

# Audiology Update



November 2025

Welcome to the latest copy of the Audiology Update. The aim of this publication is to bring together a range of recently published research and guidance that will help you make evidence-based decisions.

## Accessing Articles

The following abstracts are taken from a selection of recently published articles. If the article is available electronically, there will be a blue link in the abstract. Press CTRL and click to open the link. You will need to be registered for NHS Athens (see below) to be able to access the full text. If the full text is not available electronically, we should be able to obtain the document through our document supply services. Please fill in the pre-populated form or contact the library using the details below.

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Please contact Holly if you would like more information, or further evidence searches: [holly.cook3@nhs.net](mailto:holly.cook3@nhs.net).

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## Changes to NICE Guidance (past 6 months)

### **Betula verrucosa for treating moderate to severe allergic rhinitis or conjunctivitis caused by tree pollen**

Technology appraisal guidance

Reference number:TA1087

*Published: 06 August 2025*

<https://www.nice.org.uk/guidance/ta1087>

### **Dupilumab for treating severe chronic rhinosinusitis with nasal polyps (review of TA648) [ID6480]**

In development

Reference number:GID-TA11630

*Expected publication date: 29 October 2025*

<https://www.nice.org.uk/guidance/indevelopment/gid-ta11630>

## A selection of papers from Medline and CINHAL <6 months (most recent first)

### 1. Developing effective communication skills in audiology using anonymous patient feedback

**Item Type:** Journal Article

**Authors:** Bowers, Patrick and Graydon, Kelley

**Publication Date:** 2025

**Journal:** International Journal of Audiology 64(6), pp. 627–634

**Abstract: Objective:** To explore the value of anonymous patient feedback for audiology students, examining alignment between student and patient judgments on communication skills and assessing how students utilise the feedback.; **Design:** This study utilised a mixed methods design, employing a Likert survey to collect patient and student ratings on professionalism, compassion, and listening and talking skills in clinical encounters. Semi-structured interviews investigated the student perspective of receiving patient feedback.; **Study Sample:** 13 Audiology students and 31 patients who were placed at, or received care at an Audiology teaching clinic.; **Results:** Patients' ratings across all measures were higher on average when compared to students' self-ratings, only correlating significantly for the measure concerning students' talking skills. Five themes and one subtheme were identified: Emotional impacts, A worthwhile experience, Contrasting priorities, Patients retake centre stage, and Self-reflective learners (subtheme Self-doubt).; **Conclusions:** This study reveals that patient feedback led student Audiologists to report heightened seriousness in their interactions and increased attention on skills vital for patient-centred care. The process boosted students' confidence and reinforced awareness of the patient's perspective. Further research is needed to gauge the extent of these effects and explore the feasibility of implementing a large-scale patient feedback program in audiology training settings.

**Access or request full text:** <https://libkey.io/10.1080/14992027.2024.2399180>

**URL:** [https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=39225566&prolid=e\\_host](https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=39225566&prolid=e_host)

## 2. Assessing the Influence of Virtual Patients on Self-Efficacy: Perspectives From Audiology Students

**Item Type:** Journal Article

**Authors:** Bowers, Patrick and Tomlin, Dani

**Publication Date:** 2025

**Journal:** Nursing & Health Sciences 27(3), pp. e70198

**Abstract:** This project aims to examine the effect of pediatric virtual patients (VPs) on audiology students' perception of self-efficacy and characterize student reflections of using pediatric VPs. A mixed methods convergent parallel design was employed for this study. To measure the effect of VPs on self-efficacy the learning self-efficacy scale (L-SES) for clinical skills was used. A thematic analysis of open-ended survey questions was completed to establish student reflections. A total of 92 first-year Master of Clinical Audiology students from two cohorts participated, with 38 completing both pre- and post-VP L-SES. Statistically

significant changes in self-efficacy were seen for cognitive and psychomotor domains. Five themes were established: Gaining experience, feedback for learning, time and place, usability considerations and recommendations for future applications. This study indicates that the use of pediatric behavioral hearing assessment VPs can drive gains in self-reported self-efficacy in cognitive and psychomotor domains. Gains to affective self-efficacy improvements are likely harmed by usability issues. These findings add to a growing evidence base on the educational value of VPs as it relates to self-efficacy within audiology and the wider health care field. (© 2025 The Author(s). Nursing & Health Sciences published by John Wiley & Sons Australia, Ltd.)

**Access or request full text:** <https://libkey.io/10.1111/nhs.70198>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40708407&prolid=ehost>

### 3. Understanding the audiological care of patients with co-existing dementia or mild cognitive impairment and hearing loss in the United Kingdom National Health Service: A qualitative study

**Item Type:** Journal Article

**Authors:** Calvert, S.;Chitty, A.;Langdon, A.;Broome, E.;Henshaw, H.;Somerset, S.;Denning, T. and Heffernan, E.

**Publication Date:** 2025

**Journal:** PloS One 20(6), pp. e0327248

**Abstract: Background:** Hearing loss is common among people living with dementia and can exacerbate the symptoms associated with dementia. The effective management of hearing loss can positively impact quality of life and help alleviate dementia-related symptoms. Little is known about current audiological pathways in the National Health Service (NHS) for adults living with dementia or mild cognitive impairment.; **Objectives:** To understand the current NHS audiological care pathways for adults living with dementia or mild cognitive impairment.; **Design:** Qualitative study.; **Results:** Thirty-three NHS audiologists in the United Kingdom (UK) completed a qualitative survey about current adult audiological care pathways for people living with dementia or mild cognitive impairment, and 14 of those also participated in a follow-up interview. Data from the surveys and interviews were combined and analysed using reflexive thematic analysis. The key findings included the importance of person-centred care, the active involvement of carers, and the need for tailored approaches, including using adapted and additional tests to assess hearing loss while offering a variety of hearing interventions. Audiologists expressed a desire for more service integration, such as domiciliary visits, and emphasised the importance of adapting environments and practices, such as dementia-friendly spaces and routine dementia education for staff, to better support individuals living with these co-existing conditions.; **Conclusions:** These findings can help inform the development of formal clinical practice guidelines and evidence-based training to support audiological care for people living with dementia and mild cognitive impairment in the United Kingdom. (Copyright: © 2025 Calvert et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution,

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**Access or request full text:** <https://libkey.io/10.1371/journal.pone.0327248>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40561168&provid=ehost>

#### 4. A modern conceptual framework for study and treatment of Meniere's disease

**Item Type:** Journal Article

**Authors:** Chari, Divya A.;Bose, Arpan;Ramirez, Kimberly;Robles-Bolivar, Paula;Lin, Kuei-You;Juliano, Amy F.;Rauch, Steven D. and Eckhard, Andreas H.

**Publication Date:** 2025

**Journal:** Frontiers in Neurology 16, pp. 1607435

**Abstract:** Prosper Meniere made his immortal contribution to the field of otology in 1861. At that time, all manner of "fits" were lumped together under the diagnosis of "apoplectiform cerebral congestion" -too much blood in the brain. His genius was to identify a specific subset of this heterogeneous pool whose cardinal symptoms, tinnitus, fluctuating progressive deafness, and episodic vertigo, were due to dysfunction of the inner ear. Seventy-seven years later, in 1938, Hallpike and Cairns in England and Yamakawa in Japan identified cochleosaccular endolymphatic hydrops (EH) as the histopathologic correlate of Meniere's disease (MD). Over the 85 years since then, many theories to explain the symptoms of MD have come and gone. A consensus has slowly emerged that patients with this condition have a failure of inner ear homeostasis. The cause(s) of this homeostatic failure and the mechanism(s) by which this failure leads to fluctuating progressive sensorineural hearing loss and episodic vertigo has remained elusive. In the last few years, new techniques and findings in temporal bone histopathology and in vivo temporal bone imaging have yielded breakthroughs in this field. We are now recapitulating Meniere's approach by taking the heterogeneous population of patients with MD and segregating them into specific subtypes based upon clinical phenotype. Salient clinical features include vestibular aqueduct and endolymphatic sac morphology, age at symptom onset, sex, and incidence of bilateral involvement. Furthermore, new imaging modalities enable unequivocal diagnosis of EH, transitioning MD from a "clinical" diagnosis to one based upon specific objective criteria. These breakthroughs have opened the door to genetic analyses, consideration of comorbid clinical disorders, especially migraine, and potential new treatments, and demand that we revisit all the various treatments that have been considered previously. They also demand new and more stringent criteria for any publication about this condition. In this paper we will review these new findings, discuss their immediate implications for clinical practice, and consider some of the most pressing research questions for near- and long-term address. (Copyright © 2025 Chari, Bose, Ramirez, Robles-Bolivar, Lin, Juliano, Rauch and Eckhard.)

