Hearing loss in adults: assessment and management

Consultation on draft guideline - Stakeholder comments table
27/11/17 to 12/01/18

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Action on Hearing Loss	Short	10	10-28	**The recommendations in section 1.7 on information and support are welcome. The section should also acknowledge the difficulties older people living in care homes may face when seeking help for their hearing loss or when using their hearing aids**. **Question 1:** This recommendation may be particularly challenging to implement in care homes. Our '*A World of Silence*'[1] report shows that older people in care homes are less likely to want address their hearing loss without support – and that care staff found it difficult to encourage them to seek help. The report found that staff had a lack of training in this area and that hearing loss was often seen as less important compared to other issues such as sight loss, pain or safeguarding. Some care staff also lacked the know-how to carry out basic hearing aid maintenance. Our '*Under Pressure*'[2] report also found that less than half (46%) of NHS audiology services in England offer hearing aid support to older people living in care homes. Many older people with hearing loss have other health problems such as frailty and physical impairments so they may need additional support to visit their audiologist or look after their hearing aids. Alternatively, if they are unable to attend	**Thank you for your comment.** **The difficulties experienced by older people in care homes are commented on in the full guideline.**

[1] Echalier M. (2012). A World of Silence. The case for tackling hearing loss in care homes. London: Action on Hearing Loss. Available from: http://www.actiononhearingloss.org.uk/-/media/ahl/documents/research-and-policy/reports/care-home-report.pdf

[2] Lowe C. (2015). Under Pressure. London: Action on Hearing Loss. Available from: https://www.actiononhearingloss.org.uk/how-we-help/information-and-resources/publications/research-reports/under-pressure-report/

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				appointments due to other conditions, they will need access to hearing aid assessments or aftercare in the care home itself. Please refer to comment 46 & 47. **Question 3.** To help overcome challenges users should refer to NHS England's Healthy Ageing 'What Works' Guide,[3] which recommends training for care staff on the communication and hearing needs of older people. Additional guidance can be found in the Action Plan on Hearing Loss,[4] which states that properly diagnosing and managing hearing loss is essential for improving the health and wellbeing of older people living in care homes. The Action Plan also lists "Improved communication experience in mainstream care homes" as a key outcome measure for service improvement. **The following recommendations may help users overcome these challenges and should be added to Section 1.7** ***"Provide support to help older people living in care homes access hearing assessments and support to use their hearing aids by:*** • ***Ensuring care home staff are alert to the early signs of hearing loss and the role of the GP in referring people for a hearing test, in line with the NICE quality standard on mental wellbeing in care homes.*** • ***Establish good working relationships between audiology services and care***	

[3] NHS England. (2017). What works: hearing loss and healthy ageing. London: NHS England

[4] NHS England and Department of Health (2015) Action Plan on Hearing Loss. London: NHS England and Department of Health. Available at: https://www.england.nhs.uk/wp-content/uploads/2015/03/act-plan-hearing-loss-upd.pdf

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				homes to help older people access support. This could include outreach services, such as audiology clinics in care homes. • ***Provide training for care home staff to help them recognise the early signs of hearing loss and support older people to get the most out of their hearing aids".*** Section 1.7 should also acknowledge the communication difficulties that some people who are deaf or have hearing loss with multiple needs, such as learning disabilities or dementia, may face during audiology assessments. Research shows that hearing loss can complicate the symptoms of dementia for example by making communication more difficult and in some cases hearing loss can even be misdiagnosed as dementia due to the appearance of similar symptoms.[5] Please refer to comment 4. **The following recommendation should be added to section 1.7:** **"*Ensure the format of audiology assessments are suitable for people with diagnosed or suspected dementia, mild cognitive impairment or learning (intellectual) disabilities and provide specialist support, if needed. For example, this could include onward referral to an Ear, Nose and Throat (ENT) department or a multi-disciplinary***	

[5] Boxtel van, Beijsterveldt van, Houx PJ, et al. (2000). Mild hearing impairment can reduce verbal memory performance in a healthy adult population, Journal of Clinical and Experimental Neuropsychology, 22(1):147-54; Burkhalter CL, Allen RS, Skaar DC, et al. (2009). Examining the effectiveness of traditional audiological assessments for nursing home residents with dementia-related behaviors, Journal of American Academic Audiology, 20 (9):529-38.

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				assessment." The provision of communication support and accessible information is also crucial for ensuring people with disabilities and sensory loss can participate fully in discussions about their treatment and care. Section 1.7 should explicitly reference the requirements of NHS England's Accessible Information Standard[6], as this provides clear guidance for NHS and adult social care providers on how to improve the accessibility of their services for people with disabilities and sensory loss. **The following sentence should be added to Section 1.7:** ***"Follow the principles of NHS England's Accessible Information Standard to ensure people with disabilities and sensory loss get the support they need to communicate well and understand information"***	
Action on Hearing Loss	Short	10	11-26	**We welcome the recommendations on the principles on tailoring healthcare services for each person and enabling people to actively participate in their care.** **Question 1:** This recommendation will impact the way some staff currently communicate with patients with hearing loss in GP surgeries.	**Thank you for your comment and for highlighting this research.**

[6] NHS England (2017). Accessible Information Standard. DCB 1605. To find out more, please visit www.england.nhs.uk/accessibleinfo

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				In addition, research from Action on Hearing Loss's *'Nursing Practice Project'*[7] identified that issues with hearing loss and communication were also very common in elderly care wards. Of the 33 patients who took part in the research, 71% stated that they did not fully understand what staff were saying and 43% felt that they were not fully involved in decision-making regarding their care. The staff who were questioned also stated that they experienced difficulty communicating with patients, possibly due to hearing loss. **Question 3:** Users working in secondary care should refer to Action on Hearing Loss's nursing practice toolkit to ensure people with hearing loss receive high quality care in hospitals. The toolkit provides recommendations and resources, based on the findings from our research undertaken in a hospital elderly care assessment unit.[7]	
Action on Hearing Loss	Short	11	General	**We welcome that the draft guideline provides an outline on putting the guideline into practice, which includes tools and resources.** **Question 1**: A key challenge arises from ensuring that commissioners are informed of the benefits to their local population and cost benefits of implementing the NICE guidelines for hearing loss. Anecdotally, following engagement with commissioners, some have highlighted that there may be some reluctance to implement the entire	**Thank you for your comment. Tools and resources are developed by NICE in conjunction with publication of the guideline. Reference has been made to the documents you cite within the full guideline.**

[7] Action on Hearing Loss and Heart of England NHS Foundation Trust. (2014). Caring For Older People with Hearing Loss. A toolkit for change. London: Action on Hearing Loss

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				NICE guideline for hearing loss due to the perceived cost implications of doing so. We have also seen such reluctance in the implementation of the national Commissioning Framework for Adult Hearing Services. In the instance of urgent and routine referrals it is imperative that commissioners are informed of the long term benefits and reduced morbidly for people who require urgent referral if recommendations are implemented, as well as cost savings. **Question 3:** Organisations such as The British Society of Audiology (BSA), British Academy of Audiology (BAA) and British society of hearing aid Audiologists (BSHAA) as well as NHS England can play a significant role in overcoming the challenge of putting the guidelines into practice, and ensuring that the NICE guideline for hearing loss are disseminated and used widely. These organisations too can help share good practice and case study examples of services who have undergone or implemented change as a result of the publication of the NICE guideline for hearing loss. In the instance of urgent referrals it is imperative that audiologists are informed of the dangers of not implementing these recommendations and delaying the urgent care that some individuals may require which may lead to increased morbidity and poor long term outcomes. **Tools and resources within this section should also include the Action Plan on Hearing Loss, the Commissioning Framework for Adult Hearing Loss Services and the JSNA guidance. Please refer to comment 6.**	
Action on Hearing Loss	Short	14 - 17	General	**The recommendations for research should also**	**Thank you for your comment. The committee**

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				include a randomised controlled trial (RCT) on screening adults for hearing loss. Please refer to comment 2.	**could only make research recommendations on topics where an evidence review was carried out; no evidence was available and therefore this precluded making a recommendation. Screening was not included in the scope of this guideline and therefore we could not make a recommendation for further research on this topic.**
Action on Hearing Loss	Short	14-17	General	**The recommendations for research should include assessment on the levels of awareness of hearing loss in primary care.** In the UK, information on the causes, diagnosis and management of hearing loss is readily available for GPs, including guidance in the Royal College of GP's (RCGP) curriculum,[8] information and good practice guidance on GP notebook,[9] patient.co.uk,[10] medical journals,[11] as well as online training through e-learning modules run by the British Medical Journal (BMJ)[12] and e-GP.[13] However, there is less information for GPs on the full impacts of hearing loss, for example on communication, social participation, employment, dementia and mental	**Thank you for your suggestion. There was a great number of questions on which the committee could have recommended further research, but unfortunately we are limited on how many we can recommend. In particular, we can only recommend research on a question that has been included for investigation within the current guideline, and so we would be unable to include this question.**

[8] RCGP. (2015). RCGP Curriculum: Professional and Clinical Modules. Available at: www.rcgp.org.uk/~/media/Files/GP-training-and-exams/Curriculum-2012/RCGP-Curriculum-3-15-ENT-Oral-and-Facial-Problems.ashx
[9] Gpnotebook.co.uk. (2018). hearing loss - General Practice Notebook.Available at: http://www.gpnotebook.co.uk/simplepage.cfm?ID=1208352773
[10] Patient.info. (2018). Hearing Problems. Common hearing problems; Information.Available at: https://patient.info/health/hearing-problems ; Patient.co.uk. (2018). Presbyacusis (Hearing Loss of Older People) | Health. Available at: http://www.patient.co.uk/health/presbyacusis-hearing-loss-of-older-people
[11] Schwartz SR. (2017). Assessment of hearing loss. BMJ Best Practice. Available at: http://bestpractice.bmj.com/topics/en-gb/434
[12] Hall C, Rolfe C. (2011). Hearing loss and tinnitus in adults: a guide for GPs. BMJ Learning. Available: http://learning.bmj.com/learning/module-intro/hearing-loss-and-tinnitus-in-adults--a-guide-for-gps-.html?moduleId=10029379 ; Edmiston R, Mitchell C. (2013) Hearing Loss in Adults. BMJ. 346 doi: https://doi.org/10.1136/bmj.f2496
[13] e-Learning for Healthcare. (2018). e-Learning for Healthcare. Available at: https://www.e-lfh.org.uk/

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				health. Although, some reference is made to these in the RCGP curriculum[14] and a wide variety of information and research is available through charities such as Action on Hearing Loss.[15] It is likely that there is a lack of awareness, specifically about the diagnosis and management of hearing loss, and the latest research.	
Action on Hearing Loss	Short	15	20	**The use of hearing aids and incidence of dementia is an important research recommendation which should be prioritised**. The significance of this research area is recognised by the James Lind Alliance, Priority Setting Partnership on Mild and Moderate Hearing Loss, which identifies the effect of early fitting of hearing aids on the rate of cognitive decline as a key research question.[16] Current evidence shows that hearing loss is the largest modifiable risk factor for dementia.[17] Although existing evidence on the association between hearing aids and cognition is limited, it suggests a positive association. For example, a prospective study by Amieva et al (2015) showed no difference in the rate of change in MMSE score over the 25 year follow up period in participants with hearing loss using hearing aids compared to the control group (participants without hearing loss). In contrast, participants with hearing loss who did not use hearing aids declined more rapidly on the MMSE	**Thank you for your comment. The committee agrees that this is a priority for research and has therefore included a recommendation for further research on this topic.**

[14] RCGP. (2015). RCGP Curriculum: Professional and Clinical Modules. Available at: www.rcgp.org.uk/~/media/Files/GP-training-and-exams/Curriculum-2012/RCGP-Curriculum-3-15-ENT-Oral-and-Facial-Problems.ashx
[15] Actiononhearingloss.org.uk. (2018). Publications. Available at: https://www.actiononhearingloss.org.uk/how-we-help/information-and-resources/publications/ ; Actiononhearingloss.org.uk. (2018). Policy research and influencing. Available at: https://www.actiononhearingloss.org.uk/you-can-help/campaigns-and-influencing/policy-research-and-influencing/
[16] James Lind Alliance. (2018). Mild to Moderate Hearing Loss Top 10. Available at: http://www.jla.nihr.ac.uk/priority-setting-partnerships/mild-to-moderate-hearing-loss/top-10-priorities.
[17] Livingston G, Sommerlad A, Orgeta V, et al (2017) Dementia prevention, intervention, and care. The Lancet.16;390(10113):2673-2734. doi: 10.1016/S0140-6736(17)31363-6

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				than the control group, the findings suggest that hearing aid use decreases cognitive decline.[18] Findings from Dawes et al (2015) study showed hearing aids to be associated with better cognition, which was independent of social isolation and depression. Suggesting that positive effects of hearing aid use on cognition may be due to improvements in audibility or associated increases in self-efficacy, rather than social isolation or depression.[19] Furthermore, in a cohort study by Deal et al (2015) decline in cognitive function was found to be greatest among participants who did not wear hearing aids then compared to those who did.[20] This research recommendation is particularly important in light of the recent proposals to decommission hearing aid provision across the country by several CCGs (Please refer to comment 6). The need to understand the association between hearing loss and incidence of dementia is imperative for reducing inequalities in health.	
Action on Hearing Loss	Short	16	14	**The prevalence of hearing loss among populations who under-present is a key research recommendation which should be prioritised. This should include those who are particularly disadvantaged due to their health issues which may lead to a lack of awareness of their hearing loss, or failure to seek help.**	**Thank you for your comment. The committee agrees that this is a priority for research and has therefore included a recommendation for further research on this topic.**

[18] Amieva H, Ouvrard C, Giulioli C, et al. (2015). Self-Reported Hearing Loss, Hearing Aids, and Cognitive Decline in Elderly Adults: A 25-Year Study. Journal of the American Geriatrics Society, 63(10):2099-2104.
[19] Dawes P, Emsley R, Cruickshanks K, et al. (2015). Hearing Loss and Cognition: The Role of Hearing Aids, Social Isolation and Depression. PLOS ONE, 10(3), p.e0119616.
[20] Deal J, Sharrett A, Albert M, et al. (2015). Hearing Impairment and Cognitive Decline: A Pilot Study Conducted Within the Atherosclerosis Risk in Communities Neurocognitive Study. American Journal of Epidemiology, 181(9):680-690.

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				This includes individuals with learning (intellectual) disabilities, dementia and mild cognitive impairment. Unaddressed hearing loss is a significant problem in the UK. Despite proven and effective interventions being available which can restore quality of life, many people experiencing hearing loss do not seek medical advice and remain undiagnosed. Typically, people who are referred to hearing assessment are aged in their mid-70s and on average wait 10 years from the initial onset of hearing loss until they seek medical advice. It is estimated that only two million people have hearing aids out of the six million who have hearing loss which is significant enough to benefit from hearing aids in England, suggesting that there is a significant unmet health need.[21] In addition, the Davis, et al (2007) study shows that the ability to adapt to and manage hearing loss becomes increasingly difficult the older people are when they present for assessment and intervention.[24] Highlighting that earlier identification and intervention would ensure that individuals are supported to manage their hearing loss at an age when they are likely to benefit the most.[24]	
Action on Hearing Loss	Short	3	5 - 7	**The recommendation to refer all adults regardless of age is welcomed.** **Question 1:** This recommendation may be a challenging change in practice for GPs, since evidence suggests that often GPs can act as a	**Thank you for your comment.** **The committee considered it important that all people presenting with hearing loss in either primary or community care services should be referred to audiology services, and the recommendation has been amended to**

[21] Davis A, Smith P, Ferguson M, et al. (2007). Acceptability, benefit and costs of early screening for hearing disability: a study of potential screening tests and models. Health Technology Assessment:11(42).

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				barrier to people accessing audiology services. On average, adults with hearing loss wait 10 years before seeking medical advice, and when they do visit their GP, 30 to 45 percent are not referred on for a hearing assessment.[22] This indicates that there is a significant unmet need. Approximately only two fifths of people who need hearing aids have them.[23] In addition, there is also considerable variation across England in access to audiology services. The NHS England Atlas of Variation shows an 11-fold variation in the rate of audiology assessments,[24] suggesting that there is significant variation in referrals made by GPs for people with hearing loss.[25] In recognition of this, early diagnosis and management of hearing loss has been identified as a key objective in the Action Plan for Hearing Loss.[26] Furthermore, evidence shows that hearing loss is the largest modifiable risk factor for dementia in mid-life. Please refer to comment 2. **Question 3:** To help overcome challenges users	**reflect this.** **Thank you for supplying the references. The committee are aware of these publications and these are referenced within the full guideline. The tools and resources section of the short guideline does not include external publications, but provides implementation and audit tools developed by NICE.**

[22] Davis et al (2007) Acceptability, benefit and costs of early screening for hearing disability: A study of potential screening tests and models. Health Technology Assessment 11:1–294; Audit Commission (2000) Fully equipped: the provision of equipment to older or disabled people by the NHS and social services in England and Wales. Audit Commission, London
[23] Health Survey England (2014): VOL 1 | CHAPTER 4: HEARING. The Health and Social Care Information Centre. Available at: http://www.hscic.gov.uk/catalogue/PUB19295/HSE2014-ch4-hear.pdf; Perez E and Edmonds BA (2012) A Systematic Review of Studies Measuring and Reporting Hearing Aid Usage in Older Adults since 1999: A Descriptive Summary of Measurement Tools. PLoS ONE 7(3), e31831; European Hearing Instrument Manufacturers Association (2015) Eurotrak Survey 2015; Davis and Smith (2013) Adult hearing screening: health policy issues--what happens next? Am J Audiol. 22(1):167-70.
[24] Public Health England (2013). NHS Atlas of Variation in Diagnostic Services: Reducing unwarranted variation to increase value and improve quality.
[25] Davis et al (2012). Diagnosing patients with age-related hearing loss and tinnitus: Supporting GP clinical engagement through innovation and pathway redesign in audiology services. International Journal of Otolaryngology, available at: http://www.hindawi.com/journals/ijoto/2012/290291/
[26] NHS England and Department of Health (2015) Action Plan on Hearing Loss. London: NHS England and Department of Health. Available at: https://www.england.nhs.uk/wp-content/uploads/2015/03/act-plan-hearing-loss-upd.pdf

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				should refer to the Commissioning Framework for Adult Hearing Loss Services,[27] which states that *"GPs and other health and social care professionals should regularly check people's hearing as they get older (10, 23) to encourage people to seek help, and to ensure they get a prompt referral on to audiology services".* The Framework also recommends that *"CCGs should plan to ensure services tackle unmet need and ensure that GPs are aware of the evidence and national guidance, as well as local referral pathways".* Further guidance on referral is available from the British Academy of Audiology at http://www.baaudiology.org/index.php/download_file/view/302/178/ , and professional practice guidance from the British Society of Hearing Aid Audiologists can be found at http://www.bshaa.com/Publications/BSHAA, which **should be included within 'tools and resources' under the section 'Putting the guideline into practice' on page 11 of the short version of the guideline.** Furthermore, users should also refer to the Action Plan on Hearing Loss[26] which urges health professionals to recognise communication needs and offer appropriate support in accessing other health and public services to people with hearing loss.	
Action on Hearing Loss	Short	5	16 - 18	**The word *'consider'* should be removed from the recommendation to refer adults with diagnosed**	**Thank you for your comment. Unfortunately we cannot cover screening but feel that this**

[27] NHS England, Office of the Chief Scientific Officer. (2016). Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups. London: NHS England. Available at: https://www.england.nhs.uk/wp-content/uploads/2016/07/HLCF.pdf

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				or suspected dementia or mild cognitive impairment for hearing assessment. **Question 1:** The symptoms of dementia can make both the diagnosis and management of hearing loss challenging. This is because firstly, when testing for hearing loss the individual relies on their memory to recognise how their hearing compares with their hearing in the past.[28] They also rely on their memory to tell them how long they have been experiencing hearing loss for.[28] Secondly, diagnosing hearing loss relies on the individual's ability to understand the instructions from the audiologist. This becomes difficult when the individual has symptoms of dementia, and as a result may feel confused.[28] Additionally, there is a risk that hearing loss may be misdiagnosed as dementia,[29] since dementia itself can cause communication problems, such as difficulty in finding the right words. Furthermore, hearing impairment can adversely affect performance on cognitive testing and can cause a diagnostic challenge. The most commonly used test to determine cognitive status, the Mini-Mental State Examination (MMSE), relies on the individual's ability to fully hear the instructions.[30] The Jorgensen et al (2016) study found that reduced audibility significantly reduces scores on the MMSE,	**is a special group who need regular hearing tests.** **The committee agrees that hearing loss in this population can remain unrecognised due to the reasons you outline and this has been indicated in the wording of the recommendation. However, the term 'consider' is used to reflect the strength of the evidence and the committee may have been able to make a stronger recommendation if there was more published clinical evidence on this question. 'Consider' should be interpreted to mean that referral should be considered by the health practitioner based on their clinical assessment and with involvement of the patient and/or their carer as part of shared decision-making.** **The NICE draft dementia guideline has also been subject to stakeholder consultation, and the final version is expected to be published in June 2018.**

[28] Echalier M. (2012). A World of Silence. The case for tackling hearing loss in care homes. London: Action on Hearing Loss. Available from: http://www.actiononhearingloss.org.uk/-/media/ahl/documents/research-and-policy/reports/care-home-report.pdf

[29] Boxtel van M, Beijsterveldt van C, Houx P, et al. (2000). Mild Hearing Impairment Can Reduce Verbal Memory Performance in a Healthy Adult Population. Journal of Clinical and Experimental Neuropsychology 22(1):147-154.

