

# Evaluation of North Wales Cochlear Implant Remote Check Service: Including Service User and Clinician Feedback.

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## Introduction

The North Wales Cochlear Implant service introduced Cochlear™ Remote Check in August 2020. During this period the team needed to adapt how they delivered certain aspects of the service due to COVID-19. Cochlear™ Remote Check was seen as a good alternative to our annual review appointments and was offered to all patients who were suitable.

Cochlear™ Remote Check allows CI users who have a Nucleus N7 or Kanso 2 processor to complete a battery of tests using their compatible mobile device via the Nucleus Smart app, while in the comfort of their home.

In March 2022, as restrictions were easing, we evaluated the change made to the service. We felt it was important to obtain both service users' and clinicians' opinions regarding the implementation of Cochlear™ Remote Check to replace routine annual review face to face (F2F) appointments.

Historically annual review appointments were an hour long and held at the service user's closest clinic. A partial booking letter and questionnaire would be sent annually for the user to arrange an appointment if they felt it was warranted. We would encourage them to attend an appointment every 3 years.

## Aim

To analyse the data since the roll out of Cochlear™ Remote Check service from September 2020 to March 2022. To evaluate the completed service user and clinician questionnaires to obtain their view of Cochlear™ Remote Check in comparison to a F2F appointment.

## Method

Data was collated from Cochlear Portal and Auditbase. Two questionnaires were designed, one for service users and one for clinicians. The service user questionnaire had six objective questions, four multiple choice questions and two open-ended questions for comments. The clinician questionnaire consisted of seven questions which included three multiple choice and four open ended questions. The questions were aimed at capturing ease of use, preferred method (remote check or F2F) and time to complete the check.

Service user questionnaires were sent to 22 patients who had completed a remote check in the last 3 months (December 2021-March 2022) Clinician questionnaires were sent to all audiologists who work in the North Wales Cochlear Implant service (N=6). The questionnaire was sent via an email with word attachment, or a link to a Microsoft form.

## Results

**Data collected from Cochlear Portal** Aug 2020 – March 2022.

- Total enrolled onto Cochlear™ Remote Check N= 54 (12% caseload)
- Total of remote checks completed since August 2020 N= 99

### Actions from the completed checks:

- No further action: **70%**
- Clinic visit required: **22%**
- Other action' required: **8%** e.g. sending links to info video

Cochlear Remote checks took on average ~30 minutes for a clinician to review, instead of an hour for a face to face appointment. This generated a clinician time saving of 35 hours over a period of 18 months.

### Questionnaire Data:

**Service user** questionnaires were sent to 22 users with 7 responses (31% response rate).

Question 1, 3 and 5 results are presented opposite.

Question 4 and 6 were open-ended questions asking why they felt it was more or less convenient and to obtain any further suggestions or comments. Question 2 asked how long it took to complete the remote check. The most common answer was 15-30 minutes ( N=4).

**Clinician** questionnaires were sent to 6 staff with 5 responses (83% response rate).

The first 3 question's results are presented opposite. Q4, 5 and 7 were open ended questions, around how Cochlear™ Remote Check could be improved, what do you like about Cochlear™ Remote Check and any further comments. Question 6: "I feel confident discussing and enrolling a patient onto Cochlear™ Remote Check" showed an average score of 4.6 out of 5, with 5 being strongly agree.