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## 5. Globally applicable solution to hearing loss screening: a diagnostic accuracy study of tablet-based audiometry

**Item Type:** Journal Article

**Authors:** Cheong, Jamie;Lowe, Emily;Lee, Chang Woo;Barbosa, Claudia;Gillen, Lise;King, Emma;Premachandra, Presanna;Shah, Anand and Drobniowski, Francis

**Publication Date:** 2025

**Journal:** BMJ Open 15(5), pp. e097550

**Abstract: Objectives:** Hearing loss (HL) affects 20% of the world's population, with shortages of audiologists and audiometric sound booths unable to meet demand for hearing care services. We aimed to assess the accuracy of tablet-based audiometry (TA) to screen for HL at standard (0.25-8 kHz) and extended high frequencies (>8 kHz).; **Design:** Diagnostic accuracy study.; **Setting:** Two secondary care audiology and ear, nose and throat outpatient clinics in the UK between April 2022 and September 2023.; **Participants:** Adults aged ≥16 years undergoing sound booth audiometry (SBA).; **Interventions:** TA, hearing-related questionnaires and patient usability questionnaires.; **Outcome Measures:** Sensitivity, specificity and accuracy of TA compared with SBA for detecting HL. Patient usability assessment of TA and SBA.; **Results:** 129 patients were enrolled with 127 patients (254 ears) included in the final analysis. Median age was 43 years (IQR 33-56), 55% (70/127) were women. 76% (96/127) and 68% (86/127) of patients had HL defined by British Society of Audiology (BSA) and American Speech-Language-Hearing Association (ASHA) criteria. Age was significantly associated with HL (p85%, respectively, between 0.25 and 12.5 kHz. In terms of patient usability, TA showed significantly higher scores in attractiveness (p<0.0001), novelty (p<0.0001), efficiency (p=0.0003), stimulation (p=0.003) and perspicuity (p=0.02).; **Conclusions:** TA demonstrated good sensitivity with high specificity for detecting HL at frequencies 0.25-12.5 kHz and would be an acceptable accurate alternative to SBA. This would increase the accessibility of HL screening and has the potential to be used as a diagnostic test in those without tinnitus where resources are limited.; Trial Registration Number: NCT05847556. (© Author(s) (or their employer(s)) 2025. Re-use permitted under CC BY. Published by BMJ Group.)

**Access or request full text:** <https://libkey.io/10.1136/bmjopen-2024-097550>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40404318&prolid=e>  
[host](#)

## 6. Early Intervention Influences 9-Year Speech, Language, Cognitive, and Quality-of-Life Outcomes in Deaf or Hard-of-Hearing Children

**Item Type:** Journal Article

**Authors:** Ching, Teresa Y. C.; Cupples, Linda; Seeto, Mark; Zhang, Vicky; Hou, Sanna; Wong, Angela; Flynn, Christopher; Marnane, Vivienne; Leigh, Greg and Dillon, Harvey

**Publication Date:** 2025

**Journal:** Ear and Hearing 46(5), pp. 1174–1188

**Abstract: Objectives:** Early identification of congenital deafness enables early intervention, but evidence on the influence of age at fitting of hearing aids (HAs) or cochlear implants (CIs) on outcomes in school-aged children who are deaf or hard of hearing (DHH) is limited. This study (1) described developmental outcomes and health-related quality of life in DHH children; and (2) examined the relationships among demographic factors, including age at fitting of HAs or CIs, and outcomes.; **Design:** This prospective cohort study included participants in a population-based study who were followed up at 9 years of age. Children who are DHH and who first received hearing habilitation services before 3 years of age from the government-funded national hearing service provider in the states of New South Wales, Victoria, and Southern Queensland in Australia were invited to enroll in the study. At 9 years of age, enrolled children were assessed using standardized measures of language, cognitive abilities, and speech perception. The children also completed questionnaire ratings on their quality of life. Parents provided demographic information about their child, family, and education; and completed ratings on their child's quality of life. Audiological data were retrieved from the client database of the hearing service provider and records held at CI centers. Descriptive statistics were used to report quantitative outcomes. The relationships among demographic characteristics, including age at fitting of HAs or CIs, and children's outcomes were examined using structural equation modeling.; **Results:** A total of 367 children, 178 (48.5%) girls, completed assessments at age 9.4 (SD = 0.3) years. On average, performance was within 1 SD of the normative mean for language, cognitive functioning, and health-related quality of life; but much below norms for speech perception. The modeling result is consistent with verbal short-term memory having a mediating effect on multiple outcomes. Better verbal short-term memory is significantly associated with no additional disabilities, earlier age at CI activation, use of an oral communication mode in early intervention, and higher maternal education. In turn, verbal short-term memory directly and positively affects speech perception, language, and health-related quality of life. Maternal education directly and positively affects language outcomes, and indirectly via its effects on nonverbal I.Q. and verbal short-term memory. Better language is directly associated with a better quality of life.; **Conclusions:** This study found evidence consistent with early hearing intervention having a positive effect on speech perception and language via its effect on verbal short-term memory. Children who had better language also had better quality of life. The importance of early hearing for cognitive development lends support to early detection and early hearing intervention, including streamlining pathways for early CI activation. Strategies for intervention in language and communication development may benefit from tailoring programs to meet the needs of individuals with different memory profiles for optimizing outcomes. (Copyright © 2025 The American Auditory Society.)

**Access or request full text:** <https://libkey.io/10.1097/AUD.000000000001657>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40059097&profilid=ehost>

## 7. Association between frequency of adding salt to foods and risk of hearing loss: A population-based cohort study using UK Biobank data

**Item Type:** Journal Article

**Authors:** Han, Youngji;Lee, Kyu-Yup;Seo, Incheol and Jung, Da Jung

**Publication Date:** 2025

**Journal:** The Journal of Nutrition, Health & Aging 29(10), pp. 100663

**Abstract: Objectives:** To evaluate the association between the frequency of adding salt to food and the risk of incident hearing loss.; **Design:** A prospective cohort study.; **Setting and Participants:** 492,168 UK Biobank participants aged 40-69 years who were free of hearing loss at baseline (2006-2010) and followed through 2023.; **Measurements:** Frequency of salt addition to foods was self-reported and categorized as "Never/Rarely," "Sometimes," "Usually," or "Always." Incident hearing loss was identified using ICD-10 codes H90 and H91. Cox proportional hazards models were applied to estimate hazard ratios (HRs) and 95% confidence intervals (CIs), adjusting for demographic, lifestyle, and medical confounders. Causal mediation analyses were conducted to investigate potential intermediating roles of systemic inflammation and vascular dysfunction.; **Results:** Over a mean follow-up of 11 years, 19,188 participants developed hearing loss. The incidence rate increased from 3.37 to 4.33 per 1,000 person-years across ascending salt use categories. Compared with the "Never/Rarely" group, the adjusted HR for the "Always" group was 1.23 (95% CI, 1.16-1.32), with a significant dose-response relationship (p for trend <0.001). Subgroup analyses showed stronger associations among younger participants, men, and individuals without diabetes or hypertension. Mediation analysis indicated that systemic inflammatory markers, particularly glycoprotein acetyls and CRP, significantly mediated part of the association, while blood pressure and arterial stiffness did not demonstrate a significant mediating effect.; **Conclusions:** Frequent addition of salt to food was associated with an increased risk of incident hearing loss in a dose-dependent manner. These findings suggest that salt intake may be a modifiable risk factor for hearing loss and implicate systemic inflammation as a potential biological pathway. (Copyright © 2025 The Authors. Published by Elsevier Masson SAS.. All rights reserved.)

