. 71% of respondents used a landline phone (up from 8% preoperatively), while 54% of participants were able to use a mobile phone to some degree. Talking to familiar speakers about familiar topics was the easiest listening situation, while making a call to an unfamiliar person was the most difficult. Similar results were found in a study on 38 children². However, more (81%) used a mobile phone.

Telephone training for cochlear implant recipients aims to increase their skills and confidence using the telephone and develop their independence using Assistive Listening Devices (ALDs) to make their conversations more successful!

To Provide Effective Telephone Training

- Assess the recipient's current level of functioning in speech perception and telephone use.
- Establish individualized, client-centred goals and realistic expectations for telephone use.
- Practise simulated telephone conversations, discuss successful aspects, and practise component skills.
- Practise telephone conversations in real-life situations. Such practice will
 - Provide a positive experience using the telephone in a controlled environment
 - Build the users' confidence in their auditory skills through frequent success on the telephone
 - Build a repertoire of conversational repair strategies
 - Increase assertiveness and conversation partner management techniques
 - Ensure that telephone training is client-centred, meaningful, and motivating
- Use them as a telephone *buddy*, which will support recipients to continue to practise at home with their *buddy*. It also provides significant others with information about conversational repair strategies and communication strategies that they can use to support successful telephone conversations.

Assessment Of Telephone Use

- Discuss the recipients' experiences using the telephone. Identify what is working and what difficulties they have had.
- Establish their current level of functioning, using:
 - Auditory-only discrimination scores
 - Telephone Use Questionnaire¹
 - Paediatric Telephone Profile³, which is also suitable for use with adults

These assessments will allow you to identify the recipients' current level of functioning, compare progress over time, and set specific and measurable therapy goals.



Be Prepared....

Some forward planning will help the recipient make successful telephone calls:

- Before calling, write down information to be obtained and questions to ask.
- Consider likely topics to anticipate vocabulary and questions.
- Use a notepad and pen to write down information.
- Use a telephone *buddy* to practise with.
- Prepare an introduction for recipients to use to inform telephone conversation partners of their hearing impairment and that they may need clarification of key information (if required).

- Many businesses now offer text messages to confirm appointments made over the telephone. Enquire about whether these services are available.
- In work situations where teleconferencing is used, request the agenda ahead of time so that you are familiar with what will be discussed and can follow the conversation more easily.
- Practise using assistive listening devices (ALDs) such as a T-Coil in preparation for telephone calls.

Video Calls

Many people now have access to mobile devices, cameras, and high-speed internet connections. As a result, video calling has become popular for both social and work communication. Video calls can support cochlear implant recipients to make phone calls as they allow access to additional visual cues, such as lip reading cues and facial expression, to aid their understanding. Here are some tips for video calls:

- For work calls, determine whether video calls, rather than traditional voice-only phone calls, can be used to provide additional visual cues and support understanding.
- Test all equipment (e.g., speakers, microphones, and visual systems) prior to starting calls.
- Trial the use of an external speaker or a direct audio cable to the processor to find the best option for listening.
- Use a high-speed internet connection for high-quality audio and visual.



Telephone Use Questionnaire

This questionnaire will allow you to identify the recipient's current level of functioning, compare progress over time, and set specific and measurable therapy goals.

Your Current Phone Use

1 Are you currently able to use a phone with your implant(s)?

☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
0	1	2	3	4	5	6	7	8	9	10
No, not at all				Yes, to some extent				Yes, without problems		

2 How often do you currently use a phone with your implant(s)?

☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
0	1	2	3	4	5	6	7	8	9	10
Once a month or less				Once a week				Several times a day		

3 When talking to a familiar speaker on the phone and talking about a familiar topic, how much of the conversation can you understand?

☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
0	1	2	3	4	5	6	7	8	9	10
Nothing				About half				All		

4 When talking to familiar speakers on the phone and talking about a familiar topic, how much of the conversation can you understand?

☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
0	1	2	3	4	5	6	7	8	9	10
Nothing				About half				All		

5 When talking to unfamiliar speakers on the phone, how much of the conversation do you understand?

☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
0	1	2	3	4	5	6	7	8	9	10
Nothing				About half				All		

6 When you receive a phone call, are you able to recognize the voice of the speaker, provided the speaker is known to you (e.g., a family member or friend)?

☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
0	1	2	3	4	5	6	7	8	9	10
Never				Sometimes				Almost always		

7 Do you use the phone to make calls to unknown persons (e.g., administrative officials, doctors, customers)?

☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
0	1	2	3	4	5	6	7	8	9	10
Never				Sometimes				Very often		

8 When you hear the phone ringing, and you have to answer, do you feel stressed?

☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
0	1	2	3	4	5	6	7	8	9	10
Extremely				Moderately				Not at all		

9 How confident do you feel using the phone with familiar people?

☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
0	1	2	3	4	5	6	7	8	9	10
Not confident at all				Reasonably confident				Very confident		

10 Do you use Assistive Listening Devices with the phone? If so, what do you use?

*When referring to the *phone*, we are referring to both landline telephones and mobile phones.