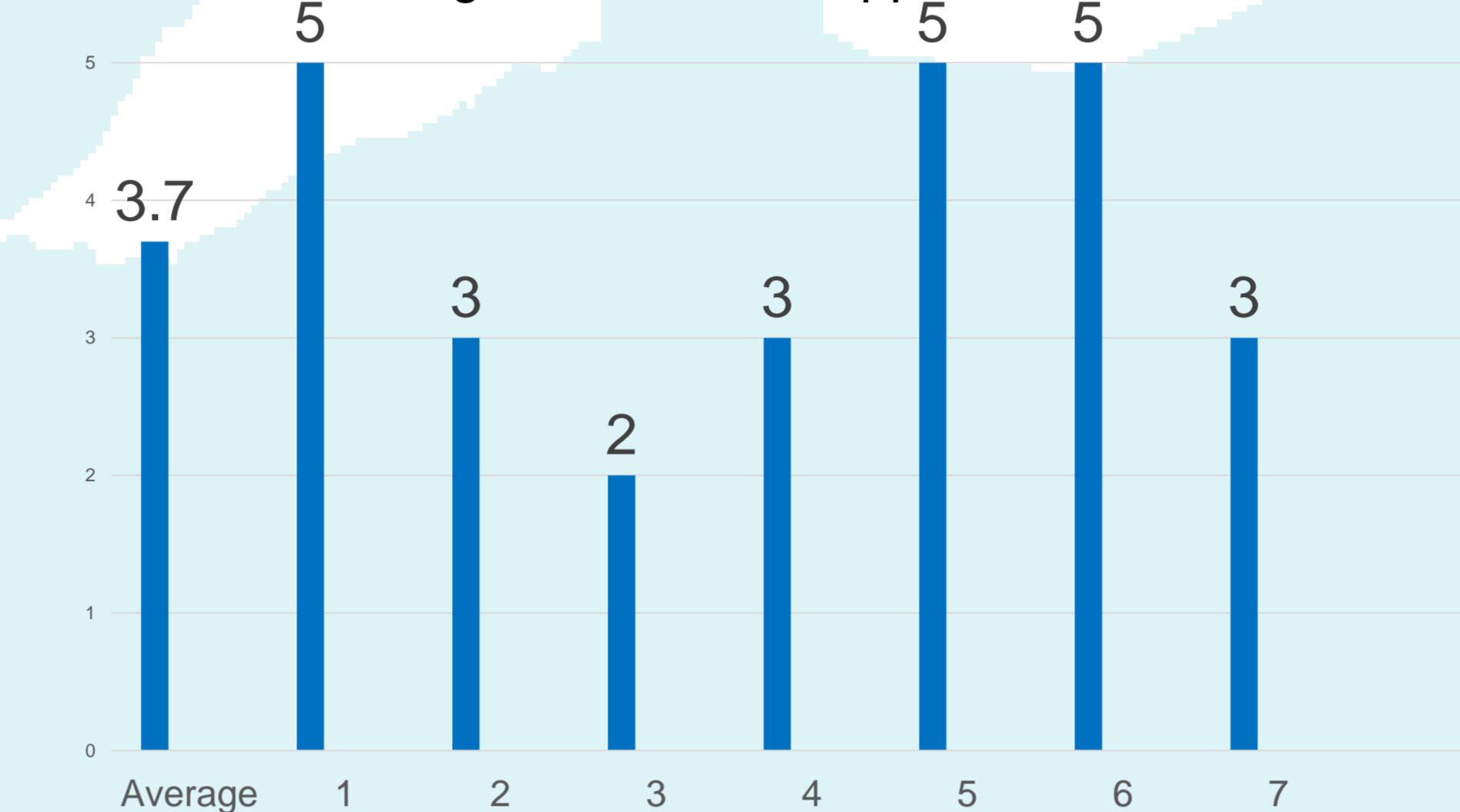
## Service user comments:

... 'as I'm immunosuppressed, even though clinics take extra care with Covid etiquette some members of the public do not and that's always a worry for me. Yes, I do miss face to face and the personal experience but the remote checks are quicker and safer for all concerned. The remote checks are similar to clinic checks and I can see no difference except for the surroundings... '... 'Even with remote checks I still feel the cochlear team are always on hand to deal with anything...'. For someone who attends a lot of outpatient clinics because of my condition, it's a relief not having to attend and to do remote checks.

