

# The Development of a Questionnaire to Measure Impact of Adult Hearing Loss on Significant Others

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## Aim:

To develop a questionnaire to be completed by close family members of adults who are being assessed for and who have received a Cochlear Implant (CI) to measure the impact of hearing loss on communication and every day functioning within the family and other close relationships.

## Background:

- Increase in numbers of elderly adults receiving CI.
- Elderly adults experiencing memory/health difficulties may:
  - perform poorly on speech testing post CI
  - show small improvement with quality of life assessment

Discussion of alternate methods of measure post CI outcomes for older adults led to development of 'Impact of Hearing Loss on Family Members Questionnaire'



## Example of Pre and Post CI comments from family members

I find it frustrating repeating everything I say and feel he blames me for speaking too fast or slow or not looking at him and we often end up arguing. It has caused a lot of stress for us both.

Gradual but steady improvement in our joint quality of life e.g. hearing birds, hearing me call from behind him, easier conversations in private and public spaces. I'm very impressed and pleased with the progress.

## Method:

- Draft questionnaire devised with 20 questions (based on SLT's experience of discussions with family members)
- Four question categories relating to ease of conversation, social situations, being together, dependence
- Provides overall pre and post measure for all CI recipients
- Questionnaire modified following focus group with partners/friends of recent CI recipients
- Can also be scored to determine improvement in conversation as a sub score
- Launched questionnaire in January 2018

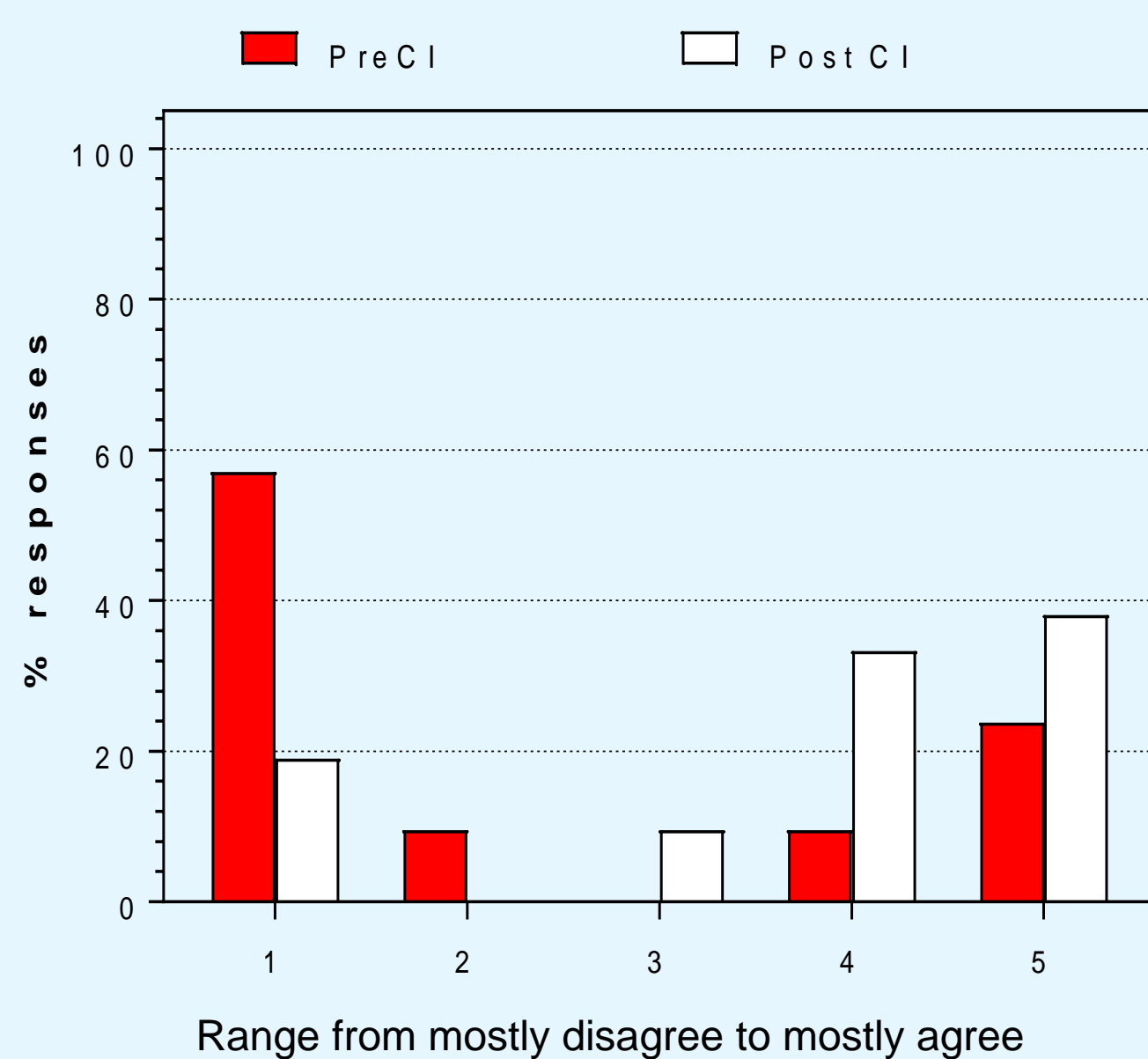
**Expectation is that family of elderly adults will report improvement in ease of conversation**