Therapy Guidelines⁴

Therapy should be structured in a hierarchical manner, working from the easiest listening situations to the most difficult. Choose a therapy level based on the recipients' assessment outcomes and goals. Use individualized vocabulary, meaningful contexts, and topics of interest or relevance to the recipients to support their motivation. These techniques can also be used, with modifications of the task, for therapy with children and adolescents.

- Practise positioning the telephone receiver.
- Discriminate between different telephone tones.
- Practise *hellos* and *good-byes*, gender identification, and caller identification.
- Practise using a telephone *code* to answer simple questions:
 - A *code* is useful if the recipient cannot use the phone well but wishes to convey a message.
 - The recipient asks simple questions such as, "Did you see her?" and the telephone partner answers using two different temporal patterns (e.g., "Yes, OK" and "No" or "Yes, yes" and "No").
- Practise simple conversational techniques:
 - Prepared conversations with written text
 - Answering simple yes/no questions (e.g., "Did you go by train?")
 - Answering either/or questions (e.g., "Did you go by bus or car?")
 - Answering closed-set questions (e.g., "Which day do you want to go?")
 - Answering open-set questions with a clue (e.g., "Where shall we meet?")
- Practise using topics or contextual clues:
 - Understanding topic-related sentences (i.e., closed-set questions)
 - Completing an instruction-following task
- Practise using a range of repair strategies:
 - Ask for repetition.
 - Ask for rephrasing of the sentence.
 - Ask the speaker to simplify the sentence.
 - Ask for clarification by repeating the message back.
 - Ask the communication partner to modify their speech (e.g., slowing down speech rate, speaking louder).
 - Repeat back what was said for confirmation of the information.
- Practise receiving calls using the same techniques.
- Progress from simple to more complex conversations:
 - One speaker with prepared sentences to more open conversation
 - Range of sentences
 - Range of speakers
 - Degree of preparedness for the conversation
 - Different types of telephones
 - Speech tracking
- Interactive exercises, such as making an appointment
- Open-set questions (e.g., "What is your favourite TV programme?")
- Practise the different levels in background noise



Telephone Etiquette

Some recipients may need tips or reminders of telephone etiquette and the structure of telephone conversations. Children may need to be taught these rules, as well as vocabulary and phrases, to use on the telephone.

- Telephone conversation is usually more formal than face-to-face conversations.
- Telephone conversation has a predictable structure—a beginning, a middle, and an end.
- Predictable events occur within this structure:
 - Greet and identify the caller.
 - Establish the purpose of the conversation.
 - Establish time available for conversation.
 - Ask relevant questions and exchange information.
 - Conclude the conversation with an appropriate farewell.

Assistive Listening Devices and Telephone Alternatives

Assistive Listening Devices (ALDs) can improve speech recognition and ease of listening on the telephone for cochlear implant users. Talk with recipients about the range of ALDs available to assist them in telephone communication, as well as alternatives to the traditional telephone call. Support them to become independent and confident using ALDs in their everyday life. Such ALDs and alternatives include:

- Telecoil
- Direct connect audio cable
- Bluetooth streaming technology with a neckloop
- Web-based video calling
- Amplified telephones
- Speaker phone
- Flashing light indicator
- Text- or web-based messaging
- E-mail
- Relay telephone services (e.g., Typetalk, TDD, textphone)



References

- 1 Anderson, I., Baumgartner, W. D., Boheim, K., Nahler, A., Arnolder, C., & D'Haese, P. (2006). Telephone use: What benefit do people with a cochlear implant receive? *International Journal of Audiology*, 45, 446–453.
- 2 Carmel, E., Kronenberg, J., Wolf, M., & Migirov, L. (2011). Telephone use among cochlear implanted children. *Acta Oto-Laryngologica*, 131(2), 156–159.
- 3 Tait, M., Nikolopoulos, T. P., Archbold, S., & O'Donoghue, G. M. (2001). Use of the telephone in prelingually deaf children with a multichannel cochlear implant. *Otology and Neurotology*, 22, 47–52.
- 4 Giles, E. (2005). Telephone training with a cochlear implant. In Pedley, K., Giles, E., & Hogan, A. (Eds.) *Adult cochlear implant rehabilitation* (pp. 219–244), London: Whurr.

Further References

- Erber, N. P. (1985). *Telephone communication and hearing impairment*. Taylor and Francis: London.
- Ihler, F., Blum, J., Steinmetz, G., Weiss, B. G., Zirn, S., & Canis, M. (2017). Development of a home-based auditory training to improve speech recognition on the telephone for patients with cochlear implants: A randomised trial. *Clinical Otolaryngology*, 42, 1303–1310.
- Rumeau, C., Frère, J., Montaut-Verient, B., Lion, A., Gauchard, G., & Parietti-Winkler, C. (2015). Quality of life and audiologic performance through the ability to phone of cochlear implant users. *European Archives of Oto-Rhino-Laryngology*, 272(12), 3685–3692.
- Spitzer, J. B., Leder, S. B., & Giolas, T. G. (1993). *Rehabilitation of late-deafened adults: Modular program manual*. St Louis, Mosby.
- Wayner, D. S., & Abrahamson, J. E. (1998). *Learning to hear again with a cochlear implant: An audiologic rehabilitation curriculum guide*. Austin, TX: Hear Again.

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