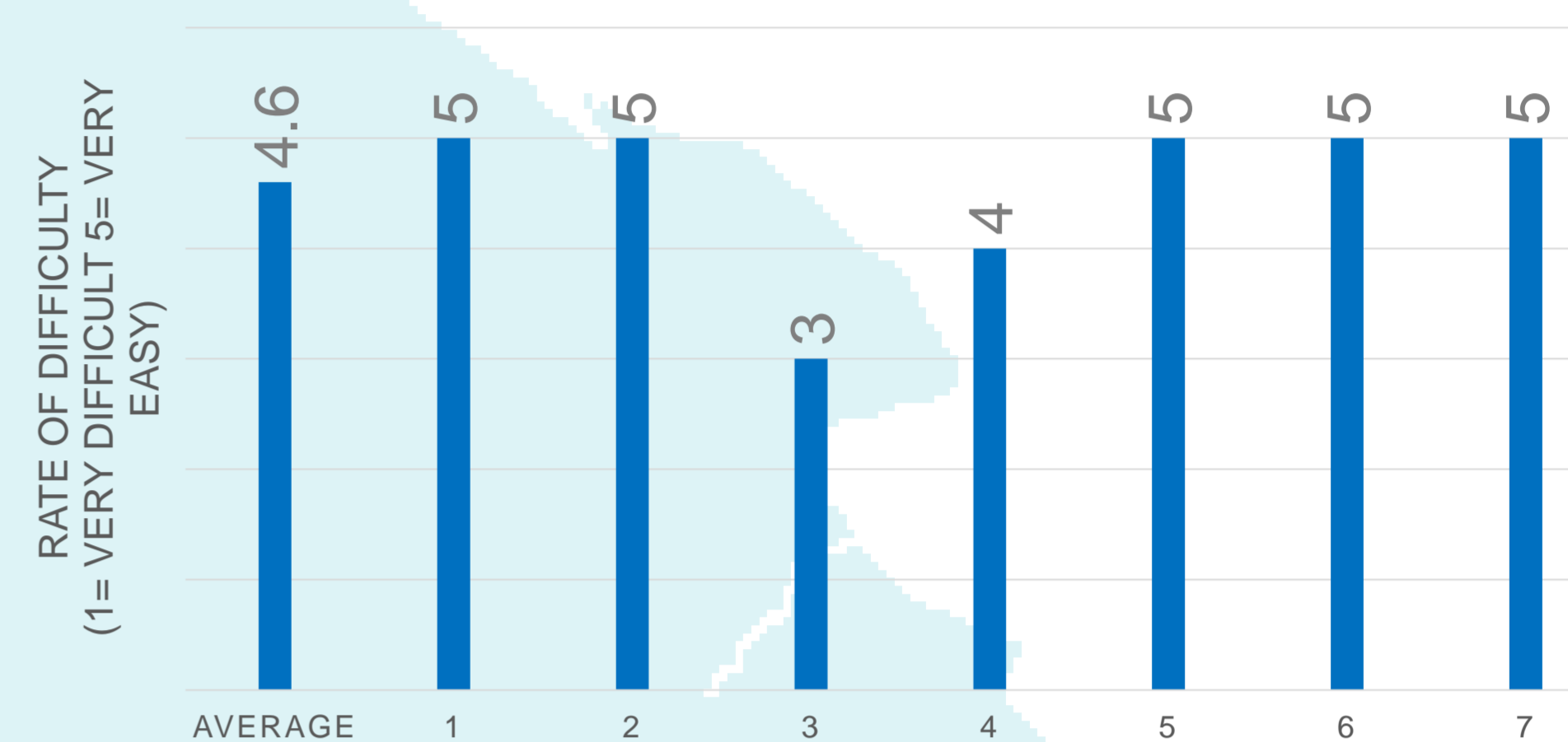
I was able to complete this in my own time without having to arrange childcare or time off work to attend F2F clinic

Sometimes things you want to try and explain what was happening so adjustments can be made. Cannot do that in remote check