**Access or request full text:** <https://libkey.io/10.1016/j.jnha.2025.100663>

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## 8. Changes in Patient Characteristics of Pediatric Cochlear Implant Candidates Over a 20-Year Timeframe Affect Language Outcomes and Equity of Healthcare

**Item Type:** Journal Article

**Authors:** Hare, Julie;Sear, Tracey and Vickers, Deborah A.

**Publication Date:** 2025

**Journal:** Ear and Hearing 46(4), pp. 1009–1018

**Abstract Objectives:** To determine how the patient profile of pediatric cochlear implant recipients changed over a 20-year period in an inner-city clinic (typical of many larger clinics), and to understand how these changes were influenced by clinical practice and changes in society. To relate changes in patient profile to long-term language outcomes, the primary purpose of pediatric cochlear implantation.; **Design:** A retrospective, observational study of children implanted between 1998 and 2019 was conducted. Longitudinal language outcomes from preimplant to 5-year postimplant were collected from all children reaching the 5-year clinical review (179 children). Demographic factors of home language, onset of severe to profound deafness (congenital, progressive, or acquired), age at implantation, device configuration (unilateral, bimodal, bilateral), and socioeconomic status were collected for the entire sample (414 children) to understand changes over time. Chi-square, Kruskal-Wallis, and Analysis of Variance tests were conducted to determine if demographic factors changed over time and Logistic Regressions were conducted to understand which factors predicted language outcomes.; **Results:** Over the 20-year period, we observed a significant increase in the percentage of children from non-native English-speaking families (24 to 67%), influenced by population migration. There was a significant increase in the percentage of children with progressive onset of deafness (8 to 45%), influenced by UK National Institution of Health and Care Excellence guidance which saw a relaxation in audiometric criteria such that greater numbers of children with progressive losses were eligible. Age at implantation significantly decreased due to greater surgical confidence, increased awareness of the benefits of implanting babies under 12 months and the introduction of newborn hearing screening. There was a significant reduction in the Index of Multiple Deprivation (proxy for socioeconomic status) believed to be related to recession, austerity, and population migratory trends. Regression analyses suggested that onset of deafness, age at implantation, year of implantation, income deprivation, and parental education were key predictors of 5-year post-implantation language abilities.; **Conclusions:** Multiple factors affect long-term speech and language outcomes in children growing up using cochlear implants. Influential factors can alter over time due to changes in clinical practice/guidance or changes in society affecting cultural/linguistic distribution. If this complex and dynamically changing landscape of influential factors is well understood, appropriate interventions can be introduced for families that are most in need of them to facilitate faster rates of language acquisition. Clinical services should be streamlined and changes in patient characteristics monitored to provide equitable treatment. (Copyright © 2025 The Authors. Ear & Hearing is published on behalf of the American Auditory Society, by Wolters Kluwer Health, Inc.)

**Access or request full text:** <https://libkey.io/10.1097/AUD.0000000000001639>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40139997&provid=ehost>

## 9. A qualitative systematic review of the impact of hearing on quality of life

**Item Type:** Journal Article

**Authors:** Henderson, Nadine;Hodgson, Sian;Mulhern, Brendan;Page, Katie and Sampson, Chris

**Publication Date:** 2025

**Journal:** Quality of Life Research : An International Journal of Quality of Life Aspects of Treatment, Care and Rehabilitation 34(4), pp. 879–892

**Abstract: Purpose:** Hearing loss, deafness, and other hearing-related conditions can significantly impact quality of life; numerous qualitative studies have sought to describe these impacts. Synthesis of these findings may provide additional or more robust insights.; **Methods:** A qualitative systematic review of studies reporting qualitative data relating to the impact of hearing problems on adults' health-related quality of life. A subset of studies was included in the review and subsequently analysed using a thematic approach.; **Results:** The literature search yielded 129 studies, of which 22 met our inclusion criteria and were included for analysis. The included studies, primarily from Australia, the UK, and the USA, involved approximately 450 participants with various hearing conditions. Semi-structured interviews and focus groups were the most common data collection methods, with thematic analysis being the predominant analytical approach. Three overarching categories of descriptive themes were identified: Physical, Mental, and Social. Physical encompassed sound localization, sound clarity, speech, and physical fatigue. Social included relationships, isolation, communication, independence, work function, social stigma, and confidence. Mental encompassed depression, anxiety, listening effort, mental fatigue, fear, and identity. The identified themes shed light on the diverse domains of health-related quality of life affected by hearing conditions.; **Conclusion:** Differences in hearing function impact upon people's health-related quality of life in a variety of ways relating to physical, mental, and social aspects of health, and these themes are clearly demonstrated across qualitative studies. These results will inform the development of hearing-specific questionnaire items for with the EQ-5D descriptive system, a commonly used patient-reported outcome measure. (© 2024. The Author(s).)

**Access or request full text:** <https://libkey.io/10.1007/s11136-024-03851-5>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=39579270&prolid=e>  
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10. "It's wishy-washy [...] You are getting this diagnosis because we've ruled out everything else:" Developmental language disorder (DLD) diagnosis in the Republic of Ireland: A qualitative exploration of the perspectives of parents and clinicians

**Item Type:** Journal Article

**Authors:** Kazmierczak-Murray, S.;Kenny, N.;Carolan, S. and Doyle, A.

**Publication Date:** 2025

**Journal:** PloS One 20(7), pp. e0327373

**Abstract:** Developmental Language Disorder (DLD) affects around 7% of children globally, yet the scholarship on it is significantly underdeveloped. Emerging research suggests that DLD is both underdiagnosed by clinicians and misunderstood by parents. This study explores the perspectives of both clinicians and parents

regarding their experiences of the process of giving and receiving a DLD diagnosis in the Republic of Ireland. Semi-structured qualitative group interviews were conducted with 15 parents and seven clinicians. The data were analysed using a reflexive, thematic analysis. Four themes were identified: "challenges of giving a DLD diagnosis", "communicating a DLD diagnosis", "utility of DLD diagnosis for children and families" and "going forward and recommendations". Clinicians reported systemic barriers in the healthcare system, including limited therapy time, long waitlists, and staff turnover, as major challenges in diagnosing DLD. Many expressed a lack of confidence in providing a diagnosis without multidisciplinary support which would support them in 'ruling out' other neurodevelopmental differences. Communicating the diagnosis was often inconsistent, with many parents feeling unsupported and uninformed about the nature and impact of DLD. Parents felt inadequate at being left with communicating the diagnosis of DLD and its impact to their children. The participants emphasised urgent need for greater awareness, teacher and clinical education, post-diagnosis support, and increased national advocacy in relation to DLD in Ireland. Both clinicians and parents saw DLD diagnosis as essential for accessing therapeutic and educational support, yet it was the access to these supports that seemed to influence the diagnostic decisions. Importantly, our research documents clinicians' fear of getting the "right" condition for diagnosis, which may be firstly at odds with the individual profiles of children, and secondly, acts as a barrier in accessing the needed support. In light of growing awareness of the co-occurrence of neurodevelopmental differences, we call for enhanced support for clinicians to build their confidence in navigating the evolving diagnostic criteria of DLD. (Copyright: © 2025 Kazmierczak-Murray et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.)

