

Mobile telephone audio compensation service for hearing impaired users.

Submission date 28/03/2018	Recruitment status No longer recruiting	☐ Prospectively registered ☐ Protocol
Registration date 13/04/2018	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 24/01/2020	Condition category Ear, Nose and Throat	☐ Individual participant data

Plain English summary of protocol

Background and study aims

Current mobile telephone technology reduces the range of sounds transmitted, which is considered to be acceptable to users with normal hearing. However, it's a known issue that hearing impaired individuals can be negatively affected by this. Goshawk is developing a medical device which Goshawk believes can improve the user experience. Previous trials in a laboratory setting showed 70% of users expressed a preference for the Goshawk-processed audio compared to standard mobile phone calls. This study aims to show that using the device in a commercial mobile phone network improves the user experience of mobile telephone calls.

Who can participate?

Men or women with a known or suspected hearing impairment.

What does the study involve?

Participants are given access to the Goshawk service, which consists of a web-based hearing assessment tool and a real-time audio compensation service applied to the user's mobile telephone (via the Goshawk SIM). The sound enhancement is based on the user's hearing test results, from the web-based hearing assessment tool.

What are the possible benefits and risks of participating?

The possible benefits are improved audio quality on mobile telephone calls, resulting in an improved user experience. There are no known side effects to the use of this service, in conjunction with the standard mobile telephones available on the market.

Where is the study run from?

The study will be run from the Goshawk offices in Compass House, Isle of Man.

When is the study starting and how long is it expected to run for?

Recruitment for the study has provisionally started. The intervention part of the study is due to commence on 1st May 2018 and is expected to run for 4 to 8 weeks. Recruitment will continue until the target number of users is between 50 and 100.

Who is funding the study?

The study is being funded by a combination of Goshawk, Isle of Man Government Department of Health and Social Care and Manx Telecom.

Who is the main contact?

The main contact for the purposes of the trial registration is the contact in the registration record, Jeff McBride, the Goshawk Quality Representative. E-mail jeff@mcbridecq.com.

Contact information

Type(s)

Public

Contact name

Mr Jeff McBride

Contact details

c/o Goshawk
Compass House
Cooil Road
Douglas
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IM2 2QZ
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Additional identifiers

Protocol serial number

Goshawk Clinical Protocol 2

Study information

Scientific Title

Mobile telephony audio compensation service for use by individuals with sensorineural hearing impairment.

Acronym

Goshawk Audio Compensation Service

Study objectives

Use of a mobile telephone is enhanced for users with impaired hearing through the Goshawk device.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Isle of Man Regional Ethics Committee, approval pending

Primary study design

Interventional

Study design

Single-centre case-controlled study

Interventional study over 4 to 8 weeks, single centre case control study on individuals known or suspected to have hearing impairment to provide evidence that the Goshawk device enhances the users experience of using a mobile telephone

Study type(s)

Quality of life

Health condition(s) or problem(s) studied

Hearing impairment

Interventions

Upon commencement of the trial, users will be granted access to the Goshawk product, which delivers real-time audio enhancement over communications networks (initially to mobile telephones, but also applicable to fixed telephony or VoIP applications). Thereafter, any and all calls made using the Goshawk service (via an enabled SIM in their mobile telephone) will be subject to intervention, until the end of the trial (either by normal expiry, or by a user request to leave the trial). The device enhances the user experience of mobile telephone calls

Intervention Type

Device

Primary outcome(s)

User experience measured by an online questionnaire and audibility testing at baseline, at start of service activation, after 4 weeks of use and after deactivation of the service. The audibility test will be conducted by a trial administrator who will conduct verbal testing over the telephone (with the service active), utilising 'Harvard Sentences' (as developed by the IEE, a series of phonetically balanced sentences). The user will be asked to repeat the sentence to the administrator. The first three timepoints will involve testing using 3 of 10 sentences. The last timepoint will use all 10 sentences.

Key secondary outcome(s)

Improved user experience of mobile telephone as measured by call time/frequency increase.

Completion date

31/08/2018

Eligibility

Key inclusion criteria

Individuals with known or suspected hearing impairment

Participant type(s)

All

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Total final enrolment

53

Key exclusion criteria

Chronic deafness

Date of first enrolment

28/03/2018

Date of final enrolment

31/05/2018

Locations**Countries of recruitment**

Isle of Man

Study participating centre**Goshawk Offices**

Compass House

Cooil Road

Douglas

Isle of Man

IM22QZ

Sponsor information**Organisation**

Goshawk

Funder(s)**Funder type**

Not defined

Funder Name

Goshawk

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study will be stored in a non-publically available repository access to which can be requested by any interested party.

IPD sharing plan summary

Stored in repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/07/2019	24/01/2020	Yes	No