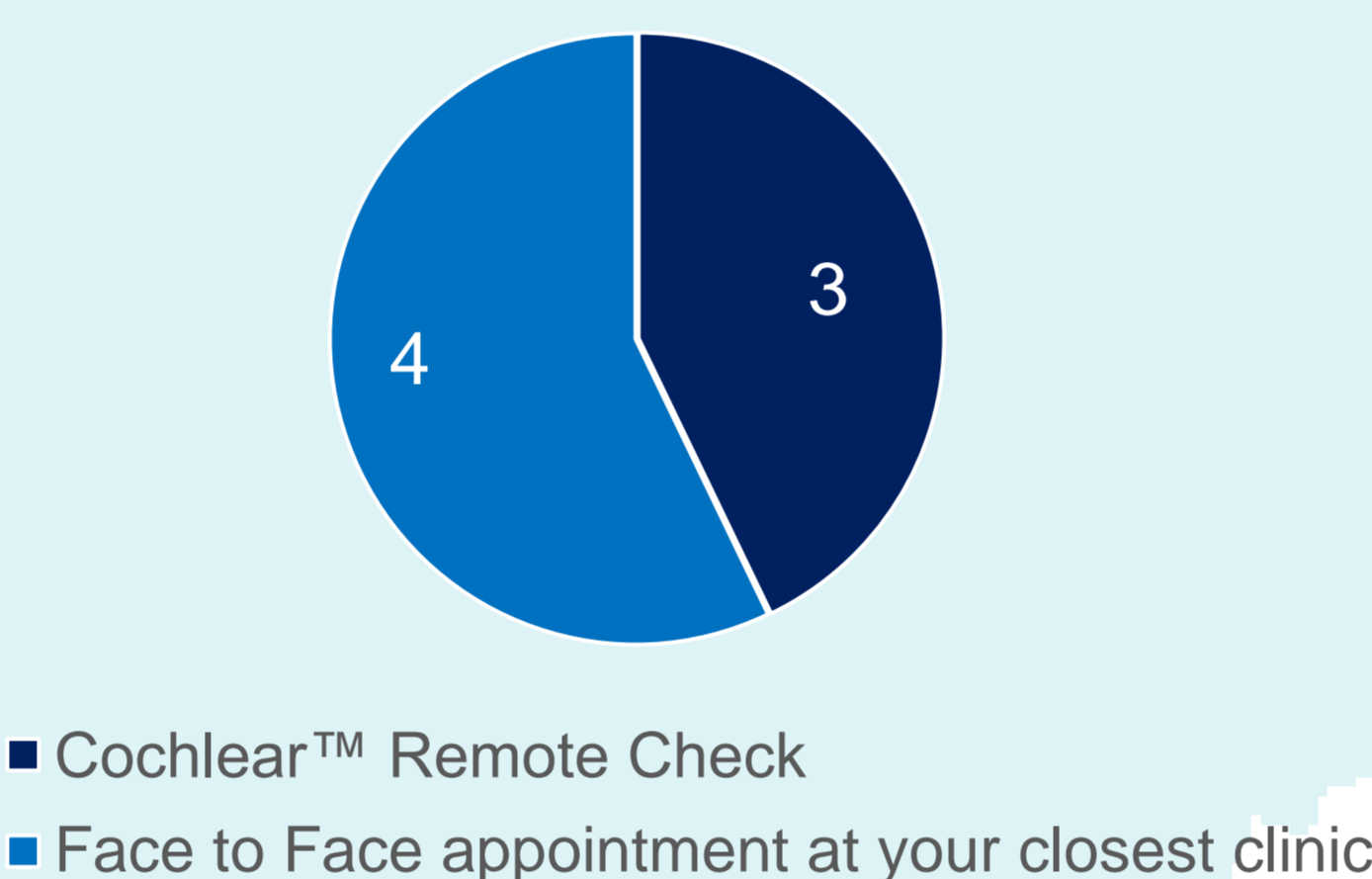
Q3 Was it less or more convenient completing a Cochlear™ Remote Check in your own time instead of attending a face to face appointment?



