

# Manchester Interdisciplinary Collaboration for Research on Ageing (MICRA)

Seedcorn Funding application 2016

**Title: Testing the acceptability and usability of Personal Sound Amplification Products (PSAPs) in managing hearing loss in care home residents with dementia**

**Applicants:** *Dr Rebecca Millman*, Lecturer, Manchester Centre for Audiology and Deafness (ManCAD); *Dr Piers Dawes*, Senior Lecturer, ManCAD; *Dr Iracema Leroi*, Honorary Consultant Psychiatrist, Institute of Brain Behaviour and Mental Health, Manchester Health and Social Care Trust; *Suzanne Parsons*, Project Manager, Central Manchester University Hospitals NHS Foundation Trust; *Julie Everleigh*, Alderwood Care Home, Salford, Manchester.

The majority of care home residents have hearing loss but there are estimated to be high levels of undiagnosed or unsupported hearing in the care home setting. Undiagnosed or untreated hearing loss can have a significant negative effect on care home residents: Hearing loss negatively affects the ability to hear and communicate with friends, family and health professionals, leading to social isolation and loneliness. Hearing aids are the primary treatment for hearing loss but hearing aids are often underused in care homes.

One reason for the underuse of hearing aids in care home residents may be the high levels of dementia in the care home setting. First, if a care home resident has dementia, they may struggle to recognise and take action on their own hearing loss. Second, those people with dementia who have been prescribed a hearing aid are more likely to select sub-optimal hearing aid settings, forget to wear or lose the hearing aid.

The work funded by MICRA will allow us to assess alternative strategies to support care home residents with hearing loss and dementia. Specifically we aim to assess the acceptability and usability of Personal Sound Amplification Products (PSAPs). PSAPs are body-worn, or hand-held, devices that deliver sound to the wearer via headphones (and sometimes the “loop setting” on a hearing aid). PSAPs increase the audibility of sounds and improve hearing in background noise. However, unlike hearing aids, PSAPs do not require a prescription. For older adults with decreased manual dexterity, the easy-to-wear headphones and simple controls incorporated into PSAPs may be preferable to traditional hearing aid controls. Using Patient and Participant Involvement (PPI), the research team will work with care home residents, carers/relatives and care home staff to assess the acceptability and usability of PSAPs in alleviating hearing and communication difficulties in care home residents with dementia.