Online Supplementary material

Appendix A: example of the interview schedule topics discussed

Healthcare Professionals Focus Group Questions

Are you familiar with the CI candidacy criteria and/or referral process? [In what ways are you/aren't you?]

What information would you provide to patients who you think might benefit from a CI? [When/ format/regularity]?

How would you introduce the notion of wanting to make a referral to a CI centre for a candidacy assessment to a patient over the age of 50? In your experience, is that a straight forward or a challenging discussion? Why? [Give examples].

What are your experiences of dealing with patients over 50 years of age who are unsure of having a CI [please provide examples]?

In your opinion, what are the motivators for patients over 50 years of age to move from HA users to having a CI? [prompts for: personal, attitudinal, physical and organisational facilitators and expand on some areas that are mentioned that fall into these domains].

As a healthcare professional, what do you perceive to be the <u>barriers to people</u> accessing CI? [prompts for: personal, social, physical, organisational examples, and expand on some areas that are mentioned that fall into these domains].

Are the barriers to getting a hearing aid and the barriers to getting a CI different <u>for people with severe-to-profound hearing loss</u>? If so, why and what are the differences? If not, why not?

From your perspective, what are the <u>barriers for healthcare professionals referring</u> patients to get a CI candidacy assessment?

Do you think a CI provides different hearing support compared to a well fitted HA? In what ways do you think CIs are different to HAs?

In your professional opinion, do CIs always lead to improvements in patients' quality of life for the over 50s? Are there differences to those patients' quality of life in the shorter and longer-term? (give examples).

What might enhance your conversations with patients, or make you feel more confident, when you discuss the possibility of CIs?

How is hearing care shared with other services or individual practitioners in your practice and beyond your practice?

Patients with <u>cochlear implants</u> Focus Group Questions

Hearing loss and the impact on relationships and daily routines

How does your hearing loss affect your relationships with your family, friends, work colleagues?

How does your hearing loss affect your daily routines?

HCP information and support provision and decision making

What propelled you to seek treatment for hearing loss?

Is the healthcare professional support you currently receive adequate for your hearing health needs? Is anything missing from the hearing support that you receive? (What)?

How are decisions about your ongoing hearing health needs made with your GP/CI specialist/ audiologist?

CIs, barriers and facilitators to utilisation, and ongoing challenges or benefits

What are the barriers you have had to overcome to get a cochlear implant or implants?

What were the motivating factors that helped you to get your cochlear implant?

Are you getting what you need from your cochlear implant?

Now that you have a cochlear implant, what are the remaining challenges you face, if any?

What motivates you to continue using your cochlear implant?

What are your long-term hopes for your hearing health?

Patients with hearing aids and candidates for CIs

What do you understand about the transition process from hearing aids to cochlear implants? [Do you have any fears/anxieties/motivators?]

Have you discussed whether you may be eligible for cochlear implants with a healthcare professional? With a non-healthcare professional? [When, how, outcomes].

Do you think an implant would impact positively or negatively on your daily routines and your relationships with others? Can you explain what these impacts might be?

Appendix B: Example of a demographic questionnaire for patients

1.	Which age group applies to you? (Note if you are under 50, please inform the researcher as you will not be eligible for the study).		
	□ 50-64		
	□ 65-74		
	□ 75 or older		
	□ Prefer not to answer		
2.	Do you have significant (severe-to-profound) hearing loss which occurred after the age of 5 years?		
	(Note, If you do not have significant hearing loss, please inform the researcher as you will not be		
	eligible for the study		
	☐ Yes, I do		
	□ No, I don't		
3.	Do you have any comorbidities (other health problems) alongside hearing loss?		
٥.	☐ Arthritis		
	□ Asthma		
	□ Back problems		
	☐ Chronic obstructive pulmonary disease		
	☐ Cardiovascular disease		
	□ Diabetes		
	☐ Mental health conditions.		
4	☐ Other (please specify)		
4.	Do you have private health insurance?		
	□ Yes		
	□ No		
_	□ Don't know		
5.	Are you a hearing aid user?		
	☐ Yes (Please go to Q6)		
_	□ No (Please go to Q9)		
6.	If yes, do you have a <u>hearing aid</u> for one or both ears?		
	□ One ear		
_	☐ Both ears		
7.	How long have you had your <u>hearing aid</u> /s?		
First hea	aring aid		
	☐ Less than 6 months		
	☐ 6 months - 1 year		
	□ 1-2 years		
	□ 2-5 years		
	☐ More than 5 years		
	□ Don't know		
Second	hearing aid (if appropriate)		
	Or a Company		
	☐ Less than 6 months		
	☐ 6 months - 1 year		
	□ 1-2 years		
	□ 2-5 years		
	☐ More than 5 years		
	□ Don't know		
8.	Think about how much you used your present hearing aid(s) over the past two weeks. On an average		
	day, how many hours did you use the hearing aid(s)?		
	□ None		
	□ Less than one hour a day		
	□ 1 to 4 hours a day		
	□ 4 to 8 hours a day		
	☐ More than 8 hours a day		