[30] Alzheimer's Society. (2017). The MMSE test. Available at: https://www.alzheimers.org.uk/info/20071/diagnosis/97/the_mmse_test.

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				resulting in greater apparent cognitive deficits as audibility decreased.[31] **Question 3: The diagnosis of dementia must therefore include hearing screening, and should be included within the NICE guidelines on Dementia (2006).[32] Please refer to comment 2.**	
Action on Hearing Loss	Short	5	22-24	**We welcome the recommendation to "consider referring people with a diagnosed learning (intellectual) disability to an audiology service" every two years**. People with learning disabilities may require specialist support to ensure they can access and benefit from hearing aids. The prevalence of hearing loss is higher in people with learning disabilities compared to the general population, and people with learning disabilities are more likely to develop hearing loss and its associated health problems earlier.[33] Around 40% of people with learning disabilities have hearing loss[34] but this often goes undiagnosed or is misdiagnosed as behavioral difficulties.[35] Diagnosing and managing hearing loss is crucial for improving the health and wellbeing of people with learning disabilities. As stated in full guideline, hearing loss that is *"not addressed will significantly affect*	**Thank you for your comment. We have made the point that those with learning difficulties should have an audiological assessment in an audiology service and in the full version have reiterated that the test has to be performed by a trained audiologist. We have also made a comment in the full document on assessment in audiology and the need to adapt the approach.** **Someone with learning difficulties should not have an assessment in primary care unless there is a fully equipped and staffed audiology service within that environment.**

[31] Jorgensen L, Palmer C, Pratt S, et al. (2016). The Effect of Decreased Audibility on MMSE Performance: A Measure Commonly Used for Diagnosing Dementia. Journal of the American Academy of Audiology. 27(4):311-323.
[32] NICE (2006). Dementia: supporting people with dementia and their carers in health and social care. Clinical guideline [CG42]. Available at: https://www.nice.org.uk/guidance/cg42
[33] Kiani R and Miller H. (2010). Sensory impairment and intellectual disability. Advances in psychiatric treatment. 16:228–235.
[34]Carvill S. (2001). Sensory impairment, intellectual disability and psychiatry. Journal of Intellectual Disability Research. 45:467–83; Kiani R and Miller H. (2010) Sensory impairment and intellectual disability Advances in psychiatric treatment. 16:228–235; McShea et al. (2015) Paid support workers for adults with intellectual disabilities; their current knowledge of hearing loss and their future training needs. Journal of Intellectual Disabilities. 28 (5), 422-432.
[35] Kiani R and Miller H. (2010). Sensory impairment and intellectual disability. Advances in psychiatric treatment. 16, 228–235.

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				understanding and will exacerbate underlying cognitive difficulties. It will contribute to increasing confusion and withdrawal." **An additional recommendation should also be added to this section to acknowledge the communication difficulties that some people with learning disabilities may face during primary care hearing assessments, and the adjustments that may be needed to ensure they can access treatment.** One study found that the format of hearing checks carried out in GP surgeries are often inappropriate for people with learning disabilities.[36] Some GPs who were interviewed as part of this study were also reluctant to refer people with learning disabilities for a hearing test, due to misconceptions that diagnosis and treatment would be ineffective. **The following paragraph should be added to recommendation 1.1.11:** ***"Adjustments should also be made to ensure the format of primary care hearing assessments are suitable for people with learning disabilities. People with learning disabilities should be provided with appropriate support to communicate well and understand information, in line with NHS England's Accessible Information Standard."*** NHS England's Accessible Information Standard[37] provides guidance for providers of NHS Care and	

[36] McShea L. (2015). Managing hearing loss in Primary care. Learning Disability Practice.18(10):18-23. doi:10.7748/ldp.18.10.18.s19
[37] NHS England (2017). Accessible Information Standard. DCB 1605. To find out more, please visit www.england.nhs.uk/accessibleinfo

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				publicly funded adult social care on making their services accessible to people with disabilities and sensory loss. The Standard became a legal requirement in August 2016, and sets out a clear process to make sure people with disabilities and sensory loss can contact services when they need to, communicate well during appointments and understand health information or correspondence they are given. This also includes the communication and/or information needs of parents, guardians or carers.	
Action on Hearing Loss	Short	8	11	**The recommendation to offer hearing aids to all adults whose hearing loss affects their ability to communicate is welcomed.** There is a significant body of evidence to show the improvements to health and wellbeing from using hearing aids. Most recently, a Cochrane review on the effectiveness of hearing aids in mild to moderate hearing loss showed that hearing aids are effective at improving hearing specific and general health related quality of life and listening ability in adults with mild to moderate hearing loss. Furthermore, a systematic review by Ciorba et al (2012) found that people benefited from hearing aids on a variety of different quality of life measures.[38] Health improvement benefits were also found by Swan et al (2012) and Barton et al (2004) using quality of life outcome measures.[39] Hearing aid users were also found to	**Thank you for your comment. The committee agrees with your observations and has drawn on the references you cite within the full guideline. A strongly worded recommendation has been made based on the available evidence and cost-effectiveness work undertaken.**

[38] Ciorba A, Bianchini C, Pelucchi S and Pastore A. (2012). The impact of hearing loss on the quality of life of elderly adults. Clinical Interventions in Aging. 7:159–163.
[39] Swan IR, Guy FH, Akeroyd MA. (2012). Health-related quality of life before and after management in adults referred to otolaryngology: a prospective national study. Clinical Otolaryngology. 37(1):35-43; Barton GR, Bankart J, Davis AC, Summerfield QA. (2004). Comparing utility scores before and after hearing aid provision: results according to the EQ-5D, HUI3 and SF-6D. Applied Health Economics and Health Policy 3(2):103-5.

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				have better social engagement, mental and physical health than non-users.[40] Using hearing aids also reduces the risk of dependence on social care and risk of premature death. Furthermore, findings from recent studies show that the rate of cognitive decline decreases with the use of hearing aids which may reduce the risk of developing dementia.[41] **Question 1.** Recent proposals by Clinical Commissioning Groups (CCGs) to decommission hearing aids for people with mild and moderate hearing loss, indicate that this recommendation may be perceived as a challenge to implement due to financial pressures. Despite the extensive clinical evidence, professional opinion and national policy prioritising hearing loss, 16 CCGs across the country have proposed to decommission hearing aid provision for people with mild and moderate hearing loss. In 2015, North Staffordshire CCG went ahead with these proposals and became the first CCG to no longer provide NHS hearing aids to people with mild hearing loss, and require people with moderate hearing loss to undergo an eligibility test before gaining access. North Staffordshire CCG is expected to review their policy on hearing aids once the NICE guidelines on hearing loss are published. Hence the importance of this recommendation in the guideline. The proposals made to decommission hearing aids	

[40] Kochkin S and Rogin CM. (2000). Quantifying the obvious: The impact of hearing instruments on quality of life. The Hearing Review. 7(1).
[41] Amieva H, Ouvrard C, Giulioli C, et al. (2015). Self-Reported Hearing Loss, Hearing Aids, and Cognitive Decline in Elderly Adults: A 25-Year Study. J Am Geriatr Soc. 63(10):2099-104. doi: 10.1111/jgs.13649.

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				are extremely concerning, since hearing aids are the "only viable treatment option"[42] for people with mild and moderate hearing loss. In addition, hearing aids are cost effective. A hearing aid costs the NHS £90, and on average £390 for all of a person's appointments, two hearing aids and repairs for three years.[43] This small cost per person enables the NHS to deliver huge benefits in terms of quality of life and reduces the need for more costly interventions in the future. As summarised by Access Economics (2006), "the literature shows that hearing aids yield significant benefits for relatively low investments".[44] NHS England state that the benefits of providing hearing aids outweigh the costs, and that hearing aids provided through the NHS are cost effective.[45] In contrast, purchasing a set of hearing aids privately costs £3,000 on average,[46] which is beyond the savings of 55% of UK households.[47] **Question 2.** Although CCGs are facing financial pressures, this should not impact patient care. There are a number of effective alternative ways that CCGs can respond to financial challenges without decommissioning hearing aid services for people with mild and moderate hearing loss. The Commissioning Framework for Adult Hearing Loss Services is	

[42] Chisholm et al. (2007). A systematic review of health-related quality of life and hearing aids: Final report of the American Academy of Audiology task force on the health-related quality of life benefits of amplification in adults. Journal of American Academy of Audiology, 18:151-183
[43] Monitor and NHS England. (2013). National tariff information workbook 2014/15. Available at: https://www.gov.uk/government/publications/national-tariff-information-workbook-201415
[44] Access Economics. (2006) Listen Hear: The economic impact and cost of hearing loss in Australia. Canberra: Access Economics
[45] NHS England, Office of the Chief Scientific Officer. (2016). Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups. London: NHS England. Available at: https://www.england.nhs.uk/wp-content/uploads/2016/07/HLCF.pdf
[46] Which? (2018). Hearing aid prices - Which? Available at: https://www.which.co.uk/reviews/hearing-aid-providers/article/how-to-get-the-best-hearing-aid/hearing-aid-prices
[47] Department for Work and Pensions (2014): Family Resources Survey: financial year 2013/14. Available at: https://www.gov.uk/government/statistics/family-resources-survey-financial-year-201314

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				guidance published by NHS England to support CCGs to commission high quality, cost effective audiology services, which enables CCGs to reduce costs of hearing services without restricting provision. There are several case studies of good practice cited within the Commissioning Framework for Adult Hearing Loss Services, this includes West Hampshire CCG, which redesigned the hearing care pathway for adults in the local area resulting in significant cost savings. The pathway was co-produced with Ear, Nose and Throat (ENT) doctors and audiologists, and designed around patient needs allowing all audiology providers to refer directly into ENT, and provides ENT an efficient method of offering users a choice of community audiology services. These changes have resulted in a more integrated model of care which is tailored to patient needs. **Question 3.** To help CCGs to overcome challenges they should refer to the following national strategy and guidance documents: • **The Action Plan on Hearing Loss**: To tackle the growing public health challenge of hearing loss, the Department of Health and NHS England published the Action Plan on Hearing Loss in 2015. The Action Plan is a national Government strategy, which demonstrates a commitment to tackling hearing loss at a national level, and clearly lays out the evidence base around the impacts of hearing loss and the need for improved awareness, technology and services. The Action Plan proposes to address hearing loss through promoting prevention of hearing loss,	

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				improving both the commissioning and integration of services, providing innovative models of care and ensuring that people of all ages with hearing loss are actively supported and empowered.[48] • **The Commissioning Framework:** The Commissioning Framework for Adult Hearing Loss Services[49] was published by NHS England in 2016, and is one of the main outputs from the Action Plan on Hearing Loss. It is a crucial document for promoting good practice amongst commissioners, providing tools and practical guidance to support CCGs to make informed decisions to achieve good value for local populations, provide services which are of high quality, consistent and integrated. The Framework suggests improving services by basing services on local needs, monitoring outcomes, considering flexible and innovative commissioning models, streamlining pathways, signposting well to support services and improving accessibility, convenience and choice. • **Joint Strategic Needs Assessment (JSNA) Guidance:** This guide[50] has been co-produced by NHS England, the Local Government Association, the Association of Directors of Public Health and other stakeholders,	

[48] NHS England and Department of Health (2015) Action Plan on Hearing Loss. London: NHS England and Department of Health. Available at: https://www.england.nhs.uk/wp-content/uploads/2015/03/act-plan-hearing-loss-upd.pdf

[49] NHS England, Office of the Chief Scientific Officer. (2016). Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups. London: NHS England. Available at: https://www.england.nhs.uk/wp-content/uploads/2016/07/HLCF.pdf

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				and will be published in 2018. The guide provides the data, evidence and insight local authorities and NHS commissioners need to develop robust hearing needs assessments to meet local needs. It will allow decision makers define the future health, care and wellbeing needs of their local populations with regards to hearing loss and to signpost to guidance on how audiology services can help them to meet these needs. People with hearing loss can often find it difficult to communicate without the right support, and are at a greater risk of unemployment, social isolation, depression and other mental health issues.[50] This worsens health inequalities and increases avoidable costs for individuals, the health and care system and the economy.[50] The correct local support can ensure that those with hearing loss are not disadvantaged, and the costs and impact associated with hearing loss are significantly diminished. Tackling the growing challenge of hearing loss requires a coordinated response across the health and social care system. Central to this, is ensuring that hearing needs are accurately captured in every local JSNA. This local approach is key to ensuring that by working together the national and growing public health challenge of hearing loss can be tackled in a sustainable way.	
Action on Hearing Loss	Short	8	13	**The recommendation to offer two hearing aids to**	**Thank you for your comment. We agree that**

[50] NHS England et al. (*Forthcoming* 2018). Guidance for Local Authorities and NHS commissioners on assessing the hearing needs of local populations. London: NHS England

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				adults with hearing loss in both ears is welcomed. Research shows that bilateral fittings improve speech clarity, reduces listening strain in dynamic and demanding situations (such as noisy environments or group conversations),[51] and enables better localisation of sound.[52] Bilateral hearing aid provision impacts on a person's safety, social competence, and emotional wellbeing.[53] It also plays a significant role in suppressing tinnitus,[54] and in reducing the risk of auditory deprivation, which affects the brain's ability to process sounds.[55] Fitting two hearing aids for people with hearing loss in both ears is needed to ensure the person can hear well, communicate, maintain their hearing, stay safe and not become socially isolated. Worryingly, in recent years several CCGs across the country, including Milton Keynes and Kernow CCGs have proposed to restrict the provision of bilateral fittings. After consultation with Action on Hearing Loss and other stakeholders they decided not to go ahead with these proposals. We therefore believe that this recommendation is particularly important in light of these proposals, and strongly welcome the	**there are benefits from fitting 2 hearing aids in people with bilateral hearing loss. Thank you for the evidence you have provided.**

[51] Köbler S and Rosenhall U. (2002). Horizontal localization and speech intelligibility with bilateral and unilateral hearing aid amplification. International Journal of Audiology, 41(7):395-400; Leeuw A and Dreschler W. (1991). Advantages of Directional Hearing Aid Microphones Related to Room Acoustics. International Journal of Audiology, 30(6):330-344.
[52] Stephens SD, Callaghan DE, Hogan S, et al. (1991). Acceptability of binaural hearing aids: a cross-over study. Journal if the Royal Society of Medicine, 84(5):267-9; Dreschler WA and Boymans M. (1994). Clinical evaluation on the advantage of binaural hearing aid fittings. Audiologische Akustik, 5:12-23.
[53] Noble W, Gatehouse S. (2006). Effects of bilateral versus unilateral hearing aid fitting on abilities measured by the Speech, Spatial, and Qualities of Hearing Scale (SSQ). International Journal of Audiology. 45(3):172-181; Brooks DN, Bulmer D. (1981). Survey of binaural hearing aid users. Ear Hear, 2(5):220-4.
[54] Brooks DN, Bulmer D. (1981). Survey of binaural hearing aid users. Ear Hear, 2(5):220-4.
[55] Nielsen H. (1974). Effect of monaural versus binaural hearing aid treatment. Scandinavian Audiology, 3(4):183-187; Silman S, Silverman CA, Emmer MB, Gelfand SA. (1992) Adult-onset auditory deprivation. J Am Acad Audiol, 3(6):390-6; Hurley RM. (1993) Monaural hearing aid effect: case presentations. J Am Acad Audiol, 4(5):285-94; discussion 295.

