

The National Acoustic Laboratories (NAL) is the research arm of Hearing Australia, a statutory government authority. NAL is funded from the government, from sponsors, grants and from commercialization of its research. The results of this research will generally be reported on in scientific publications and on the NAL website which can be accessed from www.nal.gov.au. Occasionally, a research project might additionally form part of a researcher's Master's or PhD thesis.

Participant Information and Consent Form

Project title: User-Centric Evaluation of the Cochlear Nucleus Smart App

Project number: C23.22

Date: 29/02/2024

Information for participants

Before you decide whether or not to take part, it is important you understand why this research is being done and what is involved. Please ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you want to take part. This project is sponsored by Cochlear Ltd.

If you decide to take part in the research project, you will be asked to sign a consent form online and in-person. By signing it you are telling us that you:

- Understand what you have read
- Consent to take part in the research project
- Consent to the tests and research that are described
- Consent to the use of your personal information as described

You will be given a copy of this Participant Information and Consent Form to keep.

Background information

The Cochlear™ Nucleus Smart App (NSA) allows people with cochlear implants to check and adjust Nucleus®7, Nucleus®8 and Kanso®2 sound processor settings. Certain features accessed through the app may be used more than others. However, we understand very little about how people use, or do not use the features, or if changes made using the NSA help to improve listening in challenging real-world environments.

This research aims to gather insights from new and long-term users of the app to build an understanding from first-hand experience that would help inform the development of the next generation of the Nucleus Smart App.

What is involved?

This study will involve:

All eligible participants with at least one month of cochlear implant user experience who uses the Cochlear Nucleus®7, Nucleus®8 and Kanso®2 sound processor(s) can sign up online. There are different ways to participate:

Check your eligibility to participate by doing an online survey (10mins)		
↓ Sign the consent form to take part		
18+ years old and available for an in-person appointment:	18+ years old and able to <u>participate remotely</u>:	A <u>parent/caregiver</u> of a young CI user (0-12 years old) and able to <u>participate remotely</u>:
<ul style="list-style-type: none"> • Short 2-minute daily online surveys (over 4 weeks) • One 3-hour in-person appointment at NAL* 	<ul style="list-style-type: none"> • Short 2-minute daily online surveys (over 4 weeks) via emailed instructions for downloading our survey app** • Remote 45-minute interview via phone or video call 	<ul style="list-style-type: none"> • Journaling your use of your child's NSA and/or listening experiences (over 4 weeks) • Remote 45-minute interview via phone or video call
Your remuneration is a \$200 visa gift card	Your remuneration is a \$100 visa gift card	Your remuneration is a \$100 visa gift card

*National Acoustic Laboratories (NAL) is located at the Australian Hearing Hub, Macquarie University, Sydney.

** we offer real-time support via video or phone call with our research team member to installing the survey app

For all participants who can come to NAL for a research appointment

We will ask you to do **4** tasks (where tasks 1-3 can be completed online before you come to NAL for your research appointment):

1. Online survey: You will be sent a link to do a 10-minute online survey. This survey will check that you are eligible to take part in the study and confirm that you have read this form. You will also be asked to provide some information about yourself (such as your name, age, and contact details), as well as answer some questions about your hearing and cochlear implant function and usage.
2. Brief surveys using an app: we will ask you to download an app with guided support from our researcher (if you need it). This is so that you can fill in very short surveys (~2 minutes) over the next four weeks. These surveys will provide our team with information about your experiences of listening throughout the day and how you use the NSA. While the app will measure sound levels in different listening environments whenever you access it to complete the surveys, it does not record audio/speech because it is not designed to do so.

3. An online or in-person interview (30 minutes): we want to learn about your listening experiences with your CI and anything you wish to tell us about the Nucleus Smart App. This can be done as part of your in-person research appointment at NAL, or online using a secure video call link sent to your email address for online/remote participants.
4. In-person research appointment: During this session, we will check your cochlear implant(s) by connecting your sound processors and downloading your MAPs. After this, you will complete **two** tasks:
 - a. Real-world listening experiences (30 minutes; Macquarie University): you will do some real-world activities that regularly feature in your daily life (e.g., order a drink from a café, shopping, make phone calls, walking, etc.) with a researcher beside you. This is so we can better understand the range of listening environments in which you use your cochlear implants.
 - b. Listening tests (90 minutes): you will be doing some listening tasks, and we will ask about your opinion as to how easy or hard it is to hear. We might also ask you to comment on the sound quality when certain features of the NSA are switched on.

