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Vision and hearing impairment among the population - the UK National Eye Health and Hearing Study

Submission date
24/02/2026

Recruitment status
No longer recruiting

Registration date
03/03/2026

Overall study status
Completed

Last Edited
03/03/2026

Condition category
Ear, Nose and Throat

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[_] Results
[_] Individual participant data
[X] Record updated in last year

Plain English summary of protocol

Background and study aims
Given that we do not currently know how much vision and hearing impairment there is among the UK population, this research study aims to measure vision and hearing among adults aged 50+ years living in randomly selected households and understand how many residents are living with sensory impairment and to what degree this can be prevented or treated. Additionally, the study will explore why sensory impairments can remain undetected in the community.

Who can participate?
Adult residents aged 50+ years from allocated households across Cambridgeshire and Peterborough. It is not possible to volunteer for the study.

What does the study involve?
The study involves taking consent from the invited residents or from a consultee if the resident does not have capacity, and then a sensory assessment at a local community research site or at the resident's home if that is more convenient. The study takes place in one of 13 community research sites distributed across Cambridgeshire and Peterborough, situated close to the clusters of households that have been randomly selected. Home visits are available for those who cannot attend a community research site. At either location, the research team will ask a series of questions about the resident's demographics, their vision and hearing status, quality of life measures and also measurement of quality of vision and hearing.

What are the possible benefits and risks of participating?
Those who are selected to take part in the study will receive a free measurement of vision and hearing and a report of the findings of the study team. The participants will be thanked for their time with a gift voucher for £20. Where sensory impairment is detected, the participant will be informed and recommendations made for onward care where necessary. Where impacted earwax is detected by the team, the team will offer to remove it free of charge. There are no significant risks of participation.

Where is the study run from?
The host institution for the study is the Vision & Eye Research Institute, School of Medicine, Anglia Ruskin University, UK.

When is the study starting and how long is it expected to run for?
October 2024 to June 2026.

Who is funding the study?
1. Guide Dogs for the Blind Association
2. Glaucoma UK
3. Royal National Institute for Deaf People (Action on Hearing Loss) (RNID)
4. The Royal National Institute of Blind People (RNIB)
5. The Macular Society
6. Thomas Pocklington Trust Limited
7. Deafblind UK
8. Fight for Sight
9. Blind Veterans Association

Who is the main contact?
Prof Rupert Bourne, rb@rupertbourne.co.uk

Contact information

Type(s)
Public, Scientific, Principal investigator

Contact name
Prof Rupert Bourne

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Additional identifiers

Integrated Research Application System (IRAS)
341742

Central Portfolio Management System (CPMS)
62188

Study information

Scientific Title
The United Kingdom National Eye Health and Hearing Study (UKNEHS) Phase 2: Community Study

Acronym
UKNEHS Community Study

Study objectives
Study Hypothesis. There is a significant undiagnosed or unmet need for vision and hearing care in people aged 50 years and older living in the community.

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 29/05/2024, Wales REC 7 (Health and Care Research Wales, Castlebridge 4, Cardiff, CF11 9AB, United Kingdom; -; Wales.REC7@wales.nhs.uk), ref: 24/WA/0120

Primary study design
Observational

Secondary study design
Cross sectional study

Study type(s)
Diagnostic, Prevention, Screening

Health condition(s) or problem(s) studied
Specialty: Ophthalmology, Primary sub-specialty: Other; Health Category: Ear, Eye; Disease /Condition: Visual disturbances and blindness, Other disorders of ear

Interventions
The UK lacks prevalence data on vision and hearing impairment and its causes within the population. The UK National Eye Health and Hearing Study (UKNEHS) has been designed to provide population-based data on met and unmet need and barriers to uptake of care among those aged 50 years and older, the sector of the population most affected by sensory impairment. The UKNEHS involves a pilot study involving two phases: a survey of sensory impairment among residents within a randomly selected representative group of care homes within an Integrated Care Board (ICB; Phase 1; already in progress), and a randomly enumerated sample of people aged 50+ years from the catchment population of an Integrated Care Board. This ethics application relates to the latter. People living within their own homes will be invited to take part in a study that involves questionnaires and a physical examination to collect data relating to individuals' personal and sociodemographic status, structural and functional aspects of sensory health and associated social, behavioural and medical factors.

