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Vision and hearing impairment in care homes in the UK- the UK National Eye Health and Hearing Study

Submission date	Recruitment status	[_] Prospectively registered
24/07/2024	No longer recruiting	[_] Protocol
Registration date	**Overall study status**	[_] Statistical analysis plan
23/02/2026	Completed	[_] Results
Last Edited	**Condition category**	[_] Individual participant data
23/02/2026	Other	[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 in care homes in the UK, this research study aims to measure vision and hearing among care home residents 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 care homes and the awareness of care home staff and the care home record of met and unmet needs.

Who can participate?
Care home residents (and their consultee if they lack capacity), in 7 care homes across Cambridgeshire and Peterborough and, within these, have selected 25 residents. It is not possible to volunteer for the study.

What does the study involve?
Participants will be systematically sampled from each of the care homes randomly selected for participation in the study. Twenty-five potential participants will be given a letter of invitation and written participant information, and an appointment will be made approximately one week later at the care home with a member of the research team, with a relative/carer/representative present. A senior member of the UKNEHS research staff will visit to seek informed consent from participants or consultees if potential participants cannot provide informed consent. The Care Home Manager will be able to provide information on which participants require a consultee based on the Care Home Record, and, with the participant's/consultee's consent, the attendance (face-to-face or virtual) of a spouse/partner/close friend will be encouraged at this visit. A member of the care home staff will be in attendance during the consenting process. After written consent has been gained, participants (or consultees) will be contacted by the research team to make an appointment for the interview and examinations. Continued willingness to participate in the study will be checked at this stage. One or two days before the appointment, the care home staff will be asked to check that the resident/consultee still wishes 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, 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 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 recommend actions to the participant and carer. If glasses are needed or glasses need updating, the research team will give the participant's carer/consultee 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 carer 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.

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 residents will be thanked for their time with a gift voucher for £20. Where sensory impairment is detected, the care home manager 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?
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?
December 2023 to July 2025.

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

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

Contact information

Type(s)
Scientific, Public, Principal investigator

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Prof Rupert Bourne

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Additional identifiers

Integrated Research Application System (IRAS)
331631

Central Portfolio Management System (CPMS)
58880

Study information

Scientific Title
The United Kingdom National Eye Health and Hearing Study (UKNEHS) phase I: care home study

Acronym
UKNEHS

Study objectives
Study hypothesis:
The prevalence of vision and hearing problems in people aged 50 years and older in residential care homes is higher than that in the general population, with significant levels of undiagnosed disability and/or inappropriately managed sensory care.

Ethics approval required
Ethics approval required

Ethics approval(s)
approved 04/10/2023, Social Care REC (Health Research Authority, 2nd Floor, 2 Redman Place, Stratford, London, E20 1JQ, United Kingdom; +44 02071048129; socialcare.rec@hra.nhs.uk), ref: 23/IEC08/0035

Primary study design
Interventional

Allocation
N/A: single arm study

Masking
Open (masking not used)

Control
Uncontrolled

Assignment
Single

Purpose
Supportive care

Study type(s)
Diagnostic, Prevention, Screening, Treatment

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
This is a prevalence study where people residing in care homes will have an eye and hearing examination and we will calculate what proportion have symptoms and signs of sensory impairment. We anticipate finding several previously undetected cases and inappropriately managed cases requiring onward referral.

Participants will be systematically sampled from each of the care homes randomly selected for participation in the study. Twenty-five potential participants will be given a letter of invitation and written participant information, and an appointment will be made approximately one week later at the care home with a member of the research team, with a relative/carer/representative present. A senior member of the UKNEHS research staff will visit to seek informed consent from participants or from consultees if potential participants lack the capacity to provide informed consent. The Care Home Manager will be able to provide information on which participants require a consultee based on the Care Home Record, and, with the participant's/consultee's consent, the attendance (face to face or virtual) of a spouse/partner/close friend will be encouraged at this visit. A member of the care home staff will be in attendance during the consenting process. After written consent has been gained, participants (or consultees) will be contacted by the research team to make an appointment for the interview and examinations. Continued willingness to participate in the study will be checked at this stage.

One or two days before the appointment, the care home staff will be asked to check that the resident/consultee still wishes 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, 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, in order 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 carer. If glasses are needed or glasses need updating, the research team will give the participants carer/consultee 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 carer 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 residential care homes 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 time point

2. The prevalence of hearing impairment in residential care homes 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 time point

Key secondary outcome(s))
1. Factors associated with under-detection or inappropriate management of vision impairment among residents of care homes measured using interviewer-administered questionnaire (designed for this study) to residents and care home staff at a single current time point

2. Factors associated with under-detection or inappropriate management of hearing impairment among residents of care homes measured using interviewer-administered questionnaire (designed for this study) to residents and care home staff at a single current time point

3. Comprehensiveness of the medical record (care home/GP/hospital) in recording a care home resident’s sensory health status and history measured using a comparison of residents’ care home records with research study findings of measured sensory status at a single current time point

Completion date

28/07/2025

Eligibility

Key inclusion criteria
1. Age 50 years old and over
2. Family carer/personal consultee willing to give an opinion about participation in the study in case the participant is unable to give informed consent or loses the capacity to give informed consent.

Participant type(s)
Carer, Patient

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
Residents in a dying phase

Date of first enrolment
13/12/2023

Date of final enrolment
19/07/2024

Locations

Countries of recruitment
United Kingdom

England

Study participating centre

Maxey House Residential Home
88 Lincoln Road, Deeping Gate
Peterborough
England
PE6 9BA

Study participating centre
Vera James House Care Home
Chapel St
Ely
England
CB6 1TA

Study participating centre
Orchard House Care Home
107 Money Bank
Wisbech
England
PE13 2JF

Study participating centre
Field House Residential Care Home for the Elderly
Eyebury Road
Eye
Peterborough
England
PE6 7TD

Study participating centre
Buchan House Care Home
Buchan Street
Cambridge
England
CB4 2XF

Study participating centre
Potton View Care Home
Potton Rd
Gamlingay, Sandy
England
SG19 3LW

Study participating centre
Swan House Care Home
Swan Dr
Chatteris
England
PE16 6EX

Sponsor information

Organisation
Anglia Ruskin University

ROR
https://ror.org/0009t4v78

Funder(s)

Funder type
Government

Funder Name
Fight for Sight UK

Alternative Name(s)
Fight for Sight, Fight for Sight (UK)

Funding Body Type
Private sector organisation

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

Location
United Kingdom

Funder Name
Guide Dogs for the Blind Association

Funder Name
International Glaucoma Association

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 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

Results and Publications

Individual participant data (IPD) sharing plan

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

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Study website	Study website	11/11/2025	11/11/2025	No	Yes