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				clear recommendation made for bilateral fittings within the guideline. **Question 3:** To overcome challenges in implementing this recommendation users should refer to the Commissioning Framework for Adult Hearing Loss Services, which outlines the importance of bilateral fittings: *"If hearing aids are recommended as the preferred intervention, people generally benefit from being offered 1 for each ear (bilateral) (46, 62) unless there are reasons that this is inappropriate. Fitting of bilateral hearing aids is beneficial as many modern hearing aids interact with each other to offer greater improvement in speech discrimination in everyday environments".*[56]	
Action on Hearing Loss	Short	9	1-9	**We welcome recommendations 1.5.8 and 1.5.9 on assistive listening devices. However, an additional recommendation should be added to this section to encourage audiology services and local authorities to work together to help people who are deaf or have hearing loss access assistive equipment.** Assistive equipment (usually provided by local authority sensory services) can help people who are deaf or have hearing loss communicate well and live safely and independently in their own home, and manage their condition more effectively. **Question 1:** This recommendation may be	**Thank you for your comment.** **A recommendation has been made to provide information on assistive listening devices including advice on how these may be demonstrated or obtained via certain organisations. This is a developing area but we did not find any evidence of efficacy to recommend any particular devices that should be provided by NHS audiology services.**

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				challenging to implement. Evidence from our '*Under Pressure'* report[57] shows that people who are deaf or have hearing loss might not know that these services are available and referral routes are often underutilised. These findings are consistent with patient survey results from Monitor's report on NHS adult hearing services in England[58], which showed that only one in ten respondents surveyed said that they were provided information about additional services and equipment. Provides who were interviewed stated that it is difficult to identify all the other services which are available locally, and that significant investment is needed to build awareness and knowledge of those services. As stated in the full guideline, at present *"liaison between health and social services does not happen routinely and, as a consequence, services are not joined up".* **Question 3:** It is therefore vital that NHS audiology services and local authorities work together to ensure assistive equipment is available to everyone who needs it. NHS England's Commissioning Framework for hearing loss services[59] states that *"commissioners should be open to new ideas about how to meet needs and deliver services wherever they come from, including working closely with other parts of the health and social care system".* **The following sentence should be added to the**	

[57] Lowe C. (2015). Under Pressure. London: Action on Hearing Loss. Available from: https://www.actiononhearingloss.org.uk/how-we-help/information-and-resources/publications/research-reports/under-pressure-report/
[58] Monitor. (2015). NHS adult hearing services in England: exploring how choice is working for patients. London: Monitor
[59] NHS England, Office of the Chief Scientific Officer. (2016). Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups. London: NHS England. Available at: https://www.england.nhs.uk/wp-content/uploads/2016/07/HLCF.pdf

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				"Assistive listening devices" section. ***"Work closely with other parts of the health and social care system and consider innovative solutions (such as joint-commissioning between NHS and local authority services) to help people access assistive equipment and other forms of support, as recommended by NHS England's Commissioning Framework for Adult Hearing Loss Services for Adult Hearing Loss Services".***	
Action on Hearing Loss	Short	9	11-12	**We welcome that the guideline recommends that adults should be offered a face- to face audiology appointment 6 to 12 weeks after their hearing aids are fitted.** **Question 1:** A challenge may arise in ensuring CCGs are aware of the importance of follow ups and that they are routinely offered to all those who are provided with hearing aids, alternative listening devices or other support. Research shows that follow up provision varies considerably across England. Research from our *'Under Pressure'* report found that only 49% of NHS audiology services offer patients face to face follow up appointments[60] and some areas are not contractually required to provide a follow up appointment.[61] Evidence confirms that given good support, follow up and rehabilitation, high	**Thank you for your support of this recommendation. The recommendation has been amended to include the possibility of other means of contact, if that is the preference of the hearing aid user.** **We agree that it is important that the benefits of hearing aids are understood and that follow-up is included as an integral part of the process of hearing assessment and hearing aid provision.**

[60] Lowe C. (2015). Under Pressure. London: Action on Hearing Loss. Available from: https://www.actiononhearingloss.org.uk/how-we-help/information-and-resources/publications/research-reports/under-pressure-report/
[61] Monitor. (2015). NHS adult hearing services in England: exploring how choice is working for patients. London: Monitor

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				levels of hearing aid use and satisfaction can be achieved at low costs[62] and improves people's quality of life, safety and independence.[63] It is apparent from engagement with some CCGs, that there are misconceptions about the use of and benefit of hearing aids. Largely, it is assumed that hearing aids are not beneficial to people who have them, audiologists issue hearing aids when they are not needed and NHS hearing technology is of poor quality which lead to the devices not being used. A consequence, in some areas of England CCGs have proposed to decommission hearing aids. The fitting of hearing aids, although a key component of managing hearing loss, should not be provided in isolation. As detailed in the full draft guideline, not providing a follow up *"can result in people giving up using their hearing aids and may consequently have a negative impact on their quality of life over time as their ability to communicate and participate in everyday situations declines".* In reality, often people who stop wearing their hearing aids do so because the device has stopped working; they are having issues with managing, using or inserting the hearing aid or they are uncomfortable, which are all issues that can usually be resolved in follow up appointments. Those with hearing loss should be	

[62] Abrams H, Chisolm TH, McArdle R, et al. (2002). A cost utility analysis of adult group audiologic rehabilitation: are the benefits worth the costs? Journal of Rehabilitation Research and Development, 39(5):549-558

[63] Yueh B, Souza PE, McDowell JA, et al. (2001). Randomized trial of amplification strategies. Archives of Otolaryngology Head & Neck Surgery,127(10):1197-204; Cacciatore, et al. (1999). Quality of life determinants and hearing function in an elderly population: Osservatorio Geriatrico Campano Study Group. Gerontology 45:323-323; Mulrow CD, Aguilar C, Endicott JE, et al (1990) Quality-of-life changes and hearing impairment. A randomized trial. Ann Intern Med. 1:113(3):188-94; Chisolm TH, Johnson CE, Danhauer JL, et al. (2007) A systematic review of health-related quality of life and hearing aids: final report of the American Academy of Audiology Task Force on the Health-Related Quality of Life Benefits of Amplification in Adults. Journal of the American Academy of Audiology, 18(2):151-83; Kochkin S. (2005). The impact of untreated hearing loss on household income. Better Hearing Institute

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				informed that they are entitled to have a follow up and know how to access the service if they have any questions or problems. The Commissioning Framework for Adult Hearing Loss Services states that *"follow-up and other support after the initial hearing aid fitting has been shown to improve satisfaction with hearing aid and increase hearing aid use".* [64] **Question 3:** To ensure that people receive the optimum benefit from the management they are provided, and money is not wasted by misuse of hearing aids and the number of unplanned follow up appointments, audiologists should work with their local CCGs to implement the Commissioning Framework for Adult Hearing Loss Services. [65] In addition to this, as detailed in section 14 'Assistive listening devices' the draft guideline for hearing loss recognises that a follow up appointment is an appropriate time *to "explore continuing communication or listening difficulties following hearing aid provision and ALDs may be a suitable topic to cover then".* As outlined in comment 8, access to such devices varies across the country and often access is underutilised. Anecdotally, we have heard that audiologists are not always clear on how and what information to provide	

[64] Perez E and Edmonds BA. (2012). A Systematic Review of Studies Measuring and Reporting Hearing Aid Usage in Older Adults since 1999: A Descriptive Summary of Measurement Tools. PLoS ONE, 7(3):e31831. doi: 10.1371/journal.pone.0031831; European Hearing Instrument Manufacturers Association. (2015). Eurotrak Survey 2015; Abrams H, Chisolm TH, McArdle R. (2002). A cost utility analysis of adult group audiologic rehabilitation: are the benefits worth the costs? Journal of Rehabilitation Research and Development 39(5): 549-558

[65] NHS England, Office of the Chief Scientific Officer. (2016). Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups. London: NHS England. Available at: https://www.england.nhs.uk/wp-content/uploads/2016/07/HLCF.pdf

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				people about assistive listening devices or what other support services such as lip reading classes are available locally for people with hearing loss. As outlined in comment 8 we recommend that audiology services and local authorities work together to improve access to support services for people with hearing loss. The updated service specification for adult audiology services[66] provides more in depth information about what should be included within a follow up appointment and should therefore be referred to within the 'Other considerations' section of the draft guideline for hearing loss within the 'Monitoring and follow up' section.	
Action on Hearing Loss	Short	9-10	13-1	**We welcome that the guideline states that patient reported outcomes and experience measures are obtained at follow up**. As outlined in comment 6, the Commissioning Framework for Adult Hearing Loss Services makes the recommendation for CCGs to base services on local needs and monitor outcomes.[65]	**Thank you for your comment.**
Action on Hearing Loss	General	General	General	Action on Hearing Loss (formerly the RNID) is the largest charity in the UK representing people with hearing loss. We help people confronting deafness, tinnitus and hearing loss to live the life they choose, enabling them to take control of their lives and removing the barriers in their way. We provide information, advice and support for people with hearing loss, we campaign for equality and better services, and we support research efforts to find new treatments and improve the management of hearing	**Thank you for your comment.**

[66] NHS England. (2016). NHS Standard Contract 2016/17 Particulars (Full Length): Adult Hearing Service

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				loss. We welcome the opportunity to respond to the consultation on NICE's draft guideline on '*Hearing loss in adults: assessment and management*'. Hearing loss is a growing public health challenge and is increasingly seen as a national priority. This is demonstrated by the Department of Health and NHS England's Action Plan on Hearing Loss[67] published in March 2015, and NHS England's Commissioning Framework for Adult Hearing Loss Services[68] published in April 2016. The NICE guideline on '*Hearing loss in adults: assessment and management*' is vitally important. It will further strengthen the case for the prevention and management of hearing loss, and enable providers and commissioners to recognise the impact of hearing loss on individuals, and the economic burden that unaddressed hearing loss places on the health and social care system. When put into practice, these guidelines have the potential to effectively target health and care resources to significantly improve patient outcomes, in line with the best available evidence of clinical and cost-effectiveness. In our response to the consultation, we have given feedback on the recommendations we strongly welcome and have provided evidence to support why these recommendations are critical in tackling the	

[67] NHS England and Department of Health (2015) Action Plan on Hearing Loss. London: NHS England and Department of Health. Available at: https://www.england.nhs.uk/wp-content/uploads/2015/03/act-plan-hearing-loss-upd.pdf

[68] NHS England, Office of the Chief Scientific Officer. (2016). Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups. London: NHS England. Available at: https://www.england.nhs.uk/wp-content/uploads/2016/07/HLCF.pdf

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				growing challenge of hearing loss. We have also included further recommendations which should be included within the guideline and suggested ways to strengthen those that should be extended. The key points within our response are outlined below: • Users should refer to the Action Plan on Hearing Loss[67] and the Commissioning Framework for Adult Hearing Loss Services[68] to improve patient outcomes. (Please refer to comment 6) • The importance of early diagnosis and management of hearing loss and its association with dementia, which is identified as the largest modifiable risk factor for dementia in the recent Lancet Commission (2017).[69] (Please refer to comment 2 and 4). • The significance of the recommendation to offer hearing aids to all adults whose hearing loss affects their ability to communicate. (Please refer to comment 6). • The significance of the recommendation not to use pure tone audiometry classifications such as 'mild' and 'moderate' as the sole determinant for hearing support provision. (Please refer to comment 6 and 21). • The importance of the recommendation to offer two hearing aids to adults with hearing loss in both ears. (Please refer to comment	

[69] Livingston G, Sommerlad A, Orgeta V, et al (2017) Dementia prevention, intervention, and care. The Lancet.16;390(10113):2673-2734. doi: 10.1016/S0140-6736(17)31363-6

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				7). • The urgent need for health and social care systems to develop a coordinated approach to tackle the growing public health challenge of hearing loss. Users should ensure that hearing needs are accurately captured within local Joint Strategic Needs Assessments (JSNA). Guidance for this is detailed in comment 6. • Users should recognise the communication needs of people with hearing loss, and offer appropriate support in accessing health and social care services and equipment such as assistive listening devices. (Please refer to comment 8 and 12). • The significance of GP awareness and training on the diagnosis and management of hearing loss. (Please refer to comment 3 and 28) • It is imperative that NICE support the implementation of the guidelines, in order to reduce health inequalities and local variation in access and quality of hearing services across the UK. • The guideline must take into consideration the rapidly changing landscape of technology and the inevitable significant changes that will occur in the delivery of audiology and social care services as a consequence. As the largest UK charity representing people with	

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				hearing loss we asked people to submit their own views regarding the guideline, and have incorporated the feedback we received in our response.	
Action on Hearing Loss	General	General	General	**We welcome that the guideline recognises the importance of early management of hearing loss.** The importance of early diagnosis and management has also been recognised within the Government's Action Plan on Hearing Loss which sets out an objective to ensure that all people with hearing loss are diagnosed early and managed effectively once diagnosed.[67] Without hearing aids and support, research shows that hearing loss leads to people not reaching their full potential at work, and too often leads to early retirement and loss of income (see comment 52 on employment).[70] Hearing loss also doubles the risk of developing depression and dementia.[71] There is good evidence that hearing aids improve employment prospects, quality of life, social activity and mental health.[72] However, approximately only two fifths of people who need hearing aids have them,[73] and wait on average 10 years before seeking help.[74]	**Thank you for your comment. The committee is only able to make research recommendations on issues within the scope of the research questions that have been addressed in this guideline. As questions regarding screening are a matter for the National Screening Committee rather than NICE, it is not possible for us to include screening as a research recommendation in this guideline, although the committee agrees that this would be a very useful piece of research.**

[70] Action on Hearing Loss. (2014). Hidden Disadvantage. London: Action on Hearing Loss. Available at: www.actiononhearingloss.org.uk/hiddendisadvantage ; Kochkin S. (2007). The Impact of Untreated Hearing Loss on Household Income. Alexandria VA: Better Hearing Institute.
[71] Saito et al. (2010). Hearing handicap predicts the development of depressive symptoms after three years in older community-dwelling Japanese. Journal of the American Geriatrics Society 58(1): 93-7; Lin et al. (2011). Hearing loss and incident dementia. Archives of Neurology 68(2):214-220.
[72] Kochkin S. (2007). The Impact of Untreated Hearing Loss on Household Income. Alexandria VA: Better Hearing Institute; Mulrow et al (1990) Quality-of-life changes and hearing impairment, a randomized trial". Annals of Internal Medicine 113(3): 188-94; National Council on the Aging. 2000. "The consequences of untreated hearing loss in older persons. Head & Neck Nursing 18(1):12-6
[73] Health Survey England (2014): VOL 1 | CHAPTER 4: HEARING. The Health and Social Care Information Centre. Available at: http://www.hscic.gov.uk/catalogue/PUB19295/HSE2014-ch4-hear.pdf; Perez E and Edmonds BA (2012) A Systematic Review of Studies Measuring and Reporting Hearing Aid Usage in Older Adults since 1999: A Descriptive Summary of Measurement Tools. PLoS ONE 7(3), e31831; European Hearing Instrument Manufacturers Association (2015) Eurotrak Survey 2015; Davis and Smith (2013) Adult hearing screening: health policy issues--what happens next? Am J Audiol. 22(1):167-70.

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				A universal screening programme for hearing loss would identify and help those who would benefit from hearing aids and other rehabilitation sooner. It would also offer reassurance to those with unimpaired hearing, and would help inform the public at large about the disabling effects of hearing loss and the effectiveness of interventions. Moreover, its long term benefits to social well-being and health make it cost effective: a recent independent analysis found that screening at the age of 65 would be most cost-effective, with an estimated benefit-cost ratio of 8:1 over 10 years.[75] In 2015, Action on Hearing Loss, in partnership with a number of charities, submitted a consultation response to the National Screening Committee (NSC) for the introduction of a hearing screening programme for adults. However, in 2016 the NSC, announced its decision on not to support a hearing screening programme, on the basis that there was a lack of evidence, particularly from a randomised controlled trial (RCT). The NSC has stated: *"Further research in the UK is required before screening can be recommended in the UK. It has*	

[74] Davis A, Smith P, Ferguson M, Stephens D, Gianopoulos I. (2007) Acceptability, benefit and costs of early screening for hearing disability: A study of potential screening tests and models. Health Technology Assessment, 11(42):1-294

[75] Action on Hearing Loss. (2010). Cost benefit analysis of hearing screening for older people. London: Action on Hearing Loss. Available at http://www.hearingscreening.org.uk/#!publications/cee5

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				been suggested that a large scale Randomised Controlled Trial (RCT) of screening for hearing impairment 35+ dB hearing impairment or poorer should be undertaken within the 55 – 74 age group".[76] A RCT investigating screening for hearing loss among adults will provide the evidence required to meet the criteria set by the NSC. And could potentially lead to the introduction of adult hearing screening, improving health and wellbeing, reducing social isolation, keeping people in work longer, increasing awareness of hearing loss, reducing the stigma around hearing loss and normalising help seeking. The Action Plan on Hearing Loss also commits to Public Health England (PHE) to continue to periodically review the evidence for screening hearing loss in older adults against the NSC criteria.[77] **We therefore urge the NICE guideline committee to include a RCT on screening adults for hearing loss as a research recommendation.** Furthermore, recent evidence from the Lancet Commission (2017) identifies hearing loss as the largest modifiable risk factor for dementia.[78] Cohort studies investigating hearing have shown that even mild levels of hearing loss can increase the long-term risk of cognitive decline and dementia in individuals	

[76] UK National Screening Committee (2015) Screening for Hearing Loss in Older Adults: External review against programme appraisal criteria for the UK National Screening Committee (UK NSC). London: UK National Screening Committee.
[77] NHS England and Department of Health (2015) Action Plan on Hearing Loss. London: NHS England and Department of Health. Available at: https://www.england.nhs.uk/wp-content/uploads/2015/03/act-plan-hearing-loss-upd.pdf
[78] Livingston G, Sommerlad A, Orgeta V, et al (2017) Dementia prevention, intervention, and care. The Lancet.16;390(10113):2673-2734. doi: 10.1016/S0140-6736(17)31363-6

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				who are cognitively intact but hearing impaired at baseline.[79] In light of this evidence, it is important that all adults with diagnosed or suspected dementia or mild cognitive impairment are referred to an audiology service for a hearing assessment. Hearing loss is identified as a mid-life modifiable risk factor for dementia, with 55 years being the youngest mean age in which the presence of hearing loss is shown to increase dementia risk.[78] Evidence also shows that the ability to maintain and adapt to hearing aids becomes increasingly difficult the older people are when they present for assessment and intervention.[80] Considering, hearing loss and dementia often co-occur and are particularly difficult to manage when they are experienced together, this suggests that there is significant benefit in ensuring that hearing loss is identified early, so that people can adapt before the onset or progression of dementia. **The diagnosis of dementia must therefore include hearing screening.** Currently the NICE guidelines on Dementia (2006) diagnosis and assessment state	

[79] Deal JA, et al (2017) Hearing impairment and incident dementia and cognitive decline in older adults: the Health ABC Study. J Gerontol A Biol Sci Med Sci. 72(5): 703–709; Lin FR, et al (2011) Hearing loss and incident dementia. Arch Neurol, 68: 214–20; Gallacher J, Ilubaera V, Ben-Shlomo Y, et al (2012) Auditory threshold, phonologic demand, and incident dementia. Neurology, 79: 1583–90; Lin FR, Ferrucci L, Metter EJ, et al (2011) Hearing loss and cognition in the Baltimore Longitudinal Study of Aging. Neuropsychology, 25: 763–70; Lin FR (2011) Hearing loss and cognition among older adults in the United States. J Gerontol A Biol Sci Med Sci, 66:1131–36; Deal JA, Sharrett AR, Albert MS, et al (2015) Hearing impairment and cognitive decline: a pilot study conducted within the atherosclerosis risk in communities neurocognitive study. Am J Epidemiology, 181: 680–90; Kiely KM, Gopinath B, Mitchell P, et al (2012) Cognitive, health, and sociodemographic predictors of longitudinal decline in hearing acuity among older adults. J Gerontol A Biol Sci Med Sci, 67: 997–1003; Fritze T, Teipel S, Óvári A, et al (2016) Hearing impairment affects dementia incidence. An analysis based on longitudinal health claims data in Germany. PLoS One, 11: e0156876; Gurgel RK, Ward PD, Schwartz S, et al (2014) Relationship of hearing loss and dementia: a prospective, population-based study. Otol Neurotol, 35: 775–81; Amieva H, Ouvrard C, Giulioli C, et al (2015) Self-reported hearing loss, hearing aids, and cognitive decline in elderly adults: a 25-Year Study. J Am Geriatr Soc, 63: 2099–104.

[80] Davis A, Smith P, Ferguson M, Stephens D, and Gianopoulos I (2007) Acceptability, benefit and costs of early screening for hearing disability: a study of potential screening tests and models". Health Technology Assessment.11(42). doi:10.3310/hta11420.

