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Background

Hearing aids are effective in mitigating the negative impacts of hearing loss. But hearing aid uptake is low and slow. To promote higher and earlier uptake and reduce the impacts of hearing loss, we propose a NHS telehealth program grant to evaluate systematic screening for adult hearing loss in primary care via online assessment linked to remotely delivered intervention.

To evaluate our proposed intervention, a reliable measure of hearing aid (HA) uptake is required that can be used at primary care level. Although primary care data can index treatment uptake for many health conditions, the coding of hearing loss and hearing loss treatments is variable. NHS Audiology services communicate with referring GPs and Clinical Commissioning Groups (CCG) through letters or bills of service, respectively, but no communication or coding standards exist.

Aim

To identify and evaluate candidate measures of HA uptake in an adult primary care population, based on routine clinical data. This will inform development of an efficient and inexpensive long-term outcome measure for clinical trials.

Objectives

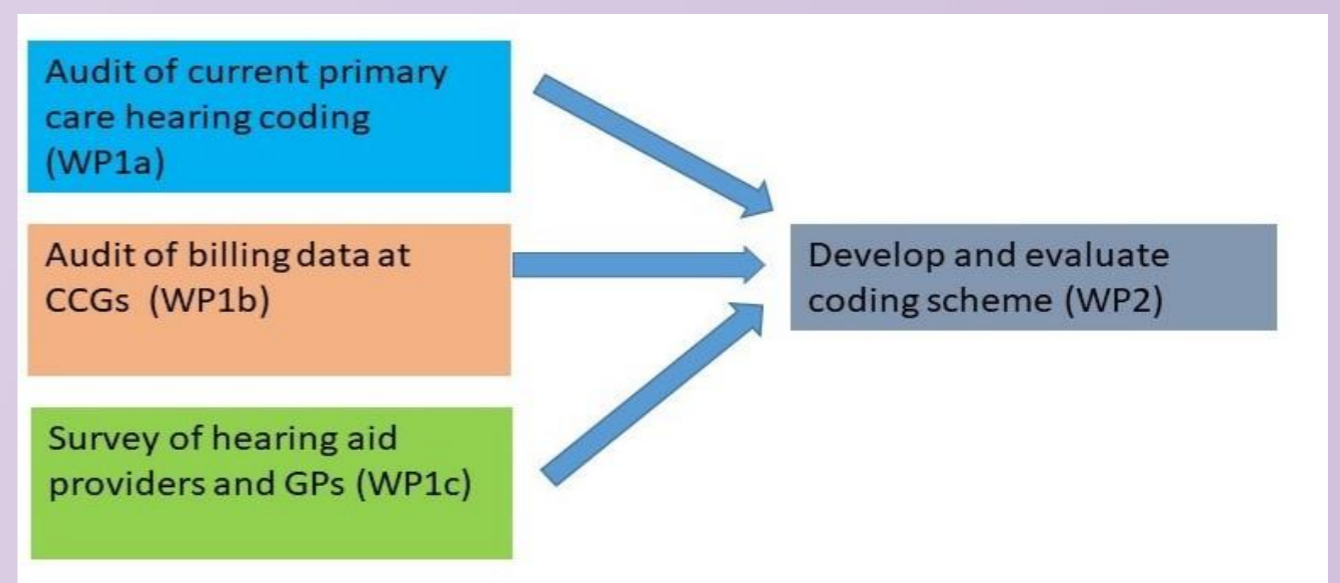
1. Audit the recording of hearing aid provision in primary care clinical data against NHS hearing aid clinical records to characterise how hearing aid uptake is currently recorded, communicated, coded and billed.
2. Determine the sensitivity of clinical records (in primary care and billing records in CCGs) at identifying incidences of hearing aid provision and the specificity of those records in identifying their provision to first time hearing aid users (the population of interest for our proposed programme grant).
3. Determine what information GPs want from audiology, what audiology services are able to provide, and identify barriers and facilitators to communication between audiology and primary care.
4. Develop and evaluate the implementation of a primary care coding scheme designed to improve information about hearing aid fittings sent from NHS audiology services to GP practices.

Methods

We will audit primary care coding and CCG billing data to identify first time adult HA recipients across NHS HA services (NHS Trusts and Any Qualified Provider) and trace these cases to the relevant primary care provider in order to characterise communication of HA provision (objective 1&2).

We will interview audiologists and GPs to determine: (i) what information GPs want from audiology; (ii) what constraints/facilitators there are for coding information; (iii) what information audiology can provide; and (iv) what constraints/facilitators there are on providing that information to GPs (objective 3).

This work will inform development of a communication strategy from audiology to primary care and a coding scheme for HA fittings. We will implement the coding scheme and evaluate the degree to which first-time HA fittings are captured in GP records over 3-months post-implementation in a sample of 6 practices in two geographic areas (North West and London), varying in size and deprivation (objective 4).



Patient and public involvement

Our patient panels (6-8 people with lived experience of hearing loss and hearing aid use) and patient/public advisers contribute to this research, e.g. to provide a patient perspective on the use of GP data to identify hearing aid uptake and the issues related to use of these data in the future program grant.

Future program grant: Can online hearing assessment and remotely delivered self-management encourage uptake of intervention and provide clinical and cost-effective care for patients in the community?

In our future program grant, we will systematically evaluate the: (1) online hearing check and (2) self-management intervention telehealth paradigm against standard care in terms of quality of life and cost utility outcomes in UK adults compared to standard care.

(1) Internet-based hearing check

- Hearing tests can be delivered over the internet providing data to program a hearing aid.
- We recently evaluated uptake of internet hearing screening, reaching 70% of the target population who would benefit from a hearing intervention.

(2) Individualised remotely delivered hearing support

We propose a self-management hearing intervention including:

- A self-fit hearing aid.
- Active Communication Enhancement instead of, or to support, hearing aid use.
- Audiologist support based on an telehealth enhanced long-term care model.

Summary

Developing reliable communication and overcoming barriers to coding of HA uptake information in primary care will i) facilitate indices for future trials to improve hearing health and ii) promote good communication and record keeping between primary care and audiology, enabling better clinical outcomes for people with hearing loss.

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