This study will be a prospective, multi-centre, cross-sectional observational study of sensory health among adults aged 50 years and older residing in the geographical area served by the Cambridgeshire & Peterborough Integrated Care Board.

A multi-stage probability sampling design, common to many previous health surveys we have used internationally, including the Health Survey for England (HSE), will be employed. The

sampling frame will be the small user Postcode Address File (PAF), sorted by the Index of Multiple Deprivation. Within the geographically defined region of Cambridgeshire & Peterborough, we will draw a random sample of primary sampling units (PSUs; 1st stage), based on postcode sectors, with probability proportional to the size of the cluster (number of addresses). Within each PSU, a fixed number of postal addresses will be selected at random (2nd stage). In the third stage, all eligible residents of selected households will be invited to participate. These methods are appropriate to address the scientific objectives because they will ensure random selection of a population-representative sample. The National Centre for Social Research (NatCen; natcen.ac.uk) has been commissioned by the research team to draw this sample. This is a similar approach used by NatCen for other population-based studies, such as HSE.

The research team is working with Eclipse Live (eclipselive.org), which gained NHS Digital central assurance in 2017 and is being supported by NHS central funding. The service works with 2500 GP Practices and has complete coverage of registrants of GP practices in Cambridgeshire and Peterborough. Regions utilising the service benefit from the creation of a dynamic centralised patient database containing individual patient clinical data information. Contiguous addresses (15 clusters of households) within each of the randomly chosen postcodes will be enumerated, the intention being to recruit 50 eligible people chosen systematically from one address to the next contiguous address.

Further information regarding the recruitment process is available in the section on recruitment below. One or two days before the appointment at a study site (or participant's home or virtual consultation), the participant/consultee will be telephoned to check that they still wish to participate and that the appointment arrangements are still convenient. On the day of the appointment, the attending research team will check again that the participant still wishes to proceed and conduct an interview with the participants, with support from family and carers (if this is the wish of the participant) collecting sociodemographic information, and complete questionnaires that explore self-reported medical and family history, cognitive function, depression, activities of daily living, frailty and quality of life.

Access to sensory care and unmet need will be assessed, and permission sought to access the participant's primary (general practitioner and optometric) and secondary care health records, to assess the diagnostic coverage of sensory impairment and potential associated medical history. The standard eye examination is a similar type of examination they would have in a high street optometric practice (recommended 2-yearly or yearly NHS-funded eye examination), but not involving a subjective refraction (this is a test of the power of the eyes by an optometrist that involves refinement with trial lenses and considerable concentration by the participant).

At the end of the examination, the research team will explain the results of the examination and recommended actions to the participant (and consultee if present). If glasses are needed or glasses need updating, the research team will give the participant (or consultee if present /appropriate) information about what is required. They will be informed that these can be ordered from an optometric practice of their choice, and the information will be left with them. If the participant is found to have a hearing impairment that is likely due to the accumulation of earwax (confirmed by the otoscopy examination), the participant (and/or carer/consultee) will be offered removal of this by the research team, who are trained in this simple, painless procedure. If an ocular/hearing problem is detected or suspected which requires referral to the GP or hospital services, the patient (and consultee if present) will be informed and a referral made according to local protocol and the urgency of the condition requiring further assessment /treatment: in some cases, referrals to the hospital have to be made through the GP, in others a direct referral may be made.