**Access or request full text:** <https://libkey.io/10.1371/journal.pone.0327373>

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## 11. Associations between objective hearing function and subjective views of aging

**Item Type:** Journal Article

**Authors:** Koch, Jana;Brady, Brooke;Zheng, Lidan and Anstey, Kaarin J.

**Publication Date:** 2025

**Journal:** European Journal of Ageing 22(1), pp. 33

**Abstract:** Hearing loss, a common age-related health condition, has been linked to adverse health outcomes, including changes in social participation and cognitive function. As subjective views of aging are influenced by changes in health and functional abilities, we hypothesized that people with poor hearing would exhibit less favorable generalized and personal Views of Aging. Additionally, we explored whether these associations varied by age. Data were analyzed from 148 participants (aged 40-84) who completed an app-based research study: Labs without Walls. Participants completed a validated, app-based hearing task, and a pure-tone average was calculated in the better-hearing ear. Generalized Views of Aging were measured using the

Expectations Regarding Aging Scale (with subscales on physical health, mental health, and cognitive function). Personal Views of Aging were measured using the Self-perceptions of Aging Scale. Structural equation modeling was conducted to explore the relative contributions of hearing function to Views of Aging constructs while controlling for chronological age, sex-at-birth, sociodemographic status, loneliness, and cognition. Cross sectionally, poorer hearing was associated with negative age expectations regarding maintaining physical health and with negative self-perceptions of aging. Contrary to our hypothesis, hearing function did not predict age expectations about mental health or cognitive function. No significant age moderation effects were observed. Overall, these findings offer preliminary evidence for distinct associations between hearing and individual Views of Aging constructs and domains. The novel insight into the association between objectively measured hearing and Views of Aging highlights the importance of addressing hearing health early in the aging process to prevent negative outcomes linked to Views of Aging. (© 2025. The Author(s).)

**Access or request full text:** <https://libkey.io/10.1007/s10433-025-00868-8>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40668281&profiid=ehost>

## 12. CAMERA: A Consensus Study to Ascertain Minimum Datasets for Ear Remote Assessments

**Item Type:** Journal Article

**Authors:** Lee, Jonathan;Cowling, Joseph;Smith, Matthew E.;Mehta, Nishchay;Spinou, Dimitrios;Coulson, Christopher and Muzaffar, Jameel

**Publication Date:** 2025

**Journal:** Clinical Otolaryngology : Official Journal of ENT-UK ; Official Journal of Netherlands Society for Oto-Rhino-Laryngology & Cervico-Facial Surgery

**Abstract: Introduction:** Remote healthcare has demonstrated benefits in providing high quality care, improving patient access, and reducing morbidity. In ear, nose, and throat surgery, there has been a recent surge in remote care driven by advancements including endoscopic otoscopy and boothless audiometry, as well as the coronavirus pandemic, but uncertainty exists regarding the minimum data needed for accurate remote diagnosis.; **Methods:** A panel of otology, audiology, general practice, and audiovestibular physicians was invited, and a literature review was undertaken to populate candidate dataset items for Round 1 of the Delphi process using the web-based software, Welphi. This was followed by two further Rounds, with controlled anonymised item-rating and qualitative feedback between rounds. Finally, a consensus meeting analysed and organised the results for dissemination of the final consensus outcomes.; **Results:** Seventy studies were used to populate the questionnaire in Round 1. Thirty-four multi-disciplinary expert panellists determined the final data items across the 3 Delphi Rounds. Experts worked at over 16 different centres across the United Kingdom. There was an average response rate of 94% across all rounds.; **Discussion:** This study highlights a multidisciplinary team's consensus essential dataset for effective remote ear assessment. With NHS waiting lists at an all-time high, remote assessment capacity could alleviate strain and enhance patient care. This initiative will facilitate novel service and pathway redesign with the aim of ensuring all patients have

access to high-quality ear assessments, regardless of location. We are also hopeful that this standardised dataset will also facilitate research and audit of remote ear services. (© 2025 John Wiley & Sons Ltd.)

**Access or request full text:** <https://libkey.io/10.1111/coa.70008>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40619759&prolid=e>  
[host](#)

### 13. "They don't realise how hard he has to try every day": The rewards and challenges of parenting a child with developmental language disorder

**Item Type:** Journal Article

**Authors:** Leitão, Suze;St Clair, Michelle,C.;Botting, Nicola;Gibson, Jenny and Jackson, Emily

**Publication Date:** 2025

**Journal:** International Journal of Language & Communication Disorders 60(2), pp. e70003

**Abstract: Background:** An emerging body of literature explores the impact of living with developmental language disorder (DLD) on children, individuals and families. This work has identified a range of challenges and strengths. However, there is limited evidence from the DLD community about the impacts of living with DLD in relation to parenting.; **Aims:** We explored the perspectives of caregivers in response to an open-text survey question: "What is most rewarding and challenging about being a parent to a child with DLD?"; **Methods & Procedures:** Respondents were caregivers of children with DLD who had signed up to Engage with Developmental Language Disorder. Qualitative content analysis was used to explore the open-ended responses from 112 parents who completed the yearly survey (child average age = 9.6 years; SD = 3.5 years, 46.9% female). Most caregivers lived in the United Kingdom, but we also had responses from around the world.; **Outcomes & Results:** For 'rewards', 52 codes and seven higher-order categories were identified. These comprised the many rewards experienced from caring for a child with DLD, including seeing and celebrating progress, celebrating their child's personality and being proud to be their child's parent. Caregivers mentioned the positives gained from learning about DLD and working together with their child to help them achieve their potential. They reflected on the supportive nature of the 'right' environment, in particular the school context and social connectedness. For 'challenges', 84 codes and 11 higher-order categories were identified. Caregivers often noted the lack of awareness of DLD amongst the community and professionals in general, within the school system and amongst teachers. Caregivers reported support and information about DLD were difficult to find and were impacted by a constant need for advocacy. They reflected on the increased time needed to support their child and worried about their child's social and community participation. Many commented on the impact of DLD on the family and the mental health and well-being of both them and their children.; **Conclusions & Implications:** Hearing the views of caregivers of children with DLD is key because shared decision-making is central to client-centred care. Furthermore, 'client perspectives' are a cornerstone of evidence-based practice. There is much to take from the responses and for professionals to reflect on and use. Collaboration with children, young people and families is needed for effective advocacy, and to develop awareness of DLD.; **What This Paper Adds:** What is already known on the subject An emerging body of

literature has explored the impact of living with developmental language disorder (DLD) on the child, the individual and the family. This work has identified a range of challenges and strengths. These are important considerations to support the evidence-based practice of those working with the DLD community from planning treatment goals to designing and providing services. What this paper adds to existing knowledge Caregivers highlighted a range of rewards in parenting a child with DLD. They also identified a wide range of challenges, including a lack of awareness and support from professionals, the constant need for advocacy and the impact on the family as well as the impact on the mental health of their child and themselves as parents. What are the potential or actual clinical implications of this work? Shared decision-making is central to client-centred and family-centred care, and client perspectives are a key aspect of evidence-based practice. There is much for clinicians and practitioners to take from this data set of parent perspectives. The findings from this study will guide researchers and clinicians to reflect on how to work in collaboration with individuals with DLD and their families, including in their design and delivery of services and advocacy to continually raise awareness of DLD. (© 2025 The Author(s). International Journal of Language & Communication Disorders published by John Wiley & Sons Ltd on behalf of Royal College of Speech and Language Therapists.)

**Access or request full text:** <https://libkey.io/10.1111/1460-6984.70003>

**URL:** [https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=39970424&prolid=e\\_host](https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=39970424&prolid=e_host)

#### 14. The impact of using the Ida "My Hearing Explained" tool on audiologists' language and patient understanding of hearing test results: a comparison with standard audiogram explanations

**Item Type:** Journal Article

**Authors:** Lough, M.;Whiston, H. and Saunders, G. H.

**Publication Date:** 2025

**Journal:** International Journal of Audiology 64(5), pp. 450–459

**Abstract: Objective:** Explore the impact of Ida's "My Hearing Explained" (MHE) tool on audiologists' language and patients' understanding/interpretation of hearing test results.; **Design:** Audiologists were video-recorded in two sequential conditions: 1) giving standard audiogram explanations to 13 patients and, 2) following discretionary self-training, giving explanations using the MHE tool (nine patients). Outcomes of interest were audiologists' language complexity, use of jargon, and audiologist-patient interactivity. Semi-structured patient interviews, conducted 1-7 days after appointments, were analysed using inductive qualitative content analysis. Patient recall was verified.; **Study Sample:** Four audiologists from one United Kingdom audiology service, and 22 patients (mean age 63.5 yrs) participated.; **Results:** In comparison to standard audiogram explanations, audiologists' language was simpler and audiologist-patient interactivity greater with the MHE tool. Interview data analysis revealed differences between explanation types within the themes of "Understanding" and "Interpretation." 54% (standard audiogram) and 22% (MHE tool) of patients expressed a desire for takeaway information. 31% (standard audiogram) and 67% (MHE tool) of patients reported their

explanation helped them relay their results to others. Four patients (one receiving the MHE tool) incorrectly recalled information, suggesting inadequate understanding in these cases.; **Conclusions:** The MHE tool has potential for improving the accessibility and comprehensibility of hearing test results.