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				that diagnosis of dementia should be made only after a comprehensive assessment, including a physical examination, however it is unclear what a physical examination should consist of.[81] The BMJ best practice, a Clinical Decision Support Tool for healthcare professionals' states that for the assessment of dementia, a physical examination should be undertaken and this should include a hearing test.[82] Although the NICE guidelines on Dementia (2006) states in section 1.4.1.3 that those interpreting test scores should take full account of other factors known to affect performance including any sensory impairments, **section 1.4.1.1 should also explicitly state that hearing screening should be included as part of the assessment process for the diagnosis of dementia.**[9]	
Action on Hearing Loss	Full & Short	General	General	**We recommend that the NICE guideline for hearing loss is included within the RCGP curriculum as well as the Action Plan on Hearing Loss and the Commissioning Framework for Adult Hearing Loss Services to provide GPs with more information about the impacts of hearing loss; the benefits of addressing hearing loss early and accessing support and management that is available on the NHS.** The standard of training and education of GPs is monitored by the General Medical Council (GMC), and the curriculum and assessment are developed by RCGP, but the content of GP training is determined locally by individual Deaneries, Local Education, and	**Thank you for your comments. GPs should be aware of NICE guidelines where they impact on their practice.**

[81] NICE (2006). Dementia: supporting people with dementia and their carers in health and social care. Clinical guideline [CG42]. Available at: https://www.nice.org.uk/guidance/cg42
[82] Tampi R, et al. (2017) Assessment of dementia. BMJ Best Practice. Available at: http://bestpractice.bmj.com/topics/en-gb/242

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				Training Boards, and so varies across the UK. The RCGP curriculum for the 'Care of People with ENT, Oral and Facial Problems' gives examples of how to apply the competencies a GP needs to have to cases of people with hearing loss. For example, it states that doctors should ensure they can communicate with the patient, that they should "appreciate the impact of hearing loss on quality of life", including its "isolating effect", and that they should find out and gain experience of the services available for people with hearing loss.[83] However, GPs may have little specific training on diagnosing and managing hearing loss, and they may not know the latest research, such as on the link between hearing loss and dementia. The RCGP curriculum provides very little detail in these areas, and apart from a link to ENT UK and a link to a website with one e-learning module, it does not reference any other information or guidance.	
Action on Hearing Loss	Full & Short	General	General	The draft guideline does not take into account the use of emerging technology such as self-fitting and remote fitting hearing aids and tele-audiology which are suitable for some individuals with non-complex hearing loss. **This should be added into the 'other considerations' section for monitoring and follow up as well as whether such methods are effective as follow ups for people with hearing loss.**	**Thank you for your comment. We have added the following text to the 'other considerations' section as you suggested: "The committee is aware that there are emerging technologies such as self-fitting and remote fitting hearing aids and tele-audiology which are suitable for some individuals with non-complex hearing loss. However, no evidence to support making a recommendation on their use was found."**

[83] RCGP. (2015). RCGP Curriculum: Professional and Clinical Modules. Available at: www.rcgp.org.uk/~/media/Files/GP-training-and-exams/Curriculum-2012/RCGP-Curriculum-3-15-ENT-Oral-and-Facial-Problems.ashx

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Action on Hearing Loss	Full & Short	General	General	As mentioned in comment 2 early identification and management of hearing loss is crucial in tackling the growing public health challenge of hearing loss. **To target those who are at high risk of hearing loss the guideline should recommend hearing assessments to be undertaken as part of the following:** • **Health assessment for older adults** • **Falls risk assessment** • **Assessment after stroke** • **Diagnosis of dementia**	**Thank you for your comment. We have recommended that everyone with dementia should be routinely assessed for hearing loss. The other issues are unfortunately outside of the scope of this guideline, and would need to be considered by those preparing or updating guidance for the respective conditions.**
Action on Hearing Loss	Full & Short	General	General	**We welcome mention of how hearing loss affects employment prospects, as outlined in the guidelines introduction. However, we recommend that more emphasis is given to the link between hearing loss and employment in the guidelines.** Doing so would usefully reinforce the government's message in the recent command paper *'Improving Lives: The Future of Work, Health and Disability'*, that health care professionals are: *"Trusted advocates [that] help set the expectations that disabled people and people with long-term health conditions have about themselves, and support them to manage their conditions; minimising the risk of this being a barrier to work."*[84] The Improving Lives command paper asserts that CCGs and healthcare professionals should include	**Thank you for your comment. Additional comment has been added to the information and support chapter to draw attention to this group of individuals.**

[84] Department for Work and Pensions and Department of Health and Social Care. (2017). Improving Lives: the Future of Work, Health and Disability. Available at: www.gov.uk/government/uploads/system/uploads/attachment_data/file/663399/improving-lives-the-future-of-work-health-and-disability.PDF

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				work as a health outcome and that work outcomes should be incentivised. **The guideline should recommend the promotion of work as a health outcome. It should also be highlighted (as is also outlined in the Improving Lives paper) that CCGs and local authorities include employment when developing JSNA and health and wellbeing strategies.** **We recommend that the guidelines include the link between hearing support (including hearing aids) and employment.** There is good evidence that hearing aids and other equipment to improve hearing, can lead to improved employment prospects, in addition to improving quality of life, social activity and mental health.[85] Moreover, there is evidence that those without aided hearing, experience higher rates of unemployment and may experience an overall reduction in quality of life (i.e. anxiety, depression, social isolation) which may negatively impact job performance.[86] The Improving Lives paper highlighted that responses to the consultation noted a lack of conversations and collaboration between GPs, employers, other healthcare professionals, and Jobcentre Plus. The command paper therefore outlines commitments that the government has made to promote further inter-agency working, which the	

[85] Kochkin S. (2007) The Impact of Untreated Hearing Loss on Household Income. Alexandria VA: Better Hearing Institute; Mulrow et al (1990) Quality-of-life changes and hearing impairment, a randomized trial". Annals of Internal Medicine 113(3): 188-94; National Council on the Aging. 2000. "The consequences of untreated hearing loss in older persons. Head & Neck Nursing 18(1):12-6

[86] Kochkin S. (2005). The impact of untreated hearing loss on household income. Better Hearing Institute

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				NICE guidelines should promote. For example, the government have committed to doubling the number of Work and Health Champions – occupational therapists trained to deliver work and health tools and techniques to healthcare professionals.[87]	
Action on Hearing Loss	Full & Short	General	General	**The guideline should include more information about the advantages of lip-reading classes, in order that commissioners consider this solution when commissioning services**. Lip-reading classes teach people with hearing loss to recognise lip shapes and patterns and how to use context and facial expressions to help them make sense of conversations. Lip-reading classes also provide information and advice on assistive technology and other services that can help people with hearing loss. They also provide an opportunity for people with hearing loss to meet, support each other and share their experiences. Action on Hearing Loss's *'Not Just Lip Service'* [88] report identified a range of benefits lip-reading classes can bring for people with hearing loss, such as: • Improvements in people's ability to recognise lip shapes and patterns and a better understanding of communication skills to	**Thank you for your comment. We have not looked at evidence underpinning lip reading but we have suggested involvement of other organisations which may resolve these issues.**

[87] Department for Work and Pensions and Department of Health and Social Care. (2017). Improving Lives: the Future of Work, Health and Disability. Available at: www.gov.uk/government/uploads/system/uploads/attachment_data/file/663399/improving-lives-the-future-of-work-health-and-disability.PDF

[88] Ringham L. (2013). Not Just Lip Service. London: Action on Hearing Loss. Available at: https://www.actiononhearingloss.org.uk/how-we-help/information-and-resources/publications/research-reports/not-just-lip-report/

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				help people understand speech. • Increased confidence and assertiveness in talking to others about their hearing loss and asking them to change their behaviour to facilitate good communication. • Feeling less negative about their hearing loss and being able to manage their hearing loss better in social situations and in the workplace. Action on Hearing Loss was also funded by the Department of Business, Innovation and Skills (BIS) to test out innovative ways of delivering lip-reading classes for working age people with hearing loss. The project found that online resources can improve access to information on lip-reading and face-to-face interactions through workshops, and have an important role to play in encouraging people to seek help for their hearing loss.[89]	
Action on Hearing Loss	Full & Short	General	General	We welcome that hearing loss is increasingly being recognised as a national priority within the UK. This is demonstrated by the Government's Action Plan on Hearing Loss, NHS England's Commissioning Framework for Adult Hearing Loss Services and now the draft NICE guideline for adult hearing loss. Although NICE guidelines cover health and care in England only, recommendations within this guideline should also be considered by health and care	**Thank you for your comment.** **We hope this guideline will be considered alongside the other publications you cite.** **The committee agrees staff delivering care to people with hearing loss should have the qualifications and training to do so.** **The committee acknowledges that support for implementation of the guidance is very important. Your comments will be considered**

[89] Arrowsmith L. (2016). Managing hearing loss when seeking or in employment report. London: Action on Hearing Loss. Available at: https://www.actiononhearingloss.org.uk/how-we-help/information-and-resources/publications/research-reports/managing-hearing-loss-when-seeking-or-in-employment-report/

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				services in Wales, Scotland and Northern Ireland to reduce health inequalities across the UK. Recently hearing loss was recognised as a global health issue by the World Health Assembly (WHA), which approved and adopted a resolution to intensify action to prevent deafness and hearing loss.[90] The resolution calls upon governments to integrate strategies for ear and hearing care within the Framework of their primary health care systems, implement prevention and screening programmes for high-risk populations, establish training programmes for health workers, and improve access to high-quality cost-effective assistive hearing technologies and products.[90] The World Health Organisation (WHO) are planning to produce a global report on hearing and provide support to countries to help them reduce hearing loss.[90] As the draft guidelines have come at a critical time when we have seen budget cuts to hearing aid services and proposals to cut provision of hearing aids; **it is imperative that the guidelines are disseminated and used widely to help reduce the local variation in access and quality of hearing aid services across the UK.** The guidelines should not be used in isolation, but should be used in conjunction with the Commissioning Framework for Adult Hearing Loss Services. Audiology services should work with their local CCGs and local authorities to help ensure that money is invested	**by NICE where relevant support activity is being planned.** **We appreciate this is a developing field with new technologies being developed and it is hoped these may be reviewed in future updates of this guideline.**

[90] World Health Organization. (2018). Seventieth World Health Assembly update, 30 May 2017. Available at: http://www.who.int/mediacentre/news/releases/2017/vector-control-ncds-cancer/en/

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				properly; services are more cost effective; more integrated; person-centred and people are easily able to access a range of high quality audiology care and support locally. The draft guidelines have highlighted that primary, secondary and tertiary staff working with people with hearing loss need to be properly trained and equipped to recognise the signs of hearing loss, to help ensure that those with hearing loss get the right support they need at the right time. **It is important that this is recognised and steps are taken to ensure that this is incorporated into the training of primary, secondary and tertiary staff, who have the information, incentives, training and screening tools they need to recognise hearing loss – and encourage people with hearing loss to seek help.** The Action Plan on Hearing Loss states that *"hearing loss is not just a health issue- it is societal and requires an integrated approach across a range if Government departments, non-departmental, public bodies and stakeholder organisations across the public, private and third sectors, including children, young people and adults with hearing loss themselves."* **It is imperative that NHS England, PHE, Department of Health, other Government departments, key stakeholders across the voluntary, professional, private sectors and people with hearing loss continue to collaborate to ensure that the objectives of the Action Plan on Hearing Loss are being worked towards and met; the Commissioning Framework for Adult Hearing Loss Services and the NICE guidelines**	

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				for hearing loss is promoted, implemented and used effectively in local CCG areas. **We urge NICE to promote and support the implementation of the guidelines, through producing resources and providing practical support for users.** Whilst we very much welcome the NICE guidelines on Hearing Loss for adults, it is important to note that the guidelines serve for the now and do not take into consideration the rapidly changing landscape of technology and the inevitable and significant changes that will occur in the delivery of audiology and social care services. Throughout the health and social care sector, there has been an increasing use of innovative digital technology, such as m-health, e-health and telehealth/medicine. Specifically, within audiology, we have seen trials of self-fitting hearing aids, remote fitting hearing aids and telehealth.[91] In addition to this, hearing aids have become better connected with other devices, such as mobile phones through Bluetooth, and many now can connect to apps that allow better self-control of the devices. Assistive listening devices are better designed through streamers and apps to improve access to speech and help individuals communicate. The draft guidelines make little or no reference to these changes and therefore, some sections could soon be	

[91] Convery E, Keidser G, Seeto M, McLelland M. (2016). Evaluation of the Self-Fitting Process with a Commercially Available Hearing Aid. Journal of American Academy of Audiology; Davis A, Smith P, Ferguson M, Stephens D, Gianopoulos I. (2007). Acceptability, benefit and costs of early screening for hearing disability: a study of potential screening tests and models. Health Technology Assessment, 11(42):1-294.

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				considered as redundant and not relevant. **It is therefore recommended that the draft guideline states that changes in technology and service provision should be monitored; services should be encouraged to innovate, trial and research effectiveness of new technologies devices and delivery of services. A review of the NICE guidelines for hearing loss should be agreed by the committee to ensure the latest developments are incorporated.**	
Action on Hearing Loss	Full	130	General	**We welcome that the guideline states in section 10.3.4 that wax removal services should be encouraged in primary and community care settings as long as there are health professionals trained to carry out the procedure and the right equipment available.** Anecdotally, we have heard reports of there being confusion about what wax removal services are available locally and what is most suitable for an individual needing to get their wax removed. We have received reports of limited or no access within primary care to wax removal services. However, as the guideline states this may be due to confusion about ear syringing, which is no longer recommended as a procedure and individuals not receiving information about other wax removal services available.	**Thank you for your comment. We have amended the recommendations to make this clear.**
Action on Hearing Loss	Full	130-131	General	**We welcome that the guideline states in section 10.3.4 that *"referring people to ENT services for simple cases of wax removal would not be an appropriate use of ENT resources"* but that clear criteria for accessing microsuction services**	**Thank you for your comment. The committee has recommended that ear irrigation using various methods depending on what is available locally, should be provided by primary and community services. This would**

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				should be developed. This is an important recommendation and should be highlighted, since**,** worryingly, we have been informed of several CCGs proposing to stop providing microsuction services. Which could be due to too many people being referred inappropriately for microsuction, when they would benefit from wax removal in primary care as a non-complex wax case. A clear criteria would help overcome this challenge. In January 2017, Wirral and Cheshire CCG proposed to stop providing microsuction services in ENT because too many people were being referred into the service. After consultation with Action on Hearing Loss and other stakeholders, they decided not to go ahead with the proposals and instead introduce a clear criteria for accessing the service for those who have contraindications for wax removal in primary care. This included allowing people to access the service if other methods of ear wax removal had not been successful. The criteria was agreed by the CCG's governing body. We therefore welcome that the guideline provides a criteria which highlights contraindications that would lead to someone being referred into secondary care for microsuction. The Commissioning Framework for Adult Hearing Loss Services states that wax is a cause of temporary hearing loss and that *"it is very important that a clear local pathway is developed and understood to deal with ear wax before audiological assessment is undertaken, as visits to audiology, prior to wax being checked and removed, are a significant source of inappropriate referrals".*	**include microsuction if the equipment is available and staff trained in this procedure. How services are delivered is determined locally and beyond the scope of this guideline, but guidance has been provided on when people should be referred to ENT if ear wax removal has been unsuccessful or there are contraindications.**

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				Question 3: To help users overcome challenges we recommend that clear local information is provided on what wax removal services are available as well as what may be the most appropriate for an individual wanting to access wax removal services; this should help to mitigate confusion for someone trying to access wax removal services in their area and reduce repeat appointments with the GP, ENT and audiology. A key element is ensuring that GPs and nurses in primary care are well informed about the importance of wax removal for hearing aid users and people attending audiology appointments. In addition, users should refer to the Commissioning Framework for Adult Hearing Loss Services, which clearly demonstrates that individuals should be checked at primary care for wax before someone accesses audiology, and should also be checked by audiologists periodically along the audiology pathway. The Framework includes a case study of Coventry and Rugby CCG where the service was redesigned to introduce direct access hearing care services for people aged 19+. This removed the need to see a GP for referral and also removed the current restrictions as detailed within the AQP implementation pack and ENT acute outpatients' appointments. The service included wax removal, which was previously available in the acute service, and has effective outcomes measures, improves patient experience and enables acute, and community services to operate alongside each other. Many audiology services are training audiologists to carry out wax removal in clinics, which is not only more convenient for individuals receiving care, but also helps mitigate the issues of wax removal services being removed from primary care.	

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Action on Hearing Loss	Full	132	20-22	**We welcome that the question *"what is the most clinically and cost effective treatment for idiopathic sudden sensorineural hearing loss (SSNHL)?"* has been reviewed within the guideline.** Whilst it is recommended that sudden onset hearing loss requires urgent assessment, the committee highlights the fact that hearing aid use, audiological rehabilitation and overall management strategies were not considered within this review, which are all very important factors that need to be considered when treating someone with SSNHL. **Question 3:** The Commissioning Framework for Adult Hearing Loss Services[92] lists sudden deterioration and onset (sudden = 72 hours) as one of the contraindications for routine adult hearing aid services. The Framework recommends that 'the definition and service pathway should be made available to service users and referrers to support service users to access the most appropriate service. Complex services should include a clear basis on which service users are returned into the non-specialist care pathway and can benefit fully from the choices available. On a local level, CCGs should work with their audiology, ENT and social care services to develop clear pathways for both routine and non-routine (complex) cases. There are likely to be some cases that require special management and support for their hearing loss and CCGs should	**Thank you for your comment. We agree that the rehabilitation required after a sudden hearing loss is very important and also highly specialised if the loss is permanent and substantial. Unfortunately we were unable to cover all aspects of care and this was not identified as a priority area to review.**

[92] NHS England, Office of the Chief Scientific Officer. (2016). Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups. London: NHS England. Available at: https://www.england.nhs.uk/wp-content/uploads/2016/07/HLCF.pdf

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				encourage services to use evidence and good practice guidance, including case study examples to help ensure that services are delivering the best care they can for all that access the service.	
Action on Hearing Loss	Full	170 - 177	General	**Information, support and advice given to adults with hearing loss, and their families and carers should also include information about social care. Please refer to comment 8.**	**Thank you for your comment. The recommendations provide general principles when providing information and support to people with hearing loss rather than the content of what information should be provided, as this would vary according to individual needs. Cross refererence has been made to the Patient Experience guideline which includes a recommendation on informing the person about both health and social care services that are available. A recommendation has also been made to provide information about organisations such as social care who can provide further information about assistive listeming devices.**
Action on Hearing Loss	Full	18	3-27	**This section should include the wider costs of hearing loss. The economic burden of hearing loss consist of factors wider than solely the costs related to unemployment, it also includes the costs related to the use of health and social care services and the monetary value of the lost quality of life.** Findings from The Ear Foundation (2014) show the financial cost of hearing loss to society to be approximately £136 million per annum in 2013, this includes approximately £76 million per annum associated with additional use of GP services and	**Thank you for your comment. We agree that there are a wide range of economic impacts of hearing loss. We have added additional comments into this section.**

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				£60 million associated with additional use of social care services. Furthermore the report estimates the net burden of illness in terms of reduced quality of life associated with hearing impairment to be approximately £26 billion in 2013.[93]	
Action on Hearing Loss	Full	18	34	**The statement that the AQP (any qualified provider) scheme means that people have choice of services is misleading.** Although the AQP scheme was introduced by the Government to extend patient choice, in reality this has not always been the consequence. In some parts of England, such as North Staffordshire, the AQP policy has led to a single provider, resulting in a lack of choice for patients.[94] Furthermore, findings from Monitor's research on NHS adult hearing services in England[95] found lack of awareness of choice among patients, with fewer than one in four respondents surveyed who said that they were aware that they could choose their provider before visiting their GP. The research also showed that very few patients were offered choice by their GPs at the point of referral. Interviews conducted with GPs suggested that GP knowledge of providers and service quality was extremely limited. Some GPs reported that they were unaware that commissioners have introduced choice, and that patients are entitled to choose their provider. The interviews also suggested that some GPs are often unable to identify most providers in the area.	**Thank you for your comment.**

[93] Archbold S, Lamb B, O'Neill C, Atkins J. (2014). The Real Cost of Adult Hearing Loss: reducing its impact by increasing access to the latest hearing technologies. The Ear Foundation.
[94] North Staffordshire Clinical Commissioning Group. (2017). Request for information under the Freedom of Information Act 2000
[95] Monitor. (2015). NHS adult hearing services in England: exploring how choice is working for patients. London: Monitor

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Action on Hearing Loss	Full	18	39-42	**The recommendation not to use pure tone audiometry classifications as the sole determinant for hearing support provision is welcomed.** **Question 1:** This recommendation may be perceived as a challenge by CCGs who wish to make cost savings. And is particularly significant in light of the proposals made by several CCGs across the country to decommission hearing aids for people with mild and moderate hearing loss, despite the extensive clinical evidence, professional opinion and national policy prioritising hearing loss, as detailed in comment 6. Under these proposals people with mild hearing loss would not receive hearing aids, and those with moderate hearing loss would need to undergo an eligibility test. The effects of "mild" and "moderate" impairments on someone's hearing can often be underestimated in terms of the impact that this will have on the individual's ability to communicate in real life situations. A high proportion of vowels and consonants are lost with mild and moderate hearing loss, making speech unclear and difficult to understand. Given that a typical conversation is heard around 60dBHL,[96] someone with a mild hearing loss will hear speech at a much reduced volume, which may sound like a whisper, and someone with moderate hearing loss will barely hear	**Thank you for your comment. The committee agree and have amended the recommendations to say that all adults with difficulties in communicating and hearing should be offered a hearing aid.**