## Results:

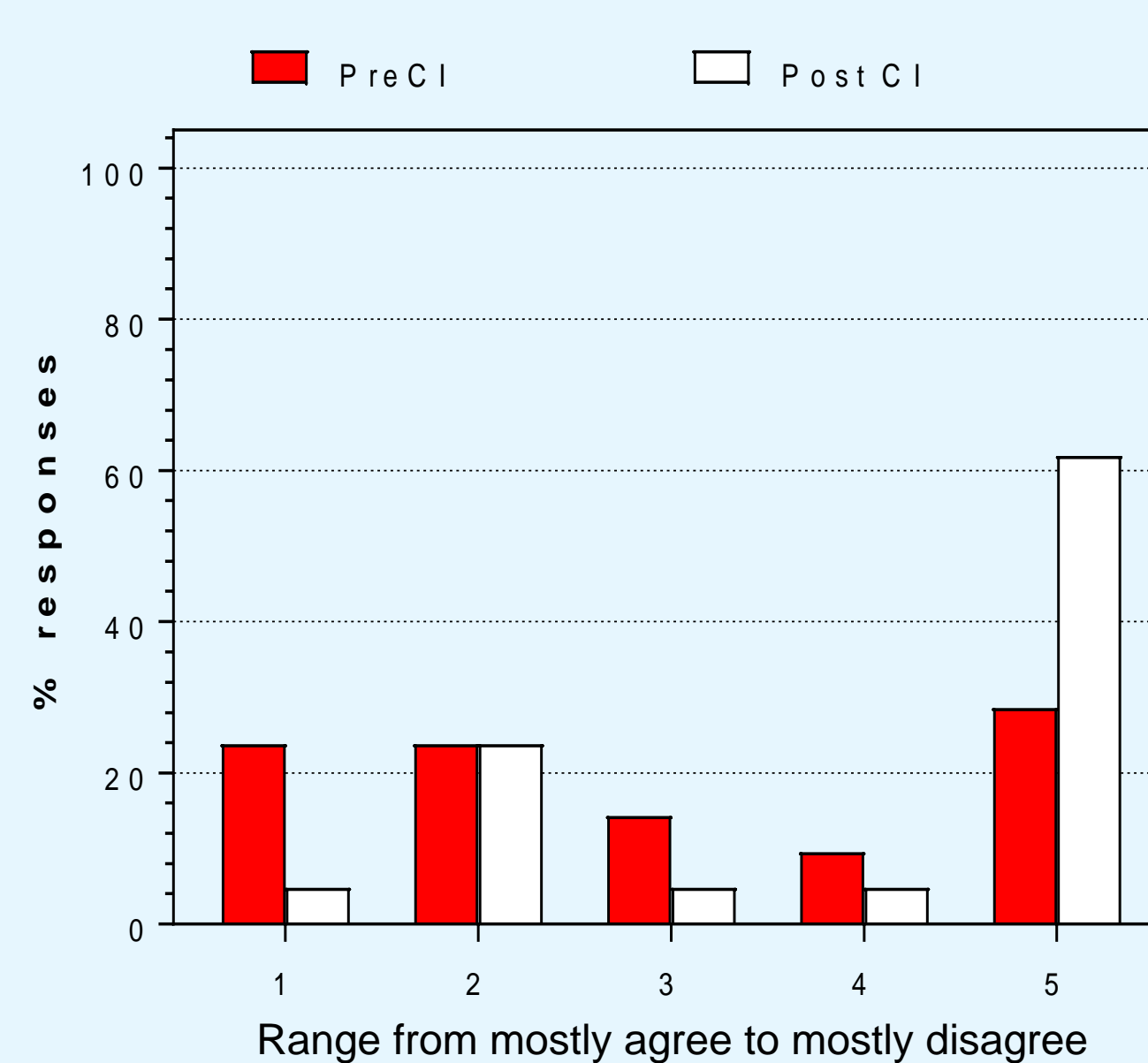
- Data from a small number of family members of CI recipients pre and three months post
- Age of recipients ranged from 22 to 88 years
- Questions show group effect between pre and post (not individual scores)
- Response choice from mostly agree, sometimes agree, neither, sometimes disagree, mostly disagree
- Analysed using Wilcoxon Signed-Rank Test
- 14 out of 20 questions showed significant improvement post CI

## Examples of questions that showed significant improvement post (both in conversation category)

They can have a chat to me/close family on the phone.



I don't talk to them anymore about the little things that have happened in my day.



## Conclusions:

- The small number of questionnaires completed pre and post CI are showing significant improvement in both overall and conversation subset score
- We will continue to use this questionnaire as part of a holistic approach to assessment of all CI candidates and recipients
- Increased use will lead to more in depth analyse of results and allow us to group results according to age of recipients

**It is hoped that the loved ones of elderly cochlear implant recipients will report easier, improved day to day conversations. Results from this questionnaire can then be shared with candidates and their families as they consider the CI and be part of the assessment toolkit to measure outcomes post CI with older adults.**