**Access or request full text:** <https://libkey.io/10.1080/14992027.2024.2358432>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38824465&prolid=ehost>

## 15. Association of midlife hearing impairment and hearing aid use with incident dementia: analysis of two UK-based longitudinal cohort studies

**Item Type:** Journal Article

**Authors:** Machado-Fragua, Marcos;Fayosse, Aurore;Dumurgier, Julien;Kivimaki, Mika;Ben Hassen, Céline;Livingston, Gill;Paquet, Claire;Sabia, Séverine and Singh-Manoux, Archana

**Publication Date:** 2025

**Journal:** Nature Aging 5(9), pp. 1732–1738

**Abstract:** The prevalence of hearing impairment and dementia increases with age but the nature of their association remains unclear. Using data from two large UK-based cohort studies, we examined the longitudinal association of 'midlife' hearing impairment and hearing aid use with incident dementia. We found modest associations and population attributable fractions for reported and measured 'midlife' hearing impairment, highlighting the need to consider age at measurement of risk factors in studies that target dementia prevention. (© 2025. The Author(s).)

**Access or request full text:** <https://libkey.io/10.1038/s43587-025-00914-1>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40595016&prolid=ehost>

## 16. Understanding affiliate stigma among significant others of adults with hearing loss: a cross-sectional survey in Australia, the UK, and the US

**Item Type:** Journal Article

**Authors:** Meyer, Carly;Scarinci, Nerina;Ekberg, Katie;Nickbakht, Mansoureh;Timmer, Barbra;Waite, Monique and Hickson, Louise

**Publication Date:** 2025

**Journal:** International Journal of Audiology 64, pp. S58–S64

**Abstract: Objectives:** To understand the international experiences of affiliate stigma among significant others of adults with hearing loss; and associations between third-party hearing disability and affiliate stigma.; **Design:** Cross-sectional online survey and descriptive analyses.; **Study Sample:** 313 significant others of adults with hearing loss 50+ years of age living in Australia, the United Kingdom, or the United States.; **Results:** Significant others associated hearing loss and hearing aids with negative stereotypes such as old age, struggling in communication, and disability; however, their experiences of affiliate stigma and third-party hearing disability were low overall. About half the participants reported feelings of sadness (57%) and about a third of participants (37%) reported feelings of helplessness in relation to their family member or friend having a hearing loss. Low to moderate associations were found between third-party hearing disability and affiliate stigma.; **Conclusion:** While significant others of adults with hearing loss living in Australia, the UK, and the US experience low levels of affiliate stigma, they experience feelings of sadness and helplessness, and associate hearing loss and hearing aids with negative stereotypes. Family-centred hearing rehabilitation can be beneficial in addressing these negative feelings and stereotypes.

**Access or request full text:** <https://libkey.io/10.1080/14992027.2025.2505979>

**URL:** [https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40450559&provid=e\\_host](https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40450559&provid=e_host)

## 17. A lexical database of British Sign Language (BSL) and German Sign Language (DGS): Iconicity ratings, iconic strategies, and concreteness norms

**Item Type:** Journal Article

**Authors:** Ortega, Gerardo;Schiefner, Annika;Lazarus, Nia and Perniss, Pamela

**Publication Date:** 2025

**Journal:** Behavior Research Methods 57(5), pp. 139

**Abstract:** Iconicity, understood as a resemblance relationship between meaning and form, is an important variable that has important psycholinguistic effects in lexical processing and language learning across modalities of language. With the growing interest in iconicity, clear operationalizations in terms of the different ways in which iconicity is construed and measured are critical for establishing its broader psycholinguistic profile. This study reports a normed database of iconicity ratings for the same concepts in British Sign Language (BSL) and German Sign Language (DGS). As a related dimension, we also report the type of iconic mapping strategy, i.e., a nominal variable that reflects the different ways in which signs make form-meaning associations for each sign. Finally, we include concreteness ratings for the same concepts. Data from deaf and hearing signers show that iconicity ratings are strongly correlated across both languages, with different distributions across the different strategies, and skewed towards the iconic end of the scale for all groups except German hearing non-signers. Concreteness ratings in BSL and DGS are correlated, though more weakly, and skewed towards the concrete end of the scale. Interestingly, this differs from findings for spoken

languages, where concreteness ratings exhibit substantially stronger correlations and abstract concepts are more predominantly represented. We also find that iconicity and concreteness ratings have a moderate positive and strong positive correlation in BSL and DGS, respectively. These results will be useful in psycholinguistic research and highlight differences that can be attributed to the manual-visual modality of signs. (© 2025. The Author(s).)

**Access or request full text:** <https://libkey.io/10.3758/s13428-025-02660-z>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40205134&prolid=ehost>

## 18. "I always feel like I'm the first deaf person they have ever met:" Deaf Awareness, Accessibility and Communication in the United Kingdom's National Health Service (NHS): How can we do better?

**Item Type:** Journal Article

**Authors:** Parmar, B.;Henshaw, H.;Howe, S.;Dickinson, A. M.;Rolfe, C.;Le Mere, P.;Blondiaux-Ding, E.;Musker, Z.;Stevenson, R.;Hughes, S. E.;Calvert, S.;Stapleton, E. and Turton, L.

**Publication Date:** 2025

**Journal:** PloS One 20(5), pp. e0322850

**Abstract: Background:** Barriers to communication significantly reduce access to health services for people with deafness or hearing loss (PDHL). These barriers contribute to reduced healthcare-seeking behaviour, poorer access to health information, and adverse health outcomes. In response, a multidisciplinary working group of patients, clinicians, researchers, and charity representatives was established to investigate accessibility, communication, and deaf awareness within the United Kingdom's (UK) National Health Service (NHS).; **Methodology:** A cross-sectional survey was conducted to explore the communication and accessibility experiences of PDHL NHS patients, and their perceived impact on well-being. The survey used rating scales and open-ended questions and data were analysed using descriptive statistics and thematic analysis. The survey was made available in British Sign Language (BSL).; **Results:** The online survey was completed by 556 PDHL, including 50 parents, carers, or family members who had accompanied PDHL friends or relatives to NHS appointments. All respondents had used NHS services within the last 24 months, with 10% identifying BSL as their preferred language. Qualitative analysis of the open-ended responses generated three key themes: 1) Accessibility challenges, 2) Impact of communication difficulties across the service pathway, and 3) Lack of consistent, effective deaf-aware communication. Overall, 64.4% of PDHL NHS patients reported missing 50% or more of the important information provided during their NHS appointments, and 32% were satisfied with the communication skills of healthcare staff.; **Conclusion:** This study presents the largest UK-wide dataset of its kind, and findings highlight the widespread non-compliance with the legally mandated Accessible Information Standards (AIS) within NHS services. The communication barriers identified in this study have significant and long-term implications for the well-being of PDHL patients. Utilising these findings, our working group has developed a set of 'Recommendations For Change' to improve deaf awareness and

effective communication across the NHS. (Copyright: © 2025 Parmar et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.)

**Access or request full text:** <https://libkey.io/10.1371/journal.pone.0322850>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40333900&prolid=e>  
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## 19. A high-sensitivity, high-throughput newborn screening assay for congenital cytomegalovirus-is it time for universal screening in the United Kingdom?