[96] American Speech Language Hearing Association. (2014). Making effective communication, a human right, accessible and achievable for all. Available at: http://www.asha.org/public/hearing/noise/

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				what is being said even in a quiet situation. Where there is background noise this will make hearing even more difficult, and often impossible. Hearing aids provide amplification of sounds, making lost speech and environmental sounds audible without making them uncomfortably loud to the wearer. Although audiometry is a vital part of a hearing assessment, it is only a measure of hearing sensitivity and is not the only factor that should be used to determine the management and rehabilitation of someone with a hearing loss; including the provision of hearing aids. As well as the level of a person's hearing loss, there are a range of other factors (auditory and otherwise) involved in the clinical assessment that determine appropriateness of hearing aid provision, requiring case-by-case, patient-centred judgement. **Question 3:** To help CCGs overcome challenges they should follow national strategy and guidance detailed in comment 6.	
Action on Hearing Loss	Full	185	General	**We welcome that the committee *"discussed the importance of having validated tool to support the decision-making process"* within audiology appointments.** The guideline states that some *"decision tools were being marketed for use in the field of hearing loss but noted that these tools have not been validated for this particular use and this specific patient group and therefore may not be fit for purpose."* The Hearing Handicap Inventory for the Elderly (HHIE-S), is a 10-item questionnaire that examines	**Thank you for your comment. We hope the recommendations further highlight the issues you mention and help to provide better outcomes for people with hearing loss.**

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				the socio-emotional needs of a person, and has been used for nearly 30 years to monitor and research the impact that hearing loss has on people, and to ensure that support provided is helping them. HHIE-S has been used as a screening tool for hearing loss, but it does not tell the clinician if the patient would benefit from a hearing aid. Someone with a mild hearing loss might have a severe impact recorded on the HHIE-S, and someone with severe hearing loss might have a mild impact – but that does not determine whether they would benefit from a hearing aid. This is the job of the audiologist's assessment and audiogram that they undertake with the patient, so these should be used instead. HHIE-S has never been used as an eligibility 'test' for hearing aid provision or audiology services before. North Staffordshire CCG implemented the use of the HHIE-S as an eligibility test for hearing aids, but it is unclear in practice how it is being used. It is likely an individual will be asked to complete the questions themselves before their audiology appointment, at their GP surgery, either by letter, or in the waiting room. For people who have moderate hearing loss, this self-assessment, and not the assessment with the audiologist, will then be used to determine whether they get hearing aids. The HHIE-S test has limitations as some of the questions will not be applicable to everyone and therefore would be unfair if determining eligibility for a treatment – if someone is living alone they may not notice if they turn up the TV or radio, or have arguments with family members. There are also wider impacts than these 10 questions can cover – for example on a person's family. Many	

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				people will not want to admit that they have these problems, and because of this, they will not be given the hearing aids that they need. Some of these questions will reinforce stigma, and it is also unethical for professionals not to inform patients of the implications of the test beforehand. **The challenge will therefore be ensuring that both audiologists and CCGs are educated in which tools are validated for use in audiology appointments.**	
Action on Hearing Loss	Full	19	3-5	This section acknowledges that in some areas of the country some adults are offered one hearing aid rather than two. Although, several factors need to be taken into account when deciding to fit one or two hearing aids, such as degree of hearing loss, lifestyle and individual preference, this section should highlight that issuing only one hearing aid to anyone whose hearing loss affects their communication that could benefit from two, or denying NHS hearing aids for hearing loss described as mild and moderate, is bad practice. Hearing aids are the only viable treatment option for mild and moderate hearing loss,[97] and evidence, including randomised controlled trials and systematic reviews, show the benefits of hearing aids for people with mild and moderate hearing loss, including improved communication, mental health, quality of life, and an increased ability to stay in work.[98] Research also shows that	**Thank you for your comment. This has been stated in the Linking evidence to recommendations section in the hearing aids chapter.**

[97] Chisolm TH, Johnson CE, Danhauer JL, et al. (2007). A systematic review of health-related quality of life and hearing aids: Final report of the American Academy of Audiology task force on the health-related quality of life benefits of amplification in adults. Journal of American Academy of Audiology 18:151-83

[98] Yueh B, Souza PE, McDowell JA, et al. (2001). Randomized trial of amplification strategies. Archives of Otolaryngology Head & Neck Surgery,127(10):1197-204; Cacciatore F, Napoli C, Abete P, et al. (1999). Quality of life determinants and hearing function in an elderly population: Osservatorio Geriatrico Campano Study Group. Gerontology 45:323-323; Mulrow CD, Aguilar

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				patients whose hearing is deteriorating with age find it easier to adapt to hearing aids and gain greater benefits the earlier they are fitted,[99] so it is important that people are given hearing aids when they have mild hearing loss. Without hearing aids, mild and moderate hearing loss lead to communication difficulties and are shown to lead to social isolation, which poses serious risks to mental health.[100] Research shows that mild and moderate hearing loss significantly increase the risk of developing depression, anxiety and other mental health issues. Despite the extensive clinical evidence, professional opinion and national policy prioritising hearing loss, CCGs across the country still continue to propose restrictions on hearing aid provision for people with mild and moderate hearing loss. Please refer to comment 6. **The section should also highlight that offering two hearing aids to adults with hearing loss in both ears is best practice. Please refer to comment 7**.	
Action on Hearing Loss	Full	193	General	**We welcome that the guideline states that "*it is a legal requirement for provision to be made such that those with a disability have equality of***	**Thank you for your suggestion. Unfortunately we are limited in the number of research recommendations we are able to suggest. We**

C, Endicott JE, et al. (1990). Quality-of-life changes and hearing impairment. A randomized trial. Annals of Internal Medicine, 113(3):188-94; Chisolm TH, Johnson CE, Danhauer JL, et al. (2007). A systematic review of health-related quality of life and hearing aids: Final report of the American Academy of Audiology task force on the health-related quality of life benefits of amplification in adults. Journal of American Academy of Audiology 18:151-83; Kochkin S. (2005) The impact of untreated hearing loss on household income. Better Hearing Institute; Matthews. (2011). Unlimited potential: a research report into hearing loss in the workplace. London: Action on Hearing Loss

[99] Davis A, Smith P, Ferguson M, et al. (2007). Acceptability, benefit and costs of early screening for hearing disability: A study of potential screening tests and models. Health Technology Assessment, 11:1–294

[100] Gopinath B, Hickson L, Schneider J, et al. (2012). Hearing-impaired adults are at increased risk of experiencing emotional distress and social engagement restrictions five years later. Age and Ageing, 41(5):618–623; Pronk M, Deeg DJ, Smits C, et al. (2011). Prospective effects of hearing status on loneliness and depression in older persons: identification of subgroups. International Journal of Audiology, 50(12):887-96

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				access to medical services, where possible, and consequently loop systems are generally provided in hospital reception areas". In England, all providers of NHS or publicly funded adult social care must meet the legal requirements of the Accessible Information Standard.[101] **Question 1:** This recommendation may be challenging to implement, since evidence from our '*Under Pressure'* report[102] shows that people who are deaf or who have hearing loss might not know that these services are available, and referral routes are often underutilised. These findings are consistent with patient survey results from Monitor's report on NHS adult hearing services in England,[103] which showed that only one in ten respondents surveyed said that they were provided information about additional services and equipment. Providers who were interviewed stated that it is difficult to identify all the other services which are available locally, and that significant investment is needed to build awareness and knowledge of those services. As stated in the full guideline, at present *"liaison between health and social services does not happen routinely and, as a consequence, services are not joined up".* As discussed in comment 54, technology is developing rapidly and the NICE guidelines for hearing loss should take this into consideration. **We**	**are unable to make recommendations such as you suggest but hope that local services will understand that working together for people with hearing loss is important.**

[101] NHS England (2017). Accessible Information Standard. DCB 1605. To find out more, please visit www.england.nhs.uk/accessibleinfo
[102] Lowe C. (2015). Under Pressure. London: Action on Hearing Loss. Available from: https://www.actiononhearingloss.org.uk/how-we-help/information-and-resources/publications/research-reports/under-pressure-report/
[103] Monitor. (2015). NHS adult hearing services in England: exploring how choice is working for patients. London: Monitor

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				recommend adding a research question to "monitor changes in traditional hardware based assistive devices to newer software based solutions in the form of apps on smartphones/tablets." **Question 3:** Action on Hearing Loss has developed some simple steps for GP practices, hospital and other urgent and emergency care services and social care services[104] to help make them more accessible to people with hearing loss and deafness. A recent review of the Accessible Information Standard has found that more work is required to ensure people who are deaf or have hearing loss realise the full benefits of good communication, specifically with regards to hearing loop systems.[105] The review also sets out the implications of the findings for people with hearing loss and our recommendations for future work. We have also developed a nursing practice toolkit for NHS Hospital Trusts, to ensure people with hearing loss receive high quality care in hospitals. The toolkit provides recommendations and resources, based on the findings from our research undertaken in a hospital elderly care assessment unit.[106] Furthermore, our '*Access all Areas'* report[107] shows that, after attending an appointment with their GP,	

[104] Actiononhearingloss.org.uk. (2018). Accessible Information Standard. Available at: https://www.actiononhearingloss.org.uk/how-we-help/health-and-social-care-professionals/standards-for-accessible-information-and-communication/accessible-information-standard/
[105] Actiononhearingloss.org.uk. (2018). NHS England's Accessible Information Standard review. Available at: https://www.actiononhearingloss.org.uk/how-we-help/information-and-resources/publications/consultation-responses/health-and-social-care/nhs-england-accessible-information-standard-review/
[106] Action on Hearing Loss and Heart of England NHS Foundation Trust. (2014). Caring For Older People with Hearing Loss. A toolkit for change. London: Action on Hearing Loss
[107] Ringham L. (2013). Access All Areas. A report into the experiences of people with hearing loss when accessing healthcare. London: Action on Hearing Loss. https://www.actiononhearingloss.org.uk/how-we-help/information-and-resources/publications/research-reports/access-all-areas-report/

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				more than a quarter of survey respondents (28%) had been unclear about their diagnosis and over a third (35%) said loop systems were not available. The report recommends GP practices to extend the use of technology that can help improve patient experience for people with hearing loss, such as visual display screens in waiting rooms and induction loop or infrared systems. Our '*A World of Silence*'[108] report also shows that staff in care homes are often unaware of the technology that could help people with hearing loss communicate, such as hearing loops, amplified telephones and personal listeners. The report makes recommendations for carers to help people in care homes with unaddressed and diagnosed hearing loss and improve the quality of care they receive.[109] **As detailed in comment 8 an additional recommendation should be added to this section to encourage audiology services and local authorities to work together to help people who are deaf or have hearing loss access assistive equipment.** Assistive equipment (usually provided by local authority sensory services) can help people who are deaf or have hearing loss communicate well and live safely and independently in their own home, and manage their condition more effectively.	
Action on Hearing Loss	Full	193	General	**We welcome that the guideline recognises that *"liaison between health and social care services***	**Thank you for your comment. We have not seen the JSNA guidance that you refer to and**

[108] Echalier M. (2012). A World of Silence. The case for tackling hearing loss in care homes. London: Action on Hearing Loss. Available from: http://www.actiononhearingloss.org.uk/-/media/ahl/documents/research-and-policy/reports/care-home-report.pdf

[109] Actiononhearingloss.org.uk. (2018). Guidance for residential care homes. Available at: https://www.actiononhearingloss.org.uk/how-we-help/health-and-social-care-professionals/guidance-for-residential-care-homes/

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				does not happen routinely and, as a consequence, services are not joined up". It is vital that NHS audiology services and local authorities work together to ensure that social care services for people with hearing loss can be accessed by all people that need it. The Commissioning Framework for Adult Hearing Loss Services [110] states that *"commissioners should be open to new ideas about how to meet needs and deliver services wherever they come from, including working closely with other parts of the health and social care system".* **Question 3:** Users should refer to the JSNA guidance referred to in comment 6.	**understand that it is not published as yet.**
Action on Hearing Loss	Full	205	General	**The two paragraphs included in 'other considerations' are welcomed. The decision to fit hearing aids based on need rather than on hearing thresholds and the cost effectiveness of hearing aids should be highlighted in both the long and short versions of the guidelines.** Hearing aids are the only viable treatment option for sensorineural hearing loss,[111] and are extremely cost effective. The NHS spends an average of £398 for all of a person's appointments, two hearing aids and repairs.[112] This small cost per person enables the	**Thank you for your helpful comment. We believe the recommendations are very clear in both versions of the guideline. In the short guideline the recommendation to refer for a hearing assessment (1.1.1) is the first recommendation and this recommendation to fit hearing aids (1.5.1) is the first recommendation in the hearing aid section.**

[110] NHS England (2016) *Commissioning Services for People with Hearing Loss: A Framework for clinical commissioning groups*. Available at: https://www.england.nhs.uk/wp-content/uploads/2016/07/HLCF.pdf

[111] Chisholm et al. (2007). A systematic review of health-related quality of life and hearing aids: Final report of the American Academy of Audiology task force on the health-related quality of life benefits of amplification in adults. Journal of American Academy of Audiology, 18:151-183

[112] Monitor and NHS England. (2013). National tariff information workbook 2014/15. Available at: https://www.gov.uk/government/publications/national-tariff-information-workbook-201415

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				NHS to deliver huge benefits in terms of quality of life and reduces the need for more costly interventions in future. As summarised by Access Economics (2006), "the literature shows that hearing aids yield significant benefits for relatively low investments",[113] other studies are in agreement that the benefits of providing hearing aids outweigh the costs, and that hearing aids provided through the NHS are cost effective.[114] By contrast, it costs £3,000 on average to purchase a set of hearing aids privately.[115] **Question 3.** The Commissioning Framework for Adult Hearing Loss Services should be referenced in this section as a tool to help CCGs design high quality, cost effective audiology services. Please refer to comment 6.	**A reference to the commissioning framework has been added to this section.**
Action on Hearing Loss	Full	22	7	**Section 3.3.3 'Relationships between the guideline and other NICE guidance' should include additional related guidelines such as the following:**	**Thank you for your comment.** **The purpose of listing related guidance is to provide links to other NICE guidance on assessment and management of hearing. The**

[113] Access Economics. (2006) Listen Hear: The economic impact and cost of hearing loss in Australia. Canberra: Access Economics

[114] Morris et al. (2013). An economic evaluation of screening 60- to 70-year-old adults for hearing loss. Journal of Public Health, 35(1):139 –146; US Preventative Services Task Force. (2012). Screening for hearing loss in older adults: U.S. Preventative Services Task Force recommendation statement. Annals of Internal Medicine, 157(9): 655-661; Action on Hearing Loss / London Economics (2010) Cost benefit analysis of hearing screening for older people. Available at: www.actiononhearingloss.org.uk/supporting-you/policy-research-and-influencing/research/our-research-reports/research-reports-2010.aspx; Chao and Chen. (2008). Cost-effectiveness of hearing aids in the hearing-impaired elderly: a probabilistic approach. Otology and Neurotology, 29(6):776-83; Abrams et al. (2002). A cost utility analysis of adult group audiological rehabilitation: are the benefits worth the costs? Journal of Rehabilitation Research and Development, 39(5):549-558

[115] Which? (2018). Hearing aid prices - Which? Available at: https://www.which.co.uk/reviews/hearing-aid-providers/article/how-to-get-the-best-hearing-aid/hearing-aid-prices

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				• Dementia: supporting people with dementia and their carers in health and social care. (2006). NICE guideline [CG42] [116] Hearing impairment can adversely affect performance on cognitive testing. The most commonly used test to determine cognitive status, the Mini-Mental State Examination (MMSE), requires the patient to be able to fully hear what is being asked.[117] Jorgensen et al (2016) study found that reduced audibility significantly reduces scores on the MMSE, resulting in greater apparent cognitive deficits as audibility decreased. Although the NICE guideline CG42 (2006) Section 1.4.1.3 states that those interpreting test scores should take full account of other factors known to affect performance including any sensory impairments, section 1.4.1.1 should also explicitly state that hearing screening should be included as part of the assessment process for the diagnosis of dementia. • Tinnitus. NICE guideline in development (2020)[118] Tinnitus affects 10% of the UK population,[119] it is often not diagnosed, and is more	**Dementia guideline does not provide any guidance in relation to hearing and therefore we do not think it is relevant to list it here. The Tinnitus guideline is in the early stages of development and will not publish before this guideline and therefore we are unable to include this in this section. The other guidelines you list do not provide guidance for people with hearing loss and therefore are not appropriate to make any direct reference to.**

[116] NICE (2006). Dementia: supporting people with dementia and their carers in health and social care. Clinical guideline [CG42]. Available at: https://www.nice.org.uk/guidance/cg42
[117] Alzheimer's Society. (2017). The MMSE. Available at: https://www.alzheimers.org.uk/info/20071/diagnosis/97/the_mmse_test.
[118] NICE. (2020). Tinnitus *Forthcoming*

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				common in people who have hearing loss or other ear problems.[120] Research highlights that 9 out of 10 people with tinnitus will also have some degree of hearing loss.[121] Tinnitus cannot be cured, but hearing aids are an important part of its management, a significant body of evidence suggests that for many people hearing aids reduce the effects of tinnitus.[122] Recent research shows that providing open fit digital hearing aids to those with mild to moderate high frequency loss made a significant clinical improvement to their tinnitus.[123] There is evidence to support that bilateral hearing aids are more effective at reducing the difficulties associated with tinnitus than unilateral aiding.[124] • Falls in older people: assessing risk and prevention. (2013). NICE guideline [CG161] [125] Hearing is important in maintaining balance,	

[119] Davis and El Refaie (2000) The epidemiology of tinnitus. In Tyler (ed.) The Handbook of Tinnitus p1 - 23
[120] Culhane BA. (2014). All About Tinnitus, version 1.5. British Tinnitus association. Available at: https://www.tinnitus.org.uk/Handlers/Download.ashx?IDMF=f293c6c7-a16f-4542-81e2-992c3d6076a6
[121] Davis and El Refaie. (2000). The epidemiology of tinnitus. In Tyler (ed.) The Handbook of Tinnitus p1 - 23
[122] Saltzman M, Ersner MS. (1947). A hearing aid for the relief of tinnitus aurium. Laryngoscope, 57: 358 -366; Vernon J. (1977). Attempts to relieve tinnitus. Journal of the American Audiology Society, 2(4): 124-31; Stacey JS. (1980). Apparent total control of severe bilateral tinnitus by masking, using hearing aids. British Journal of Audiology, 14(2):59-60; Surr RK, Montgomery AA, Mueller HG, et al. (1985). Effect of amplification on tinnitus among new hearing aid users. Ear and Hearing, 6(2):71-5; Melin L, Scott B, Lindberg P, Lyttkens L. (1987). Hearing aids and tinnitus-an experimental group study. British Journal of Audiology, 21(2): 91-7; Trotter and Donaldson (2008) Hearing aids and tinnitus therapy: a 25-year experience. Journal of Laryngology and Otology, 122(10): 1052-6.
[123] Byrom. (*Forthcoming*). Tinnitus, hearing aids and mild hearing loss. MSc Thesis, awaiting publication
[124] Brooks DN, Bulmer D. (1981). Survey of binaural hearing aid users. Ear and hearing, 2(5):220-224
[125] NICE. (2013) Falls in older people: assessing risk and prevention. NICE guideline [CG161]. Available at: https://www.nice.org.uk/guidance/cg161