		Don't know
9.	Are you	currently a cochlear implant user?
		Yes (Please go to Q10)
		No (Please go to Q14)
10.	Do you	have a <u>cochlear implant</u> for one or both ears?
		One ear
		Both ears
11.	How lor	ng have you had your <u>cochlear implant(</u> s)? Tick as appropriate for you.
	chlear im	
		F-W-1-V
		6 months or less
		6 months- 1 year
		1-2 years
		2-5 years
		Don't know
Second	cochlear	implant
		•
		6 months or less
		6 months- 1 year
		1-2 years
		2-5 years
		More than 5 years
		Don't know
12.	How lor	ng did you have a hearing aid before you got your cochlear implant(s)?
		6 months or less
		6 months- 1 year
		1-2 years
		2-5 years
		More than 5 years
		Don't know
		I didn't have a hearing aid before I got my cochlear implant
13.	If you h	ave a cochlear implant in one ear, do you have a hearing aid in the other ear?
		Yes
		No
14.	Are you	in the process of being evaluated for a cochlear implant?
		Yes
		No
		Don't know
15.	Which h	nealthcare professional did you first discuss cochlear implants with?
		GP
		Audiologist
		Other (please specify)
		I haven't discussed cochlear implants with a healthcare professional before
		Don't know
16.	Did you	introduce the topic, or did they suggest it to you?
		I brought up the topic of cochlear implants with my healthcare professional
		My (healthcare professional) first introduced the topic of cochlear
		implants with me.
		A family member/carer/friend/acquaintance brought up the topic with the healthcare
		professional
		Don't know
17.		ou seen any other healthcare professionals after the initial discussion about cochlear implants?
		Yes
		No
		Don't know
	If y	es, please list the types of health care professionals who you saw about cochlear implants?

18. Where did you get most of your information about cochlear implants from?			
□ Friends/family			
□ GP			
☐ Audiologist			
 Other healthcare professional (please specify) 			
☐ Internet (please specify website name)			
☐ Social media (twitter, Facebook) (please specify)			
☐ Association (please specify)			
□ Pamphlets (please specify)			
□ Newsletters (please specify)			
☐ Other (please specify)			
19. What is your gender?			
□ Male			
□ Female			
□ Prefer not to answer/ Indeterminate/ Intersex/ Unspecified			
20. What is your postcode?			
21. Do you live in a metropolitan, rural or remote area?			
☐ Metropolitan			
□ Rural			
□ Remote			
☐ Other (please specify)			
22. Do you access local hearing services, or do you have to travel to access hearing services			
☐ Local services			
I have to travel to access hearing services (please specify how far approximately)Kms			

Appendix C: Example of a proforma survey for a patient

- 1. When you first discussed cochlear implants with your healthcare provider (GP, hearing aid audiologist, other), what did they tell you, and how did it make you feel?
- 2. When you first discussed cochlear implants with your healthcare provider (GPs, hearing aid audiologist, other), did you feel fully informed about your hearing options and did that influence your decision about getting a cochlear implant(s)? Please explain your answer.
- 3. Now, at this present time, do you feel part of the decision-making process around the management of your hearing loss? What role do you play?
- 4. Do you feel involved in the longer-term management of your hearing loss? What role do you want to play in the future?
- 5. On the time line below, please identify, by marking either a single point, or a number of points on the timeline, when the **key transitional barriers occur for you getting hearing treatment** (i.e. the times when things stopped you from moving to the next stage in treatment, such as fears/anxieties, or lack of information etc.). Underneath the timeline please briefly explain your answer.

Profound hearing loss diagnosed

Received hearing aid(s)

Received cochlear implant(s)

6. On the time line below, please identify, by marking either a single point, or a number of points on the timeline, when **the key decision-making moments** occurred for you during your hearing loss journey (i.e. times when you had to make an active decision about your hearing and treatment, times when you had to involve others in decisions, times when you decided to discuss hearing loss with a healthcare professional for the first time). Underneath the timeline please briefly explain your answer.

Profound hearing loss diagnosed Received hearing aid(s)

Received cochlear implant(s)