For all participants who wish to participate remotely:

You will complete all of the above, *without* the in-person research appointment at NAL (Steps 4a and 4b). To re-iterate, if you are a parent/caregiver of a young cochlear implant user, then research participation is intended for you, and not the young cochlear implant user.

By participating in all 4 parts of the research project (which includes an in-person appointment), you will receive a \$200 Visa Gift Card in appreciation for your time, and to cover any reasonable time and travel expenses. Also, by participating in this study, you will potentially have access to the full Nucleus Smart App features that you may not have used or accessed before to complete some listening tasks in realistic sound environment at the Australian Hearing Hub.

Privacy of information, data protection and research outcomes

Hearing Australia is committed to protecting the privacy of our clients and research participants. You can access our Privacy Policy from www.hearing.com.au/corporate/privacy or by contacting us. It outlines how we manage personal information we hold about you, how you may access or correct personal information, or how to make a complaint if you are not satisfied with the way we handled your information. The personal information and data Hearing Australia collect about you as part of this project will be treated as strictly confidential. It will be stored securely at NAL for a period of 7 years. Data may be used in research publications, however, you will not be identified in any way.

Your rights

Participation is entirely voluntary. Although we value your participation, you are free to decide whether you will participate, and to withdraw from the research at any time without giving a reason. Refusal to participate or withdrawal will not affect your right to receive services from Hearing Australia and/or Cochlear implant centres.

Are there any benefits for me taking part?

We cannot guarantee that you will receive any benefits from this research. You may gain a better understanding of your experience with- and thoughts about the Nucleus Smart App.

Are there any possible risks if I take part?

You may have some discomfort from sitting for extended periods or tiredness as some tasks require concentrating in noise. We will try to reduce any discomfort and tiredness by offering regular breaks and comfortable seating.

Who is organising and funding this study?

This study is funded by Cochlear and being conducted by NAL. Cochlear may benefit financially from this research if, for example, the project assists any commercial developments. If knowledge acquired from this research leads to discoveries that are of commercial value to NAL, Cochlear, the researchers or their institutions, there will be no financial benefit to you or your family. No member of the research team will receive personal financial benefit from your involvement in this project (other than ordinary wages).

Contact details of researcher

If you have any concerns about this project at any stage, please feel free to contact Jermy Pang, Research Audiologist (02 9412 6709 or jermy.pang@nal.gov.au).

Who has reviewed the research project?

The ethical aspects of this research have been approved by the Hearing Australia Human Research Ethics Committee. If you have any complaints about the ethical aspects of this project, you may contact the Committee through the Secretary (Phillip Nakad) on 02 9412 6908 or phillip.nakad@nal.gov.au

Name and signature of project leader



Jermy Pang

Research Audiologist

Participant Consent Form

Project title: **User-Centric Evaluation of the Cochlear Nucleus Smart App.**

Project number: **C23.22**

Date: _____

I, _____, have read and understood this Information and Consent Form. I freely choose to participate in this research and understand I can withdraw from participation at any time.

I consent to the use of information obtained or held by NAL about me for the purpose of my participation in this research project.

I consent to recordings being made of the study interviews to assist the researchers in preparing de-identified transcripts for analysis.

I consent to the use of de-identified information obtained in this study being used for future research conducted by NAL.

Signed: _____ (Participant)

I have given a verbal explanation of the research project; its procedures and risks and I believe that the participant has understood that explanation.

Signed: _____ (Researcher)

Photographic Release Form (optional for in-person participants only)

Project title: **User-Centric Evaluation of the Cochlear Nucleus Smart App.**

Project number: **C23.22**

Date: _____

I, _____, hereby consent to the National Acoustic Laboratories (NAL) recording images of me for educational and/or promotional purposes.

I consent to these images being used and disclosed to any person or organisation approved by NAL, including but not limited to brochures, posters, reports, audiovisual presentations, and the NAL website.

I agree that NAL may edit the images prior to publication, as they consider appropriate, without first consulting me.

I agree that I shall not expect any remuneration and/or royalties from the publication of any images of me.

I acknowledge that the photographs were taken with my full knowledge and consent.

Signature: _____

Permission to Release Information Form (for in-person participants only)

Project title: **User-Centric Evaluation of the Cochlear Nucleus Smart App.**

Project number: **C23.22**

Date: _____

I, _____, give permission for the researchers of this project to access and exchange information between the National Acoustic Laboratories and (please tick)

- Hearing service provider

_____ (name of hearing services provider)

- Cochlear implant clinic

_____ (name of cochlear implant provider)

- Other

_____ (name and contact details)

Signature: _____