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				recognising spatial orientation and avoiding environmental hazards which may lead to falls.[126] The risk of falling has been identified to increase in those with hearing loss. A systematic review by Jiam et al (2016) found that hearing loss is associated with a significantly increased odds of falling in older adults.[127] A study on older female twins found that poor hearing was significantly associated with a higher risk of falls after controlling for shared genetic and environmental factors.[126] • Stroke rehabilitation in adults. (2013). NICE guideline [CG162][128] Evidence suggests that there may be a high prevalence of hearing loss among stroke patients.[129] Since, hearing plays a crucial role in the effective communication between patients and healthcare professionals,[130] hearing impairment may restrict patients from participating fully in rehabilitation programs, resulting in functional decline.[131] **The following guidelines for older people should**	

[126] Viljanen A, Kaprio J, Pyykko I, et al. (2009). Hearing as a Predictor of Falls and Postural Balance in Older Female Twins. The Journals of Gerontology Series A: Biological Sciences and Medical Sciences, 64A(2):312-317.
[127] Jiam NT, Li C, Agrawal Y. (2016). Hearing loss and falls: A systematic review and meta-analysis. Laryngoscope, 126(11):2587-2596.
[128] NICE. (2013). Stroke rehabilitation in adults. Nice guideline [CG162]. Available at: https://www.nice.org.uk/guidance/cg162
[129] Edwards DF, Hahn MG, Baum CM, et al. (2006). Screening patients with stroke for rehabilitation needs: validation of the post-stroke rehabilitation guidelines. Neurorehabilitation and Neural Repair, 20(1):42-48. doi: 10.1177/1545968305283038; Formby C, Phillips DE, & Thomas, RG. (1987). Hearing loss among stroke patients. Ear Hear, 8(6):326-332; O'Halloran R, Worrall LE, & Hickson L. (2009). The number of patients with communication related impairments in acute hospital stroke units. Int J Speech Lang Pathol, 11(6):438-449. doi: 10.3109/17549500902741363
[130] Bensing J. (2000). Bridging the gap. The separate worlds of evidence-based medicine and patient-centered medicine. Patient Education and Counseling, 39(1):17-25.
[131] Landi F, Onder G, Cesari M, et al. (2006). Functional decline in frail community-dwelling stroke patients. Eur J Neurol, 13(1):17-23. doi: 10.1111/j.1468-1331.2006.01116.x

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				also be included: • Mental wellbeing of older people in care homes. (2013). Quality standard [QS50][132] • Older people with social care needs and multiple long-term conditions. (2015). NICE guideline [NG22][133] • Older people: independence and mental wellbeing. (2015). NICE guideline [NG32][134] • Home care: delivering personal care and practical support to older people living in their own homes. (2015). NICE guideline [NG21][135] • Social care for older people with multiple long-term conditions. (2016). Quality standard [QS132][136] • Home care for older people. (2016). Quality standard [QS123][137]	
Action on Hearing Loss	Full	229	General	**We welcome that the draft guidelines for hearing loss states that "*a flexible approach in the delivery of hearing aid services is desirable*" to ensure that those who have difficulty in attending audiology services in person, such as those that live in residential homes and those with learning disabilities can access services.**	**Thank you for your comments and for highlighting the reference. The committee agreed flexibility in the delivery of hearing services is important and have stressed this within the Recommendations and link to evidence section of the guideline.**

[132] Mental wellbeing of older people in care homes. (2013). Quality standard [QS50]. Available at: https://www.nice.org.uk/guidance/qs50
[133] Older people with social care needs and multiple long-term conditions. (2015). NICE guideline [NG22]. https://www.nice.org.uk/guidance/ng22
[134] Older people: independence and mental wellbeing. (2015). NICE guideline [NG32]. Available at: https://www.nice.org.uk/guidance/ng32
[135] Home care: delivering personal care and practical support to older people living in their own homes. (2015). NICE guideline [NG21]. Available at: https://www.nice.org.uk/guidance/ng21
[136] Social care for older people with multiple long-term conditions. (2016). Quality standard [QS132]. Available at: https://www.nice.org.uk/guidance/qs132
[137] Home care for older people. (2016). Quality standard [QS123]. Available at: https://www.nice.org.uk/guidance/qs123

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				Question 3: Users should refer to the Commissioning Framework for Adult Hearing Loss Services to ensure hearing aid services are accessible to all groups of people. The Framework states that *"it should be the responsibility of the referring clinician and provider to manage between them the appropriateness of referral/treatment according to a person's needs and not automatically exclude them from this service because they have a degree of learning disability or require domiciliary care".*[138] In addition, the Framework also states that *"Commissioners should seek assurance that providers have the necessary qualifications, skills and equipment to accommodate these client groups",* this should include ensuring that providers meet the legal requirements of the Accessible Information Standards.	
Action on Hearing Loss	Full	229	General	**We welcome that the guideline recognises that the ability to use a telephone is one of the issues that needs to be addressed within the follow up, since many hearing aid users struggle on the phone which would impact on the follow up appointment**. **Question 1:** Telephone appointments are not suitable for everyone and would be limiting if the person required hearing aid adjustment or reinstruction which is not possible over the phone. However, this may be challenging to implement when dealing with people who are unable to attend	**Thank you for your comment. The committee agrees that it is very important for hearing aid users to be offered a face-to-face appointment as they may not be able to use a telephone. However, we have now amended the recommendation to give the option of a telephone appointment for those people who prefer them, for reasons such as easier accessibility, so long as they are still offered the opportunity of a face-to-face appointment.** **It is for local service providers and**

[138] NHS England, Office of the Chief Scientific Officer. (2016). Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups. London: NHS England. Available at: https://www.england.nhs.uk/wp-content/uploads/2016/07/HLCF.pdf

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				audiology appointments easily, which is not addressed by the guideline.	**commissioners to determine the best ways of actively reaching those who are unable to physically attend a clinic, such as due to limited mobility or infirmity, so that the recommendations can be fulfilled. This is the same as in any other area of healthcare.**
Action on Hearing Loss	Full	229	General	**We welcome that the guideline recognises that "*there is currently no system to recall people for ongoing monitoring and it is up to the individual to self-refer when they need their hearing reassessed or require assistance with their hearing device".*** As detailed within the draft guideline, the recommended procedure is every 3 years for reassessment which is also detailed within the Commissioning Framework for Adult Hearing Loss Services.[138] However, our *'Under Pressure'* report found that only 31% of UK audiology providers automatically recalled people for their reassessment and an annual survey report conducted by RNID (2008) found that people think that they should be recalled for a hearing test.[139] We also welcome that the committee agreed that it is important that *"patients are aware of how to re-access audiology services when needed, and that health professionals update and maintain patient records to facilitate follow up and ongoing monitoring of patients and to improve information sharing between health professionals".*	**Thank you for your comment. The committee has reconsidered this issue and made an additional recommendation that implementing a system to automatically recall hearing aid users for reassessment regularly should be considered. However, the committee did not recommend a particular frequency for this recall due to lack of evidence. The committee has made a recommendation for further research on monitoring of people using hearing aids, which would include the question of what the optimum period between reassessments should be.**

[139] Lowe C. (2015). Under Pressure. London: Action on Hearing Loss. Available from: https://www.actiononhearingloss.org.uk/how-we-help/information-and-resources/publications/research-reports/under-pressure-report/

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				Question 3: To avoid local variation across the country, the draft guideline for hearing loss should recommend that whilst further research is required to assess the benefits of ongoing monitoring, including what this should involve, and who it would benefit, the guideline should also recommend that patients are reassessed every 3 years as detailed within the Commissioning Framework for Adult Hearing Loss Services. [140]	
Action on Hearing Loss	Full	231-256	General	**Interventions to support the use of hearing aids also include services provided by the third sector**. This includes, Action on Hearing Loss's '*Hear to Help'* services which provide a range of support for people with deafness, tinnitus and hearing loss in their communities, to enable the continued use of hearing aids. Our '*Hear to Help'* staff and volunteers, carry out minor repairs to hearing aids, and replace batteries, ear moulds and tubing. The service provides training on how to maintain hearing aids, gives information and advice on managing hearing loss, and informs people about services such as lip-reading and hearing therapy. Guidance is also provided on assistive equipment that could benefit people with hearing loss, such as amplified telephones and TV listeners.[141] Services such as '*Hear to Help'*, are crucial in reducing the non-use of hearing aids and ensuring that hearing aids are used effectively. '*Hear to Help'*	**Thank you for your comment. We have changed the recommendations to include information on other organisations and support groups.**

[140] NHS England, Office of the Chief Scientific Officer. (2016). Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups. London: NHS England. Available at: https://www.england.nhs.uk/wp-content/uploads/2016/07/HLCF.pdf

[141] Action on Hearing Loss. (2015). Hearing Matters. London: Action on Hearing Loss. Available at: http://www.actiononhearingloss.org.uk/how-we-help/information-and-resources/publications/research-reports/hearing-matters-report/

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				services are particularly important in enabling services to reach more vulnerable people, as well as reducing the pressure on audiologists' capacity.[139] Findings from Action on Hearing Loss's '*Under Pressure'* report show that approximately two in five providers (39%) reported that basic hearing aid repairs and replacements were delivered via trained third sector volunteers, such as through Action on Hearing Loss's Hear to Help service.[142]	
Action on Hearing Loss	Full	50	10-15	**We welcome the questions identified by the committee as high priority questions for original heath modelling.** *"What is the clinical and cost effectiveness of early versus delayed management of hearing loss on patient outcomes?"* - **Please refer to evidence cited in comments 2 and 3.** *"What is the clinical and cost effectiveness of hearing aids for mild to moderate hearing loss in adults who have been prescribed at least 1 hearing aid?* - **Please refer to evidence cited in comment 6**. *"What is the clinical and cost effectiveness of fitting 1 hearing aid compared with fitting 2 hearing aids for people when both ears have an aidable hearing loss?* - **Please refer to evidence cited in comment 7.**	**Thank you for your comment.**
Action on Hearing Loss	Full	54	12-16	**We welcome that the draft NICE guideline for**	**Thank you for your comment. We hope that**

[142] Lowe C. (2015). Under Pressure. London: Action on Hearing Loss. Available from: https://www.actiononhearingloss.org.uk/how-we-help/information-and-resources/publications/research-reports/under-pressure-report/

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				hearing loss clearly sets out the recommendations for when to refer adults with sudden or rapid onset hearing loss that require urgent or routine referral. Anecdotally, we have received some reports from individuals delaying treatment for sudden onset hearing loss because it were believed that the underlying cause was a common cold or flu causing congestion. Subsequently, the issue was not treated urgently and the individual was later diagnosed with sensorineural hearing loss. The draft NICE guideline recognises that there are 'several clinical guidelines for GPs and audiologists outlining the circumstances in which they should consider referral for more specialist medical care, for example, the British Academy of Audiologists' Guidance for Audiologists and for Primary Care which reflect a broad clinical consensus. Whilst most of the recommendations made reflect current practice, there remains variation and not all clinicians would currently be aware of all the signs and symptoms, which lead to an urgent referral. The NICE guidelines for hearing loss will help to overcome these variations by setting out clear national guidance.	**these guidelines make a difference.**
Action on Hearing Loss	Full	57	General	**We welcome that definitions for 'immediate' and 'urgent' referral times have been included in the guideline.** **Question 1:** A challenge and significant requirement for the guideline to be implemented and work successfully, is ensuring that adequate training is provided for those working in primary, secondary and tertiary care on the symptoms that should be	**Thank you for your comment.** **It is important that staff are trained in recognising signs and symptoms so appropriate referral is made in a timely manner.**

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				recognised as needing 'immediate' and 'urgent' care. **Question 3:** Triaging of referral letters into audiology and ENT is important. To help overcome challenges, staff involved in triaging should be trained to recognise 'red flags' that indicate signs and symptoms as detailed in referral letters that require urgent and complex care. This will help to mitigate any delay in treatment by helping to ensure people are referred to the right place at the right time, and avoid inconvenience for the patient; wasted appointment times and cost. In the case of urgent care required, the impacts can be devastating if someone is not referred to the right place in the first instance. We welcome that the BAA guidelines for audiologists have been referred to, however, where there are local variations in practice and where some clinicians may not be aware that all of these signs and symptoms should lead to an urgent referral, the British Society of Audiology (BSA) and British Academy of Audiology (BAA) can also play a role in helping to ensure that audiologists are educated on these guidelines and the signs and symptoms that require urgent care. Please refer to comment 13.	
Action on Hearing Loss	Full	58	General	**We welcome that the draft guideline includes the recommendation within the 'other considerations' section that a checklist or table of signs and symptoms should be produced for health professionals.** **Question 1:** It may be challenging to ensure that primary healthcare staff and audiologists are adequately trained to recognise all of the signs and	**Thank you for your response. We will pass this information to the NICE resource impact team for their information.**

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				refer to the appropriate specialist within the correct time frame. Our *'Under Pressure'* report shows that NHS audiology services are under significant pressure, with 41% offering patients a reduced service because of reduced budgets or increased demand.[143] In England, 15% of NHS services said that they have seen a reduction in the overall number of staff; 6% have reduced average qualification level of professional staff and 6% reduced number or qualification level of specialist staff for complex cases.[143] Therefore implementation of the NICE guidelines and in particular, where training is required to ensure staff are aware of what signs and symptoms require urgent referral could be challenging in some local areas.	
Action on Hearing Loss	Full	61	General	**We welcome that the guideline states *"wax removal may be an urgent requirement in order to exclude this as the cause of hearing loss and avoid delay in treatment of underlying pathology".* This should be included in the section 'Management of ear wax' of the guideline to ensure that any urgent causes of hearing loss can be investigated and treated appropriately without delay due to excess wax.**	**Thank you for your comment. These changes have been made.**
Action on Hearing Loss	Full	75-76	General	**We welcome that section 6.2.4 within the guideline states that "*the consequence of missing a patient with vestibular schwannoma could result in increased morbidity*".** The guideline clearly sets out the recommendation for referral of someone who presents with symptoms or audiometry	**Thank you for your comment. The committee has reappraised the evidence in the light of comments and has decided to recommend a difference of 15dB at 2 adjacent frequencies (at 0.5, 1, 2, 4 and 8 kHz) to reflect current practice in ENT clinics.**

[143] Lowe C. (2015). Under Pressure. London: Action on Hearing Loss. Available from: https://www.actiononhearingloss.org.uk/how-we-help/information-and-resources/publications/research-reports/under-pressure-report/

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				test results that could indicate vestibular schwannoma or CPA lesions. These do not differ from current recommendations as specified within the Department of Health criteria. It is also welcomed that other symptoms or signs are noted as *"a strong recommendation based on the potential harms of not referring in these cases."* **Question 1:** The main concern is the local variations and in particular, where services are under referring, the challenge will be in influencing audiology, ENT and radiology to implement any changes as this will increase cost but will be clinically beneficial.	**Having been amended, we do not believe that the recommendations will significantly increase cost, though we agree they should be clinically beneficial.**
Action on Hearing Loss	Full	78	8-12	**We welcome the recommendation from the Down's Syndrome Medical Interest Group drafted guidelines that hearing assessment should be carried out every two years, however it is noted that it is unclear what happens in practice when a child transitions into adult services.** This is concerning as the guideline states that *"individuals with Down's Syndrome are at a risk of developing a high frequency hearing loss from the second or third decade even if hearing has been good when younger".* **Question 1:** Challenges arise here, particularly if a young adult is not already under the care of audiology – some may not be able to communicate that they have hearing difficulties or know how to get a referral for support. We therefore welcome that the guideline later states that it is important to conduct hearing assessment and review on a regular basis for those with mild, cognitive impairment, dementia, and learning disabilities.	**Thank you for your comment. The committee agrees that individuals with Down's Syndrome are an important group. However, the guideline does not cover adults who presented with hearing loss before the age of 18. Therefore, transitioning from children to adult services is beyond the scope of this guideline. We are pleased that Action on Hearing loss welcomes the recommendation to review people with mild cognitive impairment, dementia, and learning disabilities on a regular basis.**

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Action on Hearing Loss	Full	78	15-18	**This section should also make reference to the recent Lancet Commission (2017) on dementia prevention, intervention, and care.[144]** The commission identifies hearing loss to be the largest modifiable risk factor for dementia in middle age, and calls for better management and prevention strategies of hearing loss and other risk factors to reduce the burden of risk.[144] Please refer to comment 2.	**Thank you for your comment. We have included a reference to the Lancet Commission on dementia prevention, intervention, and care (Livingston 2017) in the main introduction and the introduction for chapter 7 of the guideline.**
Action on Hearing Loss	Full	78	19-25	**This section should acknowledge the diagnostic challenge of dementia which may arise from the presence of hearing loss. Please refer to comment 4.**	**Thank you for your comment. This is included within the introduction to the subgroups chapter.**
Action on Hearing Loss	Full	79	General	**The research recommendation to investigate whether hearing aids reduce the incidence of dementia in adults with hearing loss is welcomed. Please refer to comment 2 and 4.**	**Thank you for your comment. The Committee agrees that this is an important topic for future research.**
Action on Hearing Loss	Full	81	General	**We welcome the recommendation that hearing assessments are carried out by trained audiologists in an appropriately sound-treated room when assessing people who have learning disabilities or additional needs, as opposed to relying on results of assessments carried out in GP surgeries alone.** **Question 1:** This recommendation may be challenging to implement since some checks are carried out in primary care and the standard of care is likely to vary. One study found that the format of hearing checks carried out in GP surgeries are often	**Thank you for your comment. The committee has been made aware of GPs doing tests and indeed relying on whisper tests for people with learning difficulties. This is the reason we have been careful to say referral to an audiology service and to specify the need for a trained audiologist to test the person in an appropriate environment and perform pure tone audiometry PTA.**

[144] Livingston G, Sommerlad A, Orgeta V, et al (2017) Dementia prevention, intervention, and care. The Lancet.16;390(10113):2673-2734. doi: 10.1016/S0140-6736(17)31363-6

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				inappropriate for people with learning disabilities.[36] Some GPs who were interviewed as part of this study were also reluctant to refer people with learning disabilities for a hearing test, due to misconceptions that diagnosis and treatment would be ineffective. GPs should be adequately trained to ensure that the format of primary care hearing assessments are suitable for people with learning disabilities (please refer to comment 28). People with learning disabilities should be provided with appropriate support to communicate well and understand information, in line with the Accessible Information Standard.[37] In addition, as detailed in comment 27 audiology services are under pressure with budget cuts to services, which includes a reduction in staff as well as reduced number or qualification level of specialist staff for complex cases. **Question 3:** To overcome challenges in implementing this recommendation users should refer to the Commissioning framework for Adult Hearing Loss Services[145] which states that *"the provider will need to have systems in place to accommodate services users who have sight loss/dual sensory loss; have learning disabilities and or require domiciliary care."* The framework also *states "Commissioners should seek assurance that providers have the necessary qualifications, skills and equipment to accommodate these client groups."*	
Action on Hearing Loss	Full	97	General	**We welcome that the guideline states that an example of what comprises an audiological**	**Thank you for your comment. The committee agreed a recognised self-report instrument**

[145] NHS England, Office of the Chief Scientific Officer. (2016). Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups. London: NHS England. Available at: https://www.england.nhs.uk/wp-content/uploads/2016/07/HLCF.pdf