**Item Type:** Journal Article

**Authors:** Payne, H.;Aaltoranta, M.;Veikkolainen, V.;Kent, N.;Gkouleli, T.;Lennon, A.;Ramgoolam, T. and Adams, S. P.

**Publication Date:** 2025

**Journal:** Frontiers in Pediatrics 13, pp. 1543132

**Abstract: Introduction:** Congenital cytomegalovirus (cCMV) is the leading cause of neurodevelopmental and hearing impairment resulting from in utero infection, affecting over a million infants globally each year. Early antiviral treatment can limit sequelae; however, most newborns are diagnosed late-or not at all-due to the lack of universal screening. Ensuring the availability of appropriate screening tools is critical to facilitate accurate and timely cCMV diagnosis.; **Methods:** A high-sensitivity, high-throughput commercial CMV PCR kit targeting the RRP30 control gene and a conserved region of CMV DNA was provided by Revvity and tested in three population groups: (1) leftover dried blood spot (DBS) samples from the UK newborn screening programme, (2) DBS samples from children with CMV viraemia unrelated to cCMV, and (3) DBS and dried saliva samples from infants with and without cCMV.; **Results:** Of 3,345 anonymised newborn DBS samples analysed, CMV was detected in 22 cases (0.66%), with a mean cycle threshold value of 36.70 (range 31.87-41.68). Assay development demonstrated a sensitivity of 2.04 CMV IU per reaction. This level of sensitivity was replicated using DBS samples prepared from infant/child blood samples with known levels of CMV, suggesting that the sensitivity reflects 2,000-3,000 CMV IU/mL blood.; **Discussion:** We demonstrated high analytical sensitivity of the qPCR assay with an optimal extraction protocol, making it an effective strategy for cCMV screening using DBS samples. These data suggest a potential cCMV incidence rate of up to 0.66% in the United Kingdom, equivalent to 3,960 infants per year, 25% of whom may develop long-term sequelae, which could be improved through early diagnosis and treatment. (© 2025 Payne, Aaltoranta, Veikkolainen, Kent, Gkouleli, Lennon, Ramgoolam and Adams.)

**Access or request full text:** <https://libkey.io/10.3389/fped.2025.1543132>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40171173&prolid=e>

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## 20. The lived experience of hearing loss - an individualised responsibility

**Item Type:** Journal Article

**Authors:** Pryce, H.;Smith, S.;Burns O'Connell, G.;Hussain, S.;Straus, J. and Shaw, R.

**Publication Date:** 2025

**Journal:** International Journal of Audiology 64(4), pp. 365–373

**Abstract: Objective:** This study aimed to provide a conceptual model to understand what typifies the lived experience of hearing loss.; **Design:** A grounded theory informed study of adults with hearing loss ( n = 46) who participated in individual interviews. The data were analysed in line with the constant comparative approach of grounded theory. A substantial patient and public engagement (PPIE) strategy underpinned decisions and processes throughout.; **Study Sample:** Adults were recruited from age bands (16-29; 30-49;50-79 and 80 upwards) to provide different lived experience. We recruited individuals from across the UK including urban, sub-urban and rural communities and included a typical constituency of each location including black and minority ethnic participants. Our PPIE groups included adults often marginalised in research including South Asian community groups, adults in residential care and those with additional disabilities.; **Results:** We identified the consistent features of the lived experience with hearing loss, as the individualised responsibility that hearing loss confers. These are an individual auditory lifeworld; social comparison and social support; individual and patient-centred care and individual agency and capability.; **Conclusions:** This work provides new insights for those practising audiology and highlights the importance of building social support systems through implementation of family and peer support approaches.

**Access or request full text:** <https://libkey.io/10.1080/14992027.2024.2351037>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38767328&prolid=e>  
[host](#)

## 21. Decentralised trials for hearing and tinnitus therapies: Lessons from the Digital thErapy For Improved tiNnitus carE (DEFINE) randomised controlled trial

**Item Type:** Journal Article

**Authors:** Salem, J.;Sharma, D.;Moore, A.;Dantonio, O.;Twelves, L.;Ogburn, E.;Young, M.;Multmeier, J.;Muzaffar, J. and Smith, M. E.

**Publication Date:** 2025

**Journal:** PloS One 20(8), pp. e0324927

**Abstract:** Randomised Controlled Trials (RCTs) are the gold standard for evaluating the efficacy of interventions; yet, traditional methods involving multiple recruitment sites often involve significant logistical and financial challenges. The DEFINE trial demonstrates the feasibility of a decentralised approach to RCTs by comparing smartphone-delivered self-guided tinnitus therapy against one-to-one therapist-facilitated treatment for tinnitus. This trial was conducted entirely remotely, leveraging digital technologies for remote recruitment, data collection, and intervention delivery. A total of 210 participants were recruited through social media platforms over a five-month period. Participants were screened and enrolled by a central trial team remotely, who utilised hearing test smartphone applications and electronic consent forms. Baseline and follow-up assessments were conducted using electronic data capture (EDC) platforms, with high retention rates observed at each time point. The trial successfully recruited and retained participants, demonstrating the efficiency and cost-effectiveness of remotely managed trials. Key findings include a high engagement rate from social media ads, with 151,978 impressions leading to 4,997 clicks (3.3%), with a direct advertising spend of £880. 912 individuals self-screened for eligibility online. The median age of participants was 58.3 years, in line with comparable traditionally-recruiting tinnitus studies, with good geographical distribution across the UK. The trial's adaptability allowed for protocol adjustments, and real-time monitoring of data quality and completeness. The DEFINE trial demonstrates that decentralised RCTs can offer a viable alternative to traditional RCTs for some hearing and tinnitus research, potentially increasing participant diversity and reducing the burden of research on participants, while maintaining rigorous standards of data collection and participant safety. Increasing clinical use of remote audiological assessment, and hearing implant programming provide increasing opportunities for the adoption of entirely remote or hybrid studies in hearing and tinnitus conditions. (Copyright: © 2025 Salem et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.)

**Access or request full text:** <https://libkey.io/10.1371/journal.pone.0324927>

**URL:** [https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40811429&provid=e\\_host](https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40811429&provid=e_host)

## 22. Refinement and Validation of a New Patient-Reported Experience Measure for Hearing Loss (My Hearing PREM)

**Item Type:** Journal Article

**Authors:** Smith, S. K.;Pryce, H.;O'Connell, G. B.;Knibb, R. C. and Greenwood, R.

**Publication Date:** 2025

**Journal:** Health Expectations : An International Journal of Public Participation in Health Care and Health Policy 28(2), pp. e70225

**Abstract: Context:** Patient-reported experience measures (PREMs) generate insights into daily challenges experienced when living with a chronic condition and experiences of care. There are no validated PREMs to

measure the experience of hearing loss.; **Objective:** The aim of this study was to evaluate the psychometric properties of a newly developed tool, 'My Hearing PREM', designed to assess the experience of living with hearing loss and receiving audiology care.; **Setting and Participants:** Adults with hearing loss (n = 401) were recruited from audiology clinics in Scotland and England, and non-clinical routes such as lip-reading classes, clinical research networks, national charity links and social media.; **Design:** Participants completed a 27-item PREM alongside validated scales to measure communication difficulties, loneliness, quality of life, decisional conflict and health literacy. Modern (Rasch) and traditional psychometric analysis techniques (internal consistency and construct validity) were used to assess the psychometric properties of the My Hearing PREM.; **Results:** Factor analysis of the initial 27 items produced 3 subscales: Emotional Burden, Support and Communication, after 4 items were removed due to poor fit. Rasch analysis was carried out on each of these subscales and a further 7 items with poor fit to the Rasch model were removed. This resulted in a long-form 16-item (My Hearing PREM-16) demonstrating good internal reliability (Cronbach's  $\alpha = 0.91$ ). Each subscale showed good internal reliability (0.91, 0.85 and 0.71). A short-form (My Hearing PREM-9) version was developed for use in clinical practice ( $\alpha = 0.79$ ). Both forms of the PREM demonstrated medium to strong significant correlations with the validated measures.; **Conclusion:** Both the My Hearing PREM-16 and My Hearing PREM-9 are reliable measures with good construct validity. They provide a way for healthcare professionals to understand how hearing loss is affecting an individual's emotional well-being, social interactions and communication. Ongoing research is exploring the feasibility of My Hearing PREM in routine audiology practice.; **Patient or Public Contribution:** We developed the project in collaboration with members of the public who have lived experience of hearing loss, recruited through Aston University and volunteer networks connected to audiology services. Additionally, we engaged with individuals more likely to be impacted by hearing loss, including adults with learning disabilities, older adults in residential care, and members of South Asian communities (Bangladeshi, Indian and Pakistani). These stakeholders provided valuable feedback on the study's aims, the content and format of the My Hearing PREM items, the survey design and recruitment strategies. (© 2025 The Author(s). Health Expectations published by John Wiley & Sons Ltd.)