Intervention Type
Other

Primary outcome(s)
1. The prevalence of distance and near vision impairment in individuals living in the community measured using LogMAR (ETDRS chart) and decimal visual acuity, respectively, according to definitions of visual impairment recommended by the World Health Organization at a single current timepoint

2. The prevalence of hearing impairment in individuals living in the community measured using audiometry and the speech-in-noise test, according to definitions of hearing impairment recommended by the World Health Organization, at a single current timepoint

Key secondary outcome(s)
1. Factors associated with under-detection or inappropriate management of vision impairment among individuals living in the community measured using interviewer-administered questionnaires to household residents at a single current timepoint

2. Factors associated with under-detection or inappropriate management of hearing impairment among individuals living in the community, measured using interviewer-administered questionnaires to household residents at a single current timepoint

Completion date
03/06/2025

Eligibility

Key inclusion criteria
1. Aged 50 years and older
2. Resident of a private household

Healthy volunteers allowed
Yes

Age group
Mixed

Lower age limit
50 Years

Upper age limit
110 Years

Sex
All

Total final enrolment
0

Key exclusion criteria
Not meeting the key inclusion criteria

Date of first enrolment
23/10/2024

Date of final enrolment
03/06/2025

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
Bottisham Community Sports & Social Club
31 Downing Close
Bottisham
Cambridge
England
CB25 9DD

Study participating centre
Pyramid Community Centre
Watergall
Bretton
Peterborough
England
PE3 8NZ

Study participating centre
Newborough Village Hall
Gunton’s Road, Newborough
Peterborough
England
PE6 7RT

Study participating centre
Leeds Hall
37a High St
Eye

Peterborough
England
PE6 7UP

Study participating centre
Histon Sheltered Housing
St Audrey's Close
Histon
England
CB24 9JY

Study participating centre
Orchard Community Centre
Central Avenue, Orchard Park
Cambridge
England
CB4 2EZ

Study participating centre
Queen Elizabeth School
1 Post Street
Godmanchester
Huntingdon
England
PE29 2NB

Study participating centre
St Neots Town Football Club
Kester Way
St. Neots, Cambridgeshire
England
PE19 6SL

Study participating centre
Fordham Victoria Hall
12-52 Carter Street
Fordham
Ely
England
CB7 5NG

Study participating centre
Whittlesey Queen Street Church
24 Queen Street
Whittlesey
England
PE7 1AY

Study participating centre
Downing PLACE United Reformed Church
4 Downing PLACE
Cambridge
England
CB2 3EL

Study participating centre
Church of St Peter and St Paul
High St
Chatteris
England
PE16 6BE

Study participating centre
Hemingford Pavilion
Manor Road
Hemingford Grey
Huntingdon
England
PE28 9BX

Sponsor information

Organisation
Anglia Ruskin University

ROR
https://ror.org/0009t4v78

Funder(s)

Funder type
Government

Funder Name
Guide Dogs for the Blind Association

Funder Name
Glaucoma UK

Alternative Name(s)
IGA

Funding Body Type
Private sector organisation

Funding Body Subtype
Associations and societies (private and public)

Location
United Kingdom

Funder Name
Royal National Institute for Deaf People

Alternative Name(s)
Action on Hearing Loss, Royal National Institute for Deaf People (RNID), RN:ID, RNID

Funding Body Type
Private sector organisation

Funding Body Subtype
Trusts, charities, foundations (both public and private)

Location
United Kingdom

Funder Name
Royal National Institute of Blind People

Funder Name

Macular Society

Alternative Name(s)
Macular Disease Society, The Macular Society

Funding Body Type
Government organisation

Funding Body Subtype
Associations and societies (private and public)

Location
United Kingdom

Funder Name
Thomas Pocklington Trust

Alternative Name(s)
thomas_pocklington_trust, PocklingtonHub, Thomas Pocklington Trust | London, TPT

Funding Body Type
Private sector organisation

Funding Body Subtype
Trusts, charities, foundations (both public and private)

Location
United Kingdom

Funder Name
Deafblind UK

Funder Name
Fight for Sight

Alternative Name(s)
Fight for Sight, Inc., National Council to Combat Blindness, Fight for Sight (U.S.), FFS

Funding Body Type
Government organisation

Funding Body Subtype
Trusts, charities, foundations (both public and private)

Location
United States of America

Funder Name
Blinded Veterans Association

Alternative Name(s)
The Blinded Veterans Association, BVA

Funding Body Type
Government organisation

Funding Body Subtype
Associations and societies (private and public)

Location
United States of America

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Data sharing statement to be made available at a later date