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				assessment is provided in the assessment guidance, set out in the NHS Standard Contract for adult hearing aid services. **Question 1:** However, following engagement with CCGs, Action on Hearing Loss recognise that there are local variations in the use of outcome measures. In particular, the use of 'validated self-report instruments' vary. In some areas, CCGs do not seem to fully understand what is detailed within local audiology contracts, including what 'validated self-report instruments' are listed as requirements of the service; even where these are within local contracts, outcomes are not being reported to the CCG. **Question 3:** The Commissioning Framework for Adult Hearing Loss Services[146] sets out recommendations for hearing services. In particular, the Framework states that *"contracts for hearing services that do not include service specifications and outcome measures should be avoided".* The Framework also recommends that commissioning hearing aids services should be outcomes focused, which will *"have a positive impact in terms of access, choice, quality and other related outcomes that benefit the services user and assure CCGs that services are providing good value for money".*[146]	**should be used and considered the ones specified in the model adult service specification within Commissioning Services for People with Hearing Loss are known and currently used.**
Action on Hearing Loss	Full	General	General	**The evidence presented in the full version of the guideline should include recent evidence on the association between hearing loss and dementia. This should be included within the introduction**	**Thank you for your comment. This evidence could not be included in the evidence review because it does not address our clinical question, which is focused more on the**

[146] NHS England, Office of the Chief Scientific Officer. (2016). Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups. London: NHS England. Available at: https://www.england.nhs.uk/wp-content/uploads/2016/07/HLCF.pdf

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				and throughout the document. Please refer to comment 2.	**missed diagnoses and under-reporting in this patient group. Although papers on prevalence and incidence were sought, we did not find any papers from which we could obtain missed diagnosis or under-reporting rates. However, the recent Lancet Commission on dementia prevention, intervention, and care (Livingston 2017) and other similar papers have been referenced in the introduction to the full and short versions of the guideline and in the chapter on subgroups (chapter 7).**
Action on Hearing Loss	Full	General	General	**The guideline should include recommendations for audiology services to identify patients where hearing aids are contraindicated, not appropriate or unable to provide sufficient benefit**. Patients who are unable to gain benefit from conventional hearing aids may be suitable for hearing implants including: middle ear, cochlear and auditory brainstem implants and bone anchored hearing aids. **The guideline should recommend audiology services to consider onward referral to specialised services when appropriate.** Furthermore, the final scope and the draft guideline identifies the '*Cochlear implants for children and adults with severe to profound deafness' (2009)*[147] and '*Auditory brain stem implants' (2005)*[148] as related NICE pathways. However, it does not refer to access to these treatment options within the recommendations.	**Thank you for your comments. Changes have been made to address your suggestions and discussion about onward referral for implantable devices has been added to the audiological assessment.**

[147] NICE. (2009). Cochlear implants for children and adults with severe to profound deafness. Technology appraisal guidance [TA166]. Available at. https://www.nice.org.uk/guidance/ta166
[148] NICE. (2005). Auditory brain stem implants. Interventional procedures guidance [IPG108]. Available at: https://www.nice.org.uk/guidance/ipg108

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				In addition, this recommendation is within the scope of this guideline since it falls under the areas 'Further assessment of hearing and communication needs' and 'Management of hearing difficulties' covered by the guideline, and therefore should be included. **It is relevant to the sections 'Urgent and routine referral' and 'Monitoring and follow-up', and should be included within these sections.**	
Ashton University	Short	010	14-27	This section describes reasonable adjustments that should be made to clinic environments to support patients but does not extend to information provision and additional support for patients as implied by the title of the section. We are concerned that this has not been included, and that there is a lack of guidance on when to refer onward to other services, such as psychological support, dual sensory groups, social services etc.	**Thank you for this comment. We have cross referred to the Patient experience guideline which provides generic recommendations on information and tailoring services to meet the needs of the individual.**
Ashton University	Short	05	14-25	We are concerned with the wording as it stands, framed as advisory. The guidance does not reflect the additional help seeking challenges for these populations and there is a risk that these important groups will miss access to services. At the same time, it is not clear why the recommendation is for a referral to a service every 2 years and how this time frame will fit everyone's unique circumstances. This is incompatible with existing AQP patient pathways. We are also concerned that there is no reference to these separate populations in the audiology section of the guidance and we would like to see them included, in particular with guidance on the additional communication behaviours that are required. It is important to consider the needs of people with	**Thank you for your comment. A 2 year time frame was chosen to reflect the high incidence rate of newly developed hearing loss in these groups (making assessing at this frequency cost effective), and in line with the existing recommendation that vision checks should be conducted every 2 years for people with learning disabilities. AQP pathways that use a 3 year period relate to people with already identified hearing loss; this is a separate issue.** **These recommendations are weaker (stating 'consider') as the evidence for them was less strong than for some other recommendations.**

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				cognitive problems but also other at-risk groups e.g. the over 70's, veterans, people with dual sensory loss, depression, or diabetes (NHS England Action Plan on Hearing Loss (2015: pps 10, 14, 17, 19) and Commissioning Services for People with Hearing Loss (2016, p 13). Although the document is entitled 'Hearing Loss in Adults' it does not reflect the audiological needs of the whole population who experience hearing loss or cognate problems such as tinnitus or hyperacusis.	**The necessity of considering additional needs of people in these groups, for example when conducting tests, is discussed in the full version of the guideline.**
Ashton University	Short	06	17-18	We would like to see a more specific description of the training and expertise required for wax removal e.g. training delivered from an accredited or recognised course. The current description does not indicate the level of minimal training considered sufficient to protect the patient, and this is concerning, given the potential risk.	**Thank you for your comment. It would be expected that training that meets the required standard would be organised locally. It is not within the remit of the guideline to appraise training packages.**
Ashton University	Short	07	1-4	The recommendation to refer people with an asymmetry of 20dB or more at 1 or more frequencies between 0.5 and 4kHz for an MRI scan may well be associated with an increase in MRI referral numbers and hence costs. This is of some concern, given the panel's assessment of the evidence quality as low or very low, and may be challenging to implement in practice.	**Thank you for your comment. The committee has reappraised the evidence in the light of comments and has decided to recommend a difference of 15 dB at 2 adjacent frequencies (0.5, 1, 2, 4 and 8 kHz) to reflect current practice in ENT clinics.** **As such the committee does not believe that these criteria will lead to a significant increase in referrals for the country as a whole, and that standardisation of criteria will be beneficial and may reduce overreferral in some places.**
Ashton University	Short	07	17-19	This should incorporate participation restriction; we do not feel it is helpful to include the name of specific measures as this may limit the future development and use of more appropriate tools	**Thank you for your comment.** **The self-report instruments recommended are provided as examples which the committee considered to be recognised and currently used.**

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Ashton University	Short	08	1-3	We appreciate the move towards a shared decision making approach. This could be more fully integrated within the audiology sections of the document (see comment #1) including more emphasis on engaging patients fully in their care. We would like to see specific reference to evidence based tools to enable shared decision making, such as decision aids (Cochrane review by Stacey et al, 2017). Shared decision making is likely to be difficult to implement into Audiology practice, as identified by Pryce et al (2016).	**Thank you for your comment. The principles of shared decision-making are embedded within all NICE guidance and a link to information on this is provided in the short guideline. Please see https://www.nice.org.uk/about/nice-communities/public-involvement/your-care.**
Ashton University	Short	08	9 onwards	Although the guideline recommends a shared decision making approach to managing hearing loss and presents options, this is not reflected in the document structure. The heading 1.5 implies hearing aids or ALDs are the two available options, with greatest emphasis on hearing aids. It would be helpful to increase the content relating to ALDs, and include guidance at the same level of detail on other options such as implantable devices, referral to hearing therapy, active communication education and information provision.	**Thank you for your comment. The committee was limited in the number of areas to review due to time and resources and had to prioritise the topics to focus on. Whilst we did conduct a review on ALDs the evidence available was extremely limited and therefore the committee was unable to make detailed recommendations. Discussion on onward referral for implantable devices has been made within the audiological assessment.**
Ashton University	Short	08	17	Motivational interviewing or engagement strategies are not well defined and suggest a move away from shared decision making to a paternalistic approach. The stated aim of "acceptance" is a complex process that involves individual emotional adjustment and cannot be reduced to an output of a motivational interview.	**Thank you for your comment. We have used the recommendation 'consider' and expect these techniques to supplement the other approaches audiologists use to encourage hearing aid use and assist in assessing the readiness for having a hearing aid.**
Ashton University	Short	08	20	We query the requirement to demonstrate hearing aids at the first time they're discussed; this sets up the clinical encounter to be focused on hearing aids rather than based on patient need as outlined in	**Thank you for your comment. The committee felt that it was important to show the hearing aid to the individual to give them an idea of what they were going to receive, but we**

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				1.4.2.	**agree that a full demonstration is not required as this can be done at the fitting appointment. We have changed the wording of the recommendation to "show" rather than "demonstrate".**
Ashton University	Short	08	24	Current evidence on engaging people in changing behaviours identifies that giving advice or telling people to follow a course of action is an inefficient way to effect change. The NHS England Commissioning Services for People with Hearing Loss (2016, p 16) identifies that people want high quality services based on evidence of what works.	**Thank you for your comment. The committee agrees that high quality services should be provided using effective interventions. The committee considered based on their clinical practice that microphones and application of different settings can be beneficial for some people; however, many hearing aid users are not made aware of these functions and it was important to highlight the availability of such programmes readily available on NHS hearing aids.**
Ashton University	Short	09	12	The 6-12 weeks is a very prescriptive time frame and it's not clear why this was chosen.	**Thank you for your comment. The current timing for review is 6 to 12 weeks which the committee believes allows time for acclimatisation and reflects current practice. We had no evidence to persuade the committee that this timing was wrong.**
Ashton University	Short	09	14-29	The activities prescribed in the follow up are predominantly focused on the practical and technical aspects of hearing aid management with little emphasis on the acceptability and appropriateness of hearing aids for individual patient requirements.	**Thank you for your comment. The recommendation regarding the follow-up appointment includes instruction to "ensure that the person's hearing aids and other devices meet their needs" including by checking the comfort, sound quality and volume of the hearing aids, and the number of hours the hearing aids have been used, and to "ask the person if they have any concerns or questions".** **The committee believes that these checks will naturally include discussion with the**

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					hearing aid user of their experience with the hearing aids, including acceptability and appropriateness.
Ashton University	Short	General	General	We welcome this guidance for audiology services for assessing and managing hearing loss in adults. We have a general comment regarding differences in the language used in the first sections of the document (for primary care) where clinicians are asked to "consider" particular clinical decisions, compared to that in the second section (for audiology services) where the language around the clinical encounter is more prescriptive, such "give the person" or "tell the person". We are concerned that the procedures described in the audiology services section, while presented clearly, run the risk of presenting an algorithmic approach to managing hearing loss, and minimising the complexity of this health condition. In particular we feel this guideline risks being a "one for all" guideline which does not account for variation in individual patient preferences, values and beliefs.	**Thank you for your comment.** **The differences in the language used reflect the strength of the evidence behind the recommendation. This is explained in section 4.5 of the full version of the guideline. We agree patients should participate in the management of their condition and be able to make informed decisions regarding their care. This principle is endorsed by NICE and details are provided in the short version of the guideline.**
Ashton University	Short	General	General	We are concerned about the absence of hearing therapy in the document, including guidance on onward referral for patients to work alongside a hearing therapist to adjust to hearing loss, develop communication skills and manage the psychosocial challenges of hearing loss. This is contrary to the recommendations detailed in the NHS England Action Plan on Hearing Loss (2015: p6, 15) and Commissioning Services for People with Hearing Loss (2016, p 16) as well as the Hearing Matters report by Action on Hearing Loss (2015: p 49).	**Thank you for your comment. Hearing therapy was not prioritised by the stakeholders for inclusion in the scope and therefore has not been reviewed in detail in the guideline. However, we believe this would be included in 'other management options' mentioned in recommendation 1.5.2. We do not believe the recommendations to be contrary to the recommendations in NHS England Action Plan on Hearing Loss or Commissioning Services for People with Hearing Loss. However, the committee**

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					acknowledges that hearing therapy may be beneficial to some patients and has therefore added the following text to section 17.3.4 (monitoring and follow-up): "Some people have significant problems coming to terms with their hearing problems. These people may benefit from working alongside a hearing therapist or a psychologist to adjust to hearing loss, develop communication skills and manage the psychosocial challenges of hearing loss."
Ashton University	Short	General	General	We note that the full range of implantable devices for managing adult hearing loss are not included within the document, including guidance on onward referral from audiology to adult auditory implant services.	**Thank you for your comment. We have amended the recommendations to include onward referral for implantable devices in line with NICE's technology appraisal guidance on cochlear implants for children and adults with severe to profound deafness and interventional procedure guidance on auditory brain stem implants.**
Ashton University	Short	General	General	It would be helpful if information that would enable patients to weigh up the pros and cons of the evidence presented within this guideline is included, as well as effect sizes of the benefits of the range of interventions. It would be useful for patients to have information in this guideline on risk, such as the number of people who do or do not take up the interventions presented.	**Thank you for your comment. Full details of the evidence and the committee's evaluation of this are available in the full version of the guideline. This includes the committee's discussion on the benefits and harms associated with interventions. The short version is intended as a quick reference to the recommendations only.**
Ashton University	Full	185	-	As there is considerable evidence for the effectiveness of decision aids across a wide range of chronic health conditions (Stacey et al, 2017), it is not reasonable to expect randomised controlled trial evidence for a specific decision aid, as there is no longer equipoise on the use of decision aids.	**Thank you for your comment. The committee wished to review the evidence for the use of decision tools such as option grids specifically designed for the needs of people with hearing loss compared to not using them to see whether there was any**

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				Exclusion of references to published decision aids risks undermining the shared decision making approach. The Hearing Loss Option Grid is the only decision aid for hearing health care to meet International Patient Decision Aids Standards, and has been rigorously developed and evaluated according to standardised methods (Marrin et al, 2013).	**improvement in their outcomes. The aim was not to determine the validity and to recommend one tool over another but to make a recommendation for their use to help people with hearing loss make personalised decisions about their treatment strategy. Therefore, the clinical evidence review did not include validation papers. We have changed the wording 'fit for purpose' to 'optimal'.**
Barnsley Hospital NHS Foundation Trust	Short	03	5	This would open up the criteria for Direct Referral to audiology for all adults over 18 years of age, which would increase referrals to audiology and potentially decrease referrals into ENT. This isn't a problem as such but may require additional resources.	**Thank you for your comment. The committee has carefully considered the evidence for this recommendation. It agrees that there will be an increase in referrals to audiology as a result, but is confident that this is a cost-effective intervention, as discussed in section 8.2.4 of the full guideline, based on evidence from the health economic modelling detailed in appendix N. The resource implications of this guideline are discussed in the resource impact assessment accompanying this guideline.**
Barnsley Hospital NHS Foundation Trust	Short	05	19	Offering this patient group a hearing test every 2 years would be difficult, I would suggest every 3 - 4 years.	**Thank you for your comment. The committee has recommended that hearing tests be considered every 2 years due to the high incidence of newly developed hearing loss in this group (making assessing at this frequency cost effective). A gap of 4 years would leave many people with unaided hearing loss for several years before this is detected and they are offered assistance.**
Barnsley Hospital NHS	Short	05	22	Offering this patient group a hearing test every 2	**Thank you for your comment. The committee**

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Foundation Trust				years would be difficult, I would suggest every 3 - 4 years.	**has recommended that hearing tests be considered every 2 years due to the high incidence of newly developed hearing loss in this group (making assessing at this frequency cost effective). A gap of 4 years would leave many people with unaided hearing loss for several years before this is detected and they are offered assistance.**
Barnsley Hospital NHS Foundation Trust	Short	05	25	A number of GP's in our area have been advocating the use of a bulb syringe for patients to self syringe their ears which clinicians consider very unsafe as the patient cannot see what they are doing also the ear would not be dried after the procedure possibly leading to infection/trauma.	**Thank you for your comment. The committee agrees wax removal should be undertaken by a health professional who is trained in the procedure.**
Barnsley Hospital NHS Foundation Trust	Short	07	1	MRI if asymmetry of 20dB or more at a single frequency, in my experience a high number of patients can have asymmetry of 20dB at a single frequency so this might result in a massive increase in patients sent for MRI scans.	**Thank you for your comment. The committee has reappraised the evidence in the light of comments and has decided to recommend a difference of 15dB at 2 adjacent frequencies (0.5, 1, 2, 4 and 8 kHz) to reflect current practice in ENT clinics.**
Betsi Cadwaladr University Health Board.	Short	03	11-21	Audiology clinicians express their specific support for the inclusion of clear guidance on urgent referral for sudden hearing loss.	**Thank you for your comment.**
Betsi Cadwaladr University Health Board.	Short	03	11-21	Concern was raised that the requirement for referral immediately (within 24hrs) or urgently (within 2 weeks) to ear nose and throat department for those presenting with sudden onset of hearing loss will then in practice be actioned within those timeframes.	**Thank you for your response. Your comments will be considered by NICE where relevant support activity is being planned.**
Betsi Cadwaladr University Health Board.	Short	03	15	Request was made for addition of "either unilateral or bilateral" to add further clarity on this.	**Thank you for your comment. We have made this change.**

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Betsi Cadwaladr University Health Board.	Short	04	General	Audiology clinicians reported that the inclusion of the specific guidance on wax removal in primary care would have a significant benefit to patients and a significant improvement to service efficiency across the Health Board, including Audiology, Ear nose and throat service and Primary care.	**Thank you for your comment.**
Betsi Cadwaladr University Health Board.	Short	04	9-12	It is also suggested to include consideration of referral to ear nose and throat department for those with unilateral middle ear effusion and no upper respiratory tract infection that are not of southeast Asian family origin. Whilst the specificity would be increased, our current practice is to refer all with these results to ear nose and throat, and we have identified affected individuals as a result.	**Thank you for your comment.** **We have amended the recommendation to make this urgent referral to ENT rather than a suspected cancer pathway. We have considered extending this to the whole population, but we would not be able to justify that recommendation given the low prevalence in other groups.**
Betsi Cadwaladr University Health Board.	Short	04	13-15	It is not clear as to why recommendation 1.1.6 refers only to "people over 40". Given the lack of evidence that has been indentified, it is suggested that this is opened to all adults with unilateral hearing loss and prolonged otalgia, or that the reasoning is added to the full guidance.	**Thank you for your comment. The committee has removed this limitation.**
Betsi Cadwaladr University Health Board.	Short	04	18	Clarification is requested in the full document for definition intended for "local complex audiology pathway".	**Thank you for your comment. The committee understands the ambiguity and has adjusted the wording to 'specialist audiology service for diagnostic investigation, using a local pathway'.**
Betsi Cadwaladr University Health Board.	Short	04	27-28	In order to ensure that these recommendations are put into practice, clarification is requested that "initial treatment of any earwax" refers directly to the recommendations under the hearing "removing earwax" in section 1.2, either by using the same wording for each, or making reference to this.	**Thank you for your comment.** **We have made this amendment to the recommendation.**

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Betsi Cadwaladr University Health Board.	Short	05	14-24	There is a missing group of people, being those with known hearing loss and diagnosis of dementia. Given that carers and patients in this group are known to under-identify hearing loss, the same rate of referral for assessment would need to apply.	**Thank you for your comment. A recommendation has been made to refer people diagnosed with dementia for a hearing assessment if hearing loss is suspected. Once the person has been assessed and diagnosed with hearing loss they would have a follow-up appointment and re-access audiology services in the same way as the general hearing loss population.**
Betsi Cadwaladr University Health Board.	Short	05	20	Add the word "diagnosed" to add clarity to "without hearing loss" to prevent confusion with reported hearing loss.	**Thank you for your comment. We have made the change as you suggest.**
Betsi Cadwaladr University Health Board.	Short	05	26	Similarly, concern was raised that the current wording of "offer to remove earwax" and "consider ear irrigation" was not strong enough to ensure service change.	**Thank you for your comment. The wording of the recommendations reflects the quality of the research evidence found. Wax removal should be provided by the method available within local services.**
Betsi Cadwaladr University Health Board.	Short	05	28	Include "or if it prevents taking an aural impression of the ear" to ensure consistency with recommendation 1.1.8	**Thank you for your comment. This has been amended.**
Betsi Cadwaladr University Health Board.	Short	06	14-19	It is not clear why the clauses for considering microsuction or manual removal do not also apply to irrigation, namely practitioner training and expertise and correct equipment.	**Thank you for your comment. We have altered the wording to make it clear that training and correct equipment are necessary for all methods of irrigation.**
Betsi Cadwaladr University Health Board.	Short	06	20	Clarity is needed as to the definition of "manual ear syringing".	**Thank you for your comment. The full version of the guideline outlines what we mean by manual ear syringing in the glossary.**
Betsi Cadwaladr University Health Board.	Short	06	26-29	The current clinical practice locally is for referral by Non-medical referrers (i.e. trained audiologists) for MRI for those with 2 frequencies out of 500, 1k, 2k,	**Thank you for your comment. The committee has reappraised the evidence in the light of comments and has decided to recommend a**