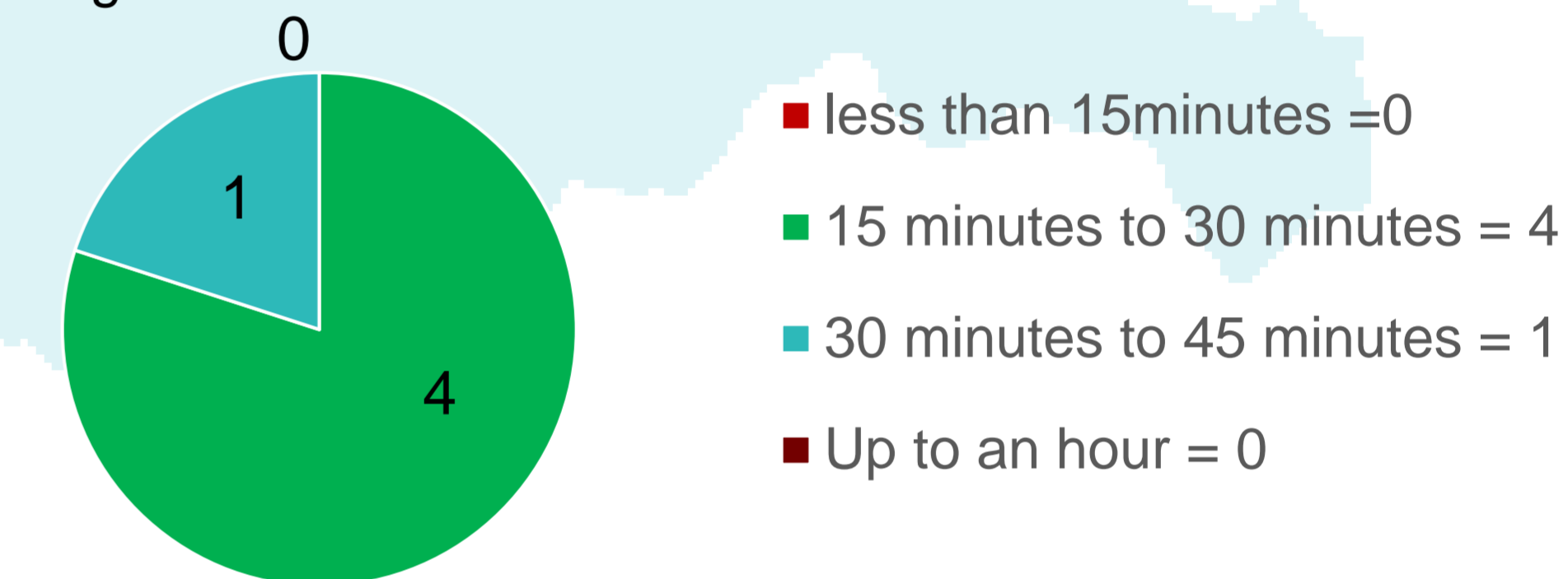
Q1 How would you rate the ease of use of Cochlear™ Remote Check?



Q5 Which method do you prefer for your annual review appointment?

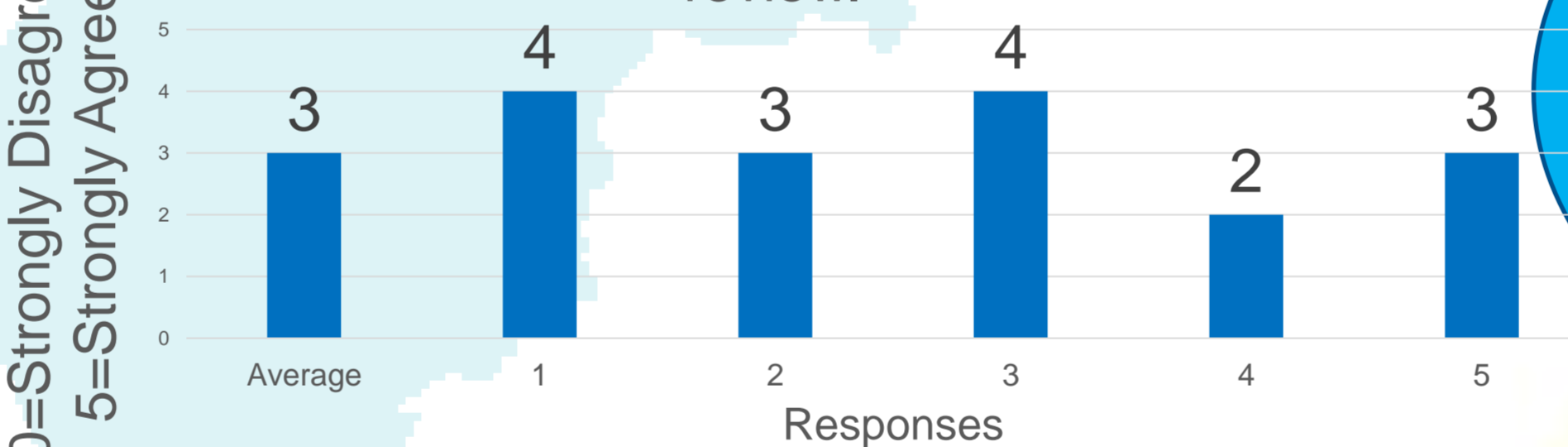


Q1 How long does it take to complete the whole process of reviewing patients Cochlear™ Remote Check including completing all administration tasks?