**Access or request full text:** <https://libkey.io/10.1111/hex.70225>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40088002&prolid=ehost>

### 23. Refinement and Validation of a New Patient-Reported Experience Measure for Hearing Loss (My Hearing PREM)

**Item Type:** Journal Article

**Authors:** Smith, Sian K.; Pryce, Helen; O'Connell, Georgina Burns; Knibb, Rebecca C. and Greenwood, Rosemary

**Publication Date:** 2025

**Journal:** Health Expectations 28(2), pp. 1–15

**Abstract: Context:** Patient-reported experience measures (PREMs) generate insights into daily challenges

experienced when living with a chronic condition and experiences of care. There are no validated PREMs to measure the experience of hearing loss. **Objective:** The aim of this study was to evaluate the psychometric properties of a newly developed tool, 'My Hearing PREM', designed to assess the experience of living with hearing loss and receiving audiology care. **Setting and Participants:** Adults with hearing loss (n = 401) were recruited from audiology clinics in Scotland and England, and non-clinical routes such as lip-reading classes, clinical research networks, national charity links and social media. **Design:** Participants completed a 27-item PREM alongside validated scales to measure communication difficulties, loneliness, quality of life, decisional conflict and health literacy. Modern (Rasch) and traditional psychometric analysis techniques (internal consistency and construct validity) were used to assess the psychometric properties of the My Hearing PREM. **Results:** Factor analysis of the initial 27 items produced 3 subscales: Emotional Burden, Support and Communication, after 4 items were removed due to poor fit. Rasch analysis was carried out on each of these subscales and a further 7 items with poor fit to the Rasch model were removed. This resulted in a long-form 16-item (My Hearing PREM-16) demonstrating good internal reliability (Cronbach's  $\alpha = 0.91$ ). Each subscale showed good internal reliability (0.91, 0.85 and 0.71). A short-form (My Hearing PREM-9) version was developed for use in clinical practice ( $\alpha = 0.79$ ). Both forms of the PREM demonstrated medium to strong significant correlations with the validated measures. **Conclusion:** Both the My Hearing PREM-16 and My Hearing PREM-9 are reliable measures with good construct validity. They provide a way for healthcare professionals to understand how hearing loss is affecting an individual's emotional well-being, social interactions and communication. Ongoing research is exploring the feasibility of My Hearing PREM in routine audiology practice. **Patient or Public Contribution:** We developed the project in collaboration with members of the public who have lived experience of hearing loss, recruited through Aston University and volunteer networks connected to audiology services. Additionally, we engaged with individuals more likely to be impacted by hearing loss, including adults with learning disabilities, older adults in residential care, and members of South Asian communities (Bangladeshi, Indian and Pakistani). These stakeholders provided valuable feedback on the study's aims, the content and format of the My Hearing PREM items, the survey design and recruitment strategies.

**Access or request full text:** <https://libkey.io/10.1111/hex.70225>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=184679866&prolid=e>  
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## 24. Loneliness and Risk of Incident Hearing Loss: The UK Biobank Study

**Item Type:** Journal Article

**Authors:** Song, Yunlong; Steptoe, Andrew; Yang, Honghao; Ma, Zheng; Guo, Lizhi; Yu, Bin and Xia, Yang

**Publication Date:** 2025

**Journal:** Health Data Science 5, pp. 0281

**Abstract: Background:** Hearing loss (HL) is one major cause of disability and can lead to social impairments. However, the relationship between loneliness and the risk of incident HL remains unclear. Our study aimed to

investigate this association among adults in the UK. **Methods:** This cohort study was based on data from the UK Biobank study. Loneliness was assessed by asking participants if they often felt lonely. Incident HL was defined as a primary diagnosis, ascertained via linkage to electronic health records. Cox proportional hazard regression models were used to examine the association between loneliness and risk of incident HL. **Results:** Our analyses included 490,865 participants mean (SD) age, 56.5 (8.1) years; 54.4% female], among whom 90,893 (18.5%) reported feeling lonely at baseline. Over a median follow-up period of 12.3 years (interquartile range, 11.3 to 13.1), 11,596 participants were diagnosed with incident HL. Compared to non-lonely participants, lonely individuals exhibited an increased risk of HL hazard ratio (HR), 1.36; 95% confidence interval (CI), 1.30 to 1.43]. This association remained (HR, 1.24; 95% CI, 1.17 to 1.31) after adjusting for potential confounders, including age, sex, socioeconomic status, biological and lifestyle factors, social isolation, depression, chronic diseases, use of ototoxic drugs, and genetic risk of HL. The joint analysis showed that loneliness was significantly associated with an increased risk of incident HL across all levels of genetic risks for HL. **Conclusions:** Loneliness was associated with the risk of incident HL independent of other prominent risk factors. Social enhancement strategies aimed at alleviating loneliness may prove beneficial in HL prevention. (Copyright © 2025 Yunlong Song et al.)

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## 25. Exploring the barriers and facilitators to effective communication with people with age-related hearing loss in community pharmacy settings

**Item Type:** Journal Article

**Authors:** Thomas, Shanice;Griffiths, Jane;Saunders, Gabrielle;Phipps, Denham;Todd, Chris and Lewis, Penny

**Publication Date:** 2025

**Journal:** Exploratory Research in Clinical and Social Pharmacy 19, pp. 100573

**Abstract: Background:** As populations age, there is a growing number of people who are affected by age-related hearing loss, who are living with chronic health conditions, treated using multiple medicines. Community pharmacy plays an important role in ensuring safe and effective medicine use.; **Objective:** This study explored the barriers and facilitators to effective communication with people with age-related hearing loss in the community pharmacy setting.; **Methods:** Semi-structured interviews were conducted with sixteen pharmacy users with self-reported age-related hearing loss in the United Kingdom (UK). Eight community pharmacists took part across two focus groups and one interview . Using a deductive-inductive approach to framework analysis, three overarching themes were generated.; **Results:** 'Navigating the environment' highlights barriers related to pharmacists reportedly high workloads and time pressures, also reflected in pharmacy user's accounts. Background noise reduced the confidentiality and effectiveness of communication. Participants had differing views on the extent to which hearing aids could overcome these challenges. 'Debating the need to communicate and to disclose hearing loss' reflects barriers relating to

pharmacy users' tendency to not disclose their needs, in relation to their personal feelings (embarrassment), perceptions of, and limited contact with, community pharmacy services. Yet, pharmacists emphasised a need to know about hearing loss to adapt communication effectively. Participants reported similar and distinct perspectives regarding 'coping strategies and solutions to communicate effectively'.; **Conclusion:** Participants identified a need to improve pharmacists' capacity to implement communication adaptations for people with hearing loss, for which pharmacists suggested digital interventions, and to visibly recognise sensory needs, to promote disclosure. (Crown Copyright © 2025 Published by Elsevier Inc.)

**Access or request full text:** <https://libkey.io/10.1016/j.rcsop.2025.100573>

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[host](#)

## 26. Preference and Outcomes for Fast Versus Slow Compression in Hearing Aids for Older Adults: A Randomized Control Trial

**Item Type:** Journal Article

**Authors:** Windle, Richard; Dillon, Harvey and Heinrich, Antje

**Publication Date:** 2025

**Journal:** Ear and Hearing

**Abstract: Objectives:** To determine whether normally aging older adults, fitted with hearing aids, report a benefit from, or a preference for, slow or fast-acting compression, and whether this relationship is influenced by cognitive ability, hearing loss, or previous experience with hearing aids.; **Design:** A single-blinded, crossover randomized control trial. Fifty-six participants were recruited from the population attending a UK National Health Service (NHS) hearing assessment clinic, both new and experienced hearing aid users. Participants were aged 56 to 85 years, with symmetrical mild-to-moderate hearing loss. Participants trialed hearing aids for 2 months in each of two settings, slow or fast-acting compression. Speech recognition in quiet and in noise were measured, unaided and aided after fitting with each compression setting. A battery of cognitive tests, self-reported hearing aid outcomes and the participant's preference for the first or second fitting were also collected at the end of the trial.; **Results:** Seventy-seven percent of participants stated a preference for one of the compression speed settings. A roughly equal number of participants preferred fast or slow-acting compression. Hearing thresholds were the only predictive factor for compression speed preference: the larger the hearing loss, the more likely it was that patients preferred a slower compression speed. Neither cognitive scores nor the degree of experience with hearing aids predicted the preference for either compression speed. Objective benefit, measured by speech understanding in quiet and in noise, was not affected by compression speed.; **Conclusions:** Participants with a greater degree of hearing loss tended to prefer slow-acting compression. The optimum boundary between the preference for "fast" versus "slow" compression speed was a four-frequency average hearing threshold of 35 dB HL in the better ear. When the default compression speed was set to "fast" for those with an average hearing threshold below 35 dB HL, and to "slow" for those with a greater degree of hearing loss, this setting correctly reflected a user's preference in about four in five cases. Neither compression speed offered a significant benefit for speech recognition in noise and quiet. Likewise,

neither cognitive performance nor previous experience with hearing aids predicted the amount of reported benefit or preference. Limitations to the study included a positive association between hearing threshold and experience with hearing aids. The study also demonstrated a strong association between the preference and the order of compression speed provided, with users tending to prefer the second fitting. (Copyright © 2025 The American Auditory Society.)

**Access or request full text:** <https://libkey.io/10.1097/AUD.0000000000001716>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40936168&provid=ehost>

## 27. Role of Lung Function, Chronic Obstructive Pulmonary Disease on Hearing Impairment: Evidence for Causal Effects and Clinical Implications

**Item Type:** Journal Article

**Authors:** Yuan, Lanlai;Cui, Feipeng;Yin, Ge;Shi, Mengwen;Aximu, Nadida;Tian, Yaohua and Sun, Yu

**Publication Date:** 2025

**Journal:** Audiology Research 15(4)

**Abstract: Objectives :** Observational studies have shown that chronic obstructive pulmonary disease (COPD) is associated with an increased risk of hearing impairment. However, causality remains unclear, including with respect to lung function. This study aimed to investigate the associations of lung function and COPD with hearing impairment in the UK Biobank and confirm potential causalities using Mendelian randomization (MR).

**Methods:** Cross-sectional analyses were performed using logistic regression models in a subsample of the UK Biobank. Two-sample MR analyses were performed on summary statistics for forced expiratory volume in one second (FEV1), forced vital capacity (FVC), COPD, and sensorineural hearing loss. **Results :** FEV1 and FVC were negatively associated with hearing impairment, with odds ratios (95% confidence intervals) of 0.80 (0.77, 0.84) and 0.80 (0.76, 0.83), respectively. COPD was positively associated with hearing impairment, with an odds ratio (95% confidence interval) of 1.10 (1.02, 1.18). In the MR analyses, a negative association was found between FVC and sensorineural hearing loss, with an odds ratio (95% confidence interval) of 0.91 (0.83, 0.99). For FEV1 and COPD, no significant associations were found. **Conclusions :** The results of this study showed that FVC was causally associated with hearing impairment, suggesting a potential protective effect of FVC on hearing impairment.

**Access or request full text:** <https://libkey.io/10.3390/audiolres15040088>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40700231&provid=ehost>

## 28. Distinct changes in the morphology of cortical and subcortical grey matter associated with age-related hearing loss and tinnitus in the UK Biobank participants

**Item Type:** Journal Article

**Authors:** Zainul Abidin, Fatin,N.;Biondo, Francesca;Altmann, Andre and Dawson, Sally J.

**Publication Date:** 2025

**Journal:** Brain Communications 7(3), pp. fcac203

**Abstract:** Prevalence of both hearing loss and tinnitus increases with age. However, neuroimaging studies of both conditions report inconsistent changes in brain morphology likely due to small sample size and variable methodology. Structural and functional neuroimaging studies in hearing loss and tinnitus have revealed distinct neural correlates, and further replication is needed to confirm these findings. This study aims to investigate the effects of hearing loss and tinnitus on the brain morphology in a well-powered sample. We utilized self-reported hearing difficulty and tinnitus in participants with magnetic resonance imaging (MRI) in the UK Biobank cohort. Control participants without hearing difficulty and tinnitus were age and sex matched leading to total sample sizes of 13 074 and 6242 for self-reported hearing difficulty and tinnitus, respectively. We utilized the rich UK Biobank dataset (i) to reveal these brain changes in a well-powered large study of hearing loss and tinnitus, (ii) to document the effect of confounding factors on these associations, (iii) to discriminate the effects of tinnitus versus hearing difficulty on the brain and (iv) to estimate the brain-age gap in hearing difficulty and tinnitus subjects compared with controls. Hearing difficulty is significantly associated with smaller grey matter volumes exclusively in the bilateral transverse temporal regions, whereas tinnitus is associated with larger volumes of bilateral hippocampi and thalami when compared with the control group. Furthermore, correcting for confounders (i.e. diabetes, cardiovascular disease, age, sex, smoking, alcohol consumption and Townsend deprivation index) during statistical analysis helped to better delineate the impact of hearing status on brain structural changes. The brain-age gap analysis showed that participants with tinnitus appeared to have significantly younger brains than controls, whereas participants with hearing difficulty did not differ significantly from the control group. Altogether, our results confirmed previous findings and suggest the enlargement of bilateral thalami as the main effect in people with tinnitus. We also established that there are independent and distinct brain pathologies between hearing difficulty and tinnitus. Therefore, the self-reported measure is a reasonable approach to assess the hearing loss and tinnitus pathologies. (© The Author(s) 2025. Published by Oxford University Press on behalf of the Guarantors of Brain.)

**Access or request full text:** <https://libkey.io/10.1093/braincomms/fcaf203>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40496672&provid=ehost>

## 29. Inpatient Audiologic Services Facilitate Early Hearing Detection

**Item Type:** Journal Article

**Authors:** Zemba, A.;Vaughan, C.;Gerth, H.;Guerra, G.;Benedict, J. and Findlen, U. M.

**Publication Date:** 2025

**Journal:** American Journal of Audiology 34(1), pp. 97–105

**Abstract: Purpose:** Infants needing neonatal intensive care unit (NICU) intervention have protracted timelines for diagnosis after not passing their newborn hearing screening despite being at higher risk for congenital hearing loss. The primary aim of this study was to evaluate the outcomes of early hearing detection for infants with a history of NICU admission. The secondary aim was to determine if diagnostic audiology services within the NICU setting accelerated diagnosis and intervention.; **Method:** A retrospective chart review was completed for infants referred for diagnostic audiologic testing from 2018 to 2021 at a tertiary urban-setting children's hospital. After exclusion criteria were applied, 367 infants with NICU history were included in the analysis. Various factors were recorded from electronic medical records. Time to diagnosis was derived and compared across (a) NICU location, (b) insurance type, and (c) race/ethnicity.; **Results:** Analysis of infants with NICU history revealed that 70% of infants had a diagnosis by 3 months corrected age. The level of in-NICU audiologic care did not significantly impact corrected age at diagnosis; however, loss to follow-up (LTFU) rates were higher for NICUs that did not provide in-hospital diagnostic services (10.0%) when compared to the NICU setting with inpatient audiology services (6.8%). In-NICU testing occurred on average 5.7 weeks prior to discharge, expediting diagnosis of hearing status compared to having to wait for an outpatient evaluation after discharge.; **Conclusions:** Timely hearing detection is feasible in the medically complex NICU population. Inpatient audiology diagnostic testing may help reduce LTFU and facilitate early hearing detection and intervention.

**Access or request full text:** [https://libkey.io/10.1044/2024\\_AJA-24-00178](https://libkey.io/10.1044/2024_AJA-24-00178)

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