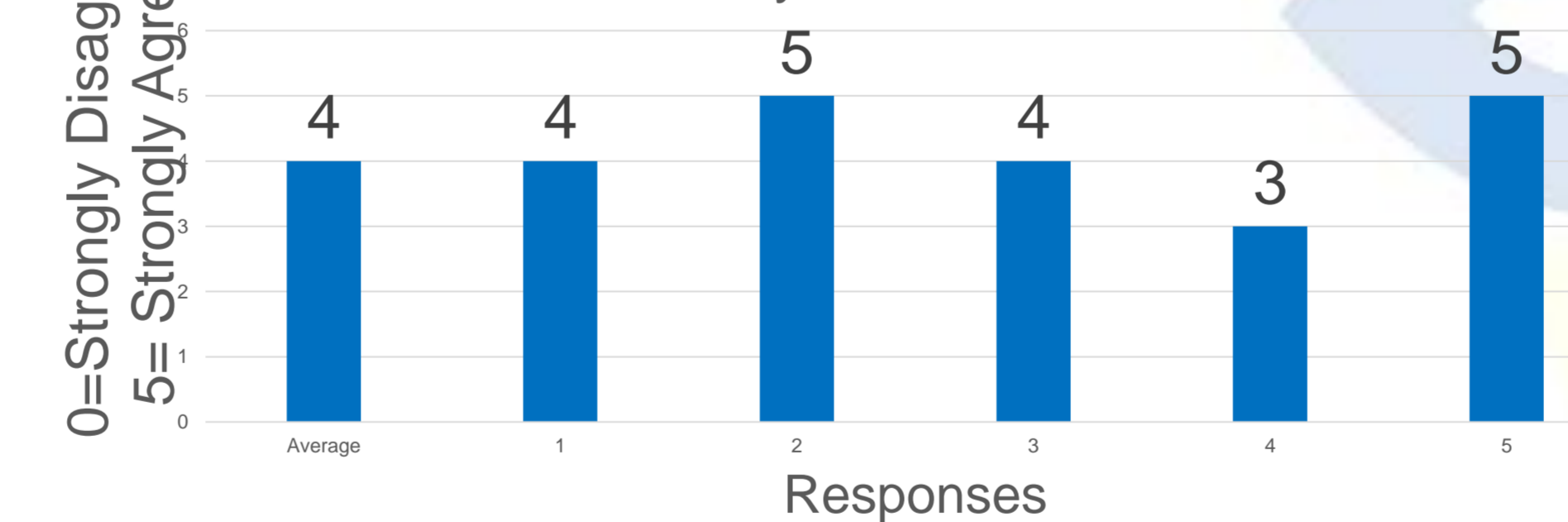


## Clinicians results and comments:

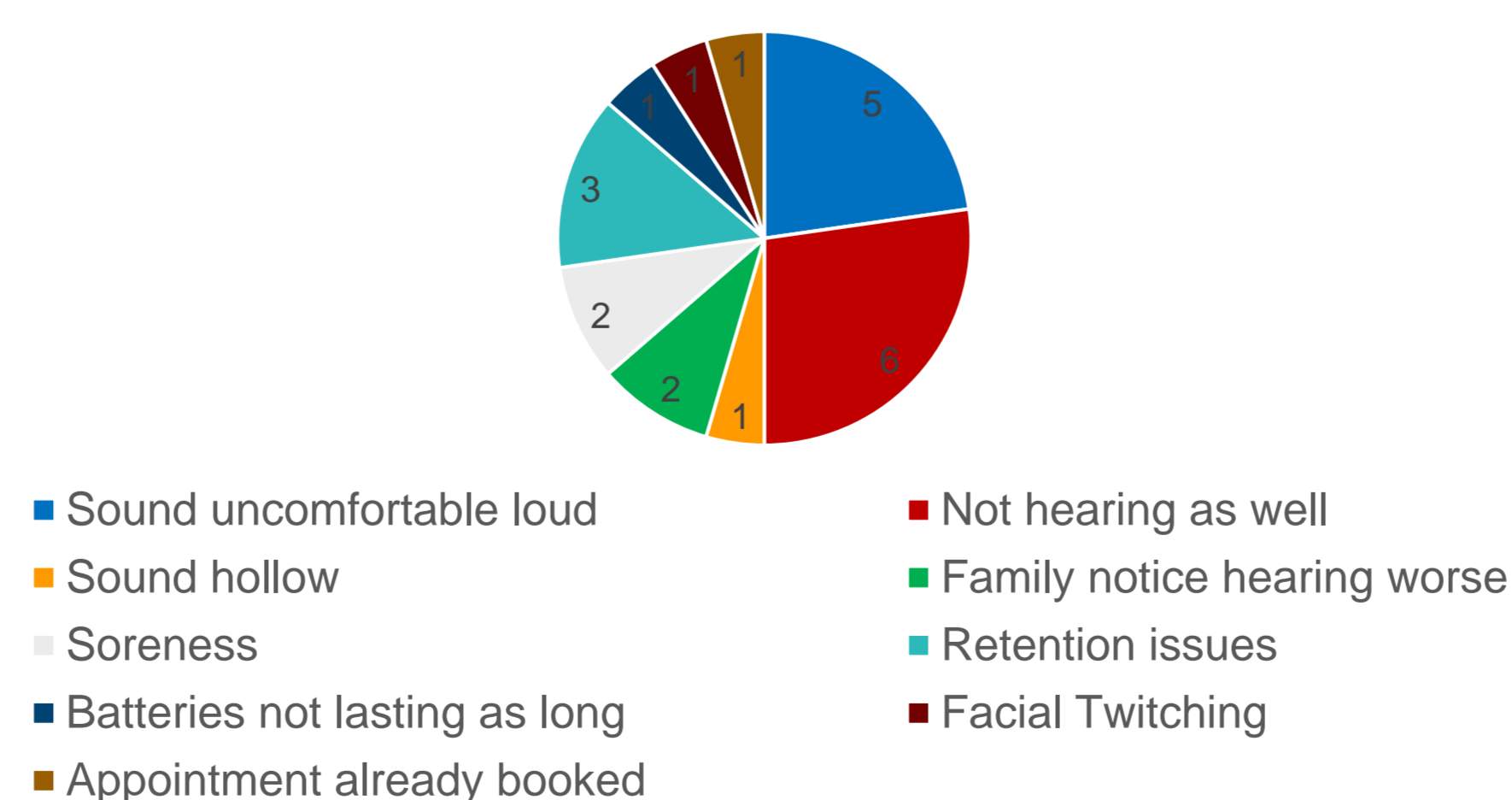
Q3 How much do you agree with the following statements: Cochlear™ Remote Check is an appropriate alternative to an Annual face to face review.



Q2 How much do you agree with the following statements: Cochlear™ Remote Check reviewing is an efficient use of my clinical time.



Custom Sound results:  
Reason for Clinic Visit after completed Cochlear™ Remote Check



Great use of technology and patients who are suitable for remote check are generally happy to try this. I think there are some significant problems with the software that need sorting out otherwise I feel this is a great service to offer to patients.

For a subgroup of patients it is convenient, modern way of keeping in touch with the CI centre and also allows a quick check/reassurance should there any problems arise.

I would like to be able to compare impedance results from one remote check to another (similar to the CS software where you can lay previous results on top of each other). I think also the navigation of the remote check software could be improved.

## Summary

Service users feel that Cochlear™ Remote Check is more convenient, however when it comes to choosing the preferred method of review, more preferred F2F appointments. One service user commented that having the ability to adjust the processor settings would make remote check more convenient. As a service we will continue to offer cochlear Remote Check as an option, with the understanding that annual reviews can be continue to be requested via the service user's preferred method. We feel there remain barriers to overcome to create a smoother remote care service, including patient education and training and patient access to technology. Significant clinician time has been used to support the initial set-up and delivery of Remote Check, but hopefully once established this will become a time-releasing development.

**The future:** Once remote programming is available alongside remote check, remote care may be more attractive to our CI users.