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				4k that have a difference of 20dB or greater. This has shown to be an efficient referral mechanism, and the numbers of referrals received by radiology have been felt to be a significant increase from those referred by Ear nose and throat service previously, but has been accepted by the service. Whilst the increased sensitivity for the recommended criteria is understood from the evidence presented in the full document, clinicians are concerned that the change would increase the number of referrals made considerably, with a significant impact on the radiology service. An economic evaluation of this is suggested prior to such a recommendation being made, that deviates from current British Academy of Audiology (2016) recommendation. Suggested clarification of wording by using "cochlear asymmetry of 20dB or greater"	**difference of 15 dB at 2 adjacent frequencies (at 0.5, 1, 2, 4 and 8 kHz)to reflect current practice in ENT clinics.** **The committee recognises that current practice varies across the country, and that a difference of 20 dB at 2 frequencies is used in some areas, but believes that the definition now adopted represents most common current practice. As such the committee does not believe that these criteria will lead to a significant increase in referrals, for the country as a whole, and that standardisation of criteria will be beneficial and may reduce overreferral in some places.** **However, due to the limited evidence regarding the most suitable criteria to use and uncertainty on the effect that this might have on referral numbers, the committee has recommended only that clinicians and commissioners 'consider' using these criteria as there is insufficient evidence to support a stronger recommendation.**
Betsi Cadwaladr University Health Board.	Short	07	5-6	Concern was raised that the requirement for referral immediately (within 24hrs) or urgently (within 2 weeks) to ear nose and throat department for those presenting with sudden onset of hearing loss will then in practice be actioned within those timeframes. Also, the urgency does also not appear to be matched in strength of wording by the management to "consider a steroid..."	**Thank you for your comment. The Committee considers the timeframes recommended to be appropriate.** **We are unable to be stronger about our recommendation with the evidence we have available but we do believe that individuals with a sudden hearing loss need to be seen for an urgent medical assessment as some specific causes need urgent treatment, e.g., autoimmune disease or cerebrovascular accident. The wording 'consider' was**

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					specifically for idiopathic sudden sensorineural hearing loss.
Betsi Cadwaladr University Health Board.	Short	07	28	Could there be clarification on what speech in noise tests might be employed to augment information gained from the PTA. In isolation, the PTA provides limited information to guide management or predict outcome of management. If not available, this should be added as a research need.	**Thank you for your comment. We have amended the wording to 'listening in noisy environments'. We are not recommending a specific speech-in-noise test, rather we are saying that there could be listening difficulties in noise that will not be detected on pure tone audiometry.** **The specific question of the effectiveness of different speech-in-noise tests or other additional tests that can be used alongside PTA testing was not a research question that was included within this guideline. Unfortunately we were only able to look at a limited number of questions. We are not able to make a research recommendation that falls outside of the included questions in the guideline as we have not established whether there is a lack of evidence in this area.**
Betsi Cadwaladr University Health Board.	Short	08	09	Use of patient reported outcome measurement tools for management interventions. The nature of these interventions is that benefit is not realised immediately. It would be a missed opportunity not to provide guidance on use of PROMS. There is a need for such guidance at service level that would have significant benefit for patients.	**Thank you for your comment. A recommendation has been made for audiology services to use self-report tools such as the Glasgow Hearing Aid Benefit Profile or the client –orientated Scale of Movement.**
Betsi Cadwaladr University Health Board.	Short	08	011-12	There are benefits to hearing aids other than just communication, including safety, environmental awareness and appreciation of other sounds (e.g. appreciation of music for pleasure). There is concern that by only stating communication needs as a	**Thank you for your comment. We've amended the recommendation to include awareness of warning sounds and the environment, and appreciation of music.**

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				reason for hearing aid use, they would then be denied to those that have profound hearing loss or those whose communication is via other means, such as adults with profound learning disabilities.	
Betsi Cadwaladr University Health Board.	Short	08	13-16	The additional detail in recommendation 1.5.2 was felt to be too prescriptive.	**Thank you for your comment. The committee considered that outlining the benefits of having 2 hearing aids if the person has hearing loss in both ears would be useful in helping them to make a decision on management options.**
Betsi Cadwaladr University Health Board.	Short	08	20	The reason for demonstration would be to consider the person's ability to use hearing aids and to ensure that the type of aid offered should be appropriate for their needs. It is suggested that wording such as this might be clearer than specifying to demonstrate the use of hearing aids.	**Thank you for your comment. We have adjusted the wording.**
Betsi Cadwaladr University Health Board.	Short	08	21-23	The level of information recommended to be discussed at the assessment is significantly more than done at this stage currently. There is concern, given the evidence that only a small percentage of information discussed is retained and the majority of current hearing aids having all the recommended options and therefore allow discussion and decision to be made at the fitting stage, rather than at assessment.	**Thank you for your comment. We have adjusted the wording to reflect this.**
Betsi Cadwaladr University Health Board.	General	General	General	It is welcomed that the guidelines are not prescriptive over the location of Audiology services, which might vary by pathway and due to geographical factors etc to efficiently meet local needs. This recognises the plurality of provision across the UK which may vary between and within the home countries devolved	**Thank you for your comment.**

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				health administrations.	
Betsi Cadwaladr University Health Board.	Full	General	General	Suggestion that there should be mention of consideration of referral to cochlear implant or bone anchored hearing aid service within the document and/or recommendations, or reference to other guidelines on these.	**Thank you for your comment. We have amended the recommendations to include discussion of onward referral for implantable devices or surgical management within the audiological assessment.**
Betsi Cadwaladr University Health Board.	Full	General	General	Question 1: Within the audiology service, the biggest impact to service access may come from the assessment of all adults with suspected dementia or mild cognitive impairment; however this is welcomed in order to meet the needs of this patient group. The challenge may also be mitigated by developments that were already in place locally through close working with memory services. The biggest impact within primary care is likely to be the recommendations on wax removal, given the current situation in which many services have stopped this service. This is welcomed by the audiology and ear nose and throat services, in whom the lack of primary care service for wax removal was impacting. The challenge will be less locally due to the presence of primary care audiology advanced practitioners that have been working on wax pathways in primary care.	**Thank you for your response. We will pass this information to the NICE resource impact team for their information.**
Betsi Cadwaladr University Health Board.	Full	General	General	Question 2: Whilst there would be cost implication in implementation of the frequency of assessment for those with learning disabilities, dementia and mild cognitive impairment, the recommendations are	**Thank you for your response. We will pass this information to the NICE resource impact team for their information.**

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				welcomed as there is clear evidence of the needs of this patient group and the wider impact of identifying and managing hearing loss for them. There would be cost implication for radiology services in the implementation of recommendation 1.3.1.	
Betsi Cadwaladr University Health Board.	Full	General	General	Question 3: Challenges would be supported by economic evaluations on the challenging recommendations in question, to further evidence the impact of change for the patient, within the service in question and across health services. Ready access to support materials that link to the guidelines, such as motivational interviewing materials from the IDA institute, would reduce the time needed for each individual service to investigate and implement the practical recommendations.	**Thank you for your response. We will pass this information to the NICE resource impact team for their information.**
Boots Hearing Care	Full	16	36	Suggest inclusion of lip reading classes	**Thank you for your comment. We did not look at the evidence behind lip reading classes and so cannot recommended them but have included reference to other organisations for support**
Boots Hearing Care	Full	18	35	Should reference be made that public can access private provision independently	**Thank you for your comment. NICE guidance is for provision made by the NHS.**
Boots Hearing Care	Full	18	42	Should speech in noise tests be recommended?	**Thank you for your comment. We did not review this question.**
Boots Hearing Care	Full	192	14.2.40.25	This could be expanded to be more explicit on technologies to include; FM, AI, bluetooth	**Thank you for your comment. The technologies listed in this section were examples. We did not limit our review to these examples and would have included any**

Organisation name	Document	Page No	Line No	Comments	Developer's response
					other relevant technologies. **We have also added the following text to the LETR: 'The committee is aware of innovations in this field with modern technology in particular FM, AI and Bluetooth, and is unable to comment on effectiveness in the absence of evidence.'**
Boots Hearing Care	Full	21	26	What about those adults with no measureable PTA loss but poor SNR or no measurable dysfunction yet claim difficulty in noise and choose to use a noise suppressing technology?	**Thank you for your comment. We recognise these cases but our remit restricted us to people with hearing loss.**
Boots Hearing Care	Full	212	15.3.46.29	Should there be some guidance as to which ear is aided first if a person selects one aid only or a Trust will only fund one ; ie – better ear as defined by PTA/speech results?	**Thank you for your comment. The committee has recommended clearly that 2 hearing aids are preferable for people with hearing loss in both ears, and so they should be encouraged to have 2 hearing aids and this should be funded. If a person is unwilling to have 2 hearing aids they should discuss this and make a decision in consultation with their audiologist, who will use their training and clinical judgement.**
Boots Hearing Care	Full	228	17.3.46.32	Should this recommendation not include here that after follow up a self-referral mechanism should be available with recall at 3 years?	**Thank you for your comment. The committee has reconsidered this issue and made an additional recommendation that implementing a system to automatically recall hearing aid users for reassessment regularly should be considered. However, the committee did not recommend a particular frequency for this recall due to lack of evidence. The committee has made a recommendation for further research on monitoring of people using hearing aids, which would include the question of what the**

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					optimum period between reassessments should be.
Boots Hearing Care	Full	77	general	Is there protocol for hyperventilation tests & when they should be used in presence of other results?	**Thank you for your comment.** **We are not sure if the question is about whether the committee recommends a hyperventilation protocol or if it's about the protocol used in the included paper. Therefore, we are providing a response for both.** **A comparison of the effectiveness of different hyperventilation protocols was not specifically addressed within this guideline and therefore the committee did not make any recommendations about this.** **The protocol for hyperventilation that was used in the included paper in the MRI systematic review is described in Mandala 2013 (Mandala M, Giannuzzi A, Astore S, Trabalzini F, Nuti D. Hyperventilation-induced nystagmus in vestibular schwannoma and unilateral sensorineural hearing loss. European Archives of Oto-Rhino-Laryngology. 2013; 270(7):2007-11**
Boots Hearing Care	Full	79	7.2.14. 10	Is there a recommendation for a test that audiologists can include to assess cognitive state?	**Thank you for your question. The guidelines recommend that audiologists should take a 'full history including relevant symptoms, comorbidities, cognitive ability …' A history is not an assessment and we do not expect the audiologist to go any further than a history which reflects what would be recorded in a typical audiological**

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					assessment. We did not consider cognitive assessments and therefore cannot comment on which one should be used.
Boots Hearing Care	Full	93	general	Even if loss is mild or typically considered not within an aidable range – if REM can show not adding risk or occlusion but providing aided benefit – should this be included?	**Thank you for your comment. If hearing loss is too profound to be aidable then it would be inappropriate to provide a hearing aid. If a patient with a mild loss can achieve benefit with a hearing aid this is an aidable hearing loss. An aidable hearing loss is one that will benefit from use of a hearing aid.**
Boots Hearing Care	Full	general	General	A welcome and very thorough guideline which serves as a comprehensive overview of the state of audiology and the tools associated including wax removal services. Recommendations made reflect best practice without creating an adverse pressure on services.	**Thank you for your comment.**
Boots Hearing Care	Full	General	General	There is no guidance on when it might be appropriate to consider referral for cochlea implant	**Thank you for your comment. We have amended the recommendations and linked to NICE guidelines on cochlear implant.**
British Academy of Audiology	Short	4	23	Inadequate definition of hyperacusis for a GP referring to understand the term, this could lead to many over referrals to ENT rather than routine audiology appointments. Better definition on NHS website is "Hyperacusis is the name for intolerance to everyday sounds that causes significant distress and affects a person's day-to-day activities". https://www.nhs.uk/conditions/hyperacusis/	**Thank you for your comment.** **We've amended the recommendation and added the definition to the glossary.**
British Academy of Audiology	Short	7	1-4	Concerned that point 9 refers to only a one frequency difference of 20dB, currently this is set by BAA and BSHAA guidance as 2 Consecutive Frequency differences of 20dB. From BAA Onward Referral	**Thank you for your comment. The committee has reappraised the evidence in the light of comments and has decided to recommend a difference of 15dB at 2 adjacent frequencies**

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				Guidance defined as a difference between the left and right bone conduction thresholds (masked as appropriate) of 20 dB or greater at two or more adjacent frequencies: 500, 1000, 2000, 4000 or 8000Hz. (Other frequencies may be included at the discretion of the Audiologist). In the absence of recordable bone conduction thresholds, air conduction thresholds should be considered instead. (November 2016 http://www.baaudiology.org/files/4614/9989/1701/BAA_Guidance_for_Onward_Referral_of_Adults_with_Hearing_Difficulty_Directly_Referred_to_Audiology_2016_-_minor_amendments.pdf). Limited evidence to show the need to change these criteria in the document. This will lead to a large proportion of patients being referred for MRI leading both to increased cost, wait times and unnecessary increased levels of concerns for patients whilst they wait for scan results.	**(0.5, 1, 2, 4 or 8kHz) to reflect current practice in ENT clinics.** **The committee recognises that current practice varies across the country, and that a difference of 20 dB at 2 frequencies is used in some areas, but believes that the definition now adopted represents most common current practice. As such the committee does not believe that these criteria will lead to a significant increase in referrals for the country as a whole, and that standardisation of criteria will be beneficial and may reduce overreferral in some places.** **However, due to the limited evidence regarding the most suitable criteria to use and uncertainty on the effect that this might have on referral numbers, the committee has recommended only that clinicians and commissioners 'consider' using these criteria as there is insufficient evidence to support a stronger recommendation.** **The bone conduction threshold is best if it is recordable and available. This is described in the full version of the guideline.**
British Academy of Audiology	Short	7	22	Tympanometry- it is not part of a routine adult assessment in audiology to do tympanometry unless there is cause for concern that the hearing loss may be conductive in nature. To add this as a recommendation for all assessments would require additional tympanometers to be purchased in many clinics both in traditional audiology settings in NHS hospitals and in community out reach or AQP services. Suggest a more pragmatic approach such	**Thank you for your comment. The wording of the recommendation has been amended to specify where indicated.**

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				as that defined in BAA Guidelines for onward referral as "Tympanometry (performed if there is any indication of middle ear effusion)". Tympanometers are available in many clinics but not in every room so the need to do a tymp on every referral would be the issue not on those that show a clinical need for the test.	
British Academy of Audiology	Short	8	5	Concerned that access to printing to give the person a copy of their management plan is limited in many community settings. Also the use of technology should be included here eg emailing plans directly, rather than relying on old technology (printing)	**Thank you for your comments. The guidelines do not mention printing. There is no reason a copy cannot be electronic, hand written or typed. The format chosen should reflect the needs of the patient.**
British Academy of Audiology	Full	12	37	Inadequate definition of hyperacusis for a GP referring to understand the term, this could lead to many over referrals to ENT rather than routine audiology appointments. Better definition on NHS website is "Hyperacusis is the name for intolerance to everyday sounds that causes significant distress and affects a person's day-to-day activities". https://www.nhs.uk/conditions/hyperacusis/	**Thank you for your comment. We have amended the definition of 'hyperacusis' as suggested and added it to the glossary.**
British Academy of Audiology	Full	13	21	Concerned that point 9 refers to PTA hearing threshold asymmetry that a GP referring will not have access to at referral stage. It makes the point at this stage irrelevant	**Thank you for your comment. In order to request an MRI scan the person referring will need to have these details.**
British Academy of Audiology	Full	13	21	Concerned that point 9 refers to only a one frequency difference of 20dB, currently this is set by BAA and BSHAA guidance as 2 Consecutive Frequency differences of 20dB. From BAA Onward Referral Guidance defined as a difference between the left	**Thank you for your comment. The committee have reviewed the evidence in light of comments and have amended the recommendation to align with current ENT practice. The recommendation is to consider**

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				and right bone conduction thresholds (masked as appropriate) of 20 dB or greater at two or more adjacent frequencies: 500, 1000, 2000, 4000 or 8000Hz. (Other frequencies may be included at the discretion of the Audiologist). In the absence of recordable bone conduction thresholds, air conduction thresholds should be considered instead. (November 2016 http://www.baaudiology.org/files/4614/9989/1701/BAA_Guidance_for_Onward_Referral_of_Adults_with_Hearing_Difficulty_Directly_Referred_to_Audiology_2016_-_minor_amendments.pdf). Limited evidence to show the need to change these criteria in the document. This will lead to a large proportion of patients being referred for MRI leading both to increased cost, wait times and unnecessary increased levels of concerns for patients whilst they wait for scan results.	**MRI scan if there is a sensorineural hearing loss of 15 dB HL at 2 or more adjacent frequencies (0.5, 1, 2, 4 and 8 kHz).**
British Academy of Audiology	Full	16	36	Suggest inclusion of lip reading classes	**Thank you for your comment. We did not look at the evidence behind lip reading classes and so cannot recommended them but have included reference to other organisations for support.**
British Academy of Audiology	Full	18	35	Should reference be made that public can access private provision independently?	**Thank you for your comment. NICE guidance is for provision made by the NHS.**
British Academy of Audiology	Full	18	42	Should speech in noise tests be recommended?	**Thank you for your comment. We did not review this question.**
British Academy of Audiology	Full	192	14.2.40.25	This could be expanded to be more explicit on technologies to include; FM, AI, Bluetooth	**Thank you for your comment. The technologies listed in this section were examples. We did not limit our review to these examples and would have included any**

Organisation name	Document	Page No	Line No	Comments	Developer's response
					other relevant technologies. **We have also added the following text to the LETR: 'The committee is aware of innovations in this field with modern technology in particular FM, AI and Bluetooth, and is unable to comment on effectiveness in the absence of evidence.'**
British Academy of Audiology	Full	21	26	What about those adults with no measureable PTA loss but poor SNR or no measurable dysfunction yet claim difficulty in noise and choose to use a noise suppressing technology?	**Thank you for your comment. These guidelines are for those adults with hearing loss. We have not considered these dysacuses.**
British Academy of Audiology	Full	21	3.3.36 3.3.23 & 3.3.24	Whilst we fully appreciate that the Final Scope and draft guidance does not cover "Surgical management of hearing loss", it does identify "Further assessment" and "Management of hearing difficulties" as 2 out of the 3 key areas to be covered. The BAA considers the need to refer to specialist services when appropriate to be entirely within the identified scope of this guidance.	**Thank you for your comment. We have amended the recommendations to include discussion of onward referral for implantable devices and surgical management if appropriate at the audiological assessment.**
British Academy of Audiology	Full	212	15.3.46.29	Should there be some guidance as to which ear is aided first if a person selects one aid only or a Trust will only fund one; ie – better ear as defined by PTA/speech results?	**Thank you for your comment. The committee has recommended clearly that 2 hearing aids are preferable for people with hearing loss in both ears, and so they should be encouraged to have 2 hearing aids and this should be funded. If people are unwilling to have 2 hearing aids they should discuss this and make a decision in consultation with their audiologist, who will use their training and clinical judgement.**
British Academy of Audiology	Full	22	3.3.33 3.3.36	Further, the Final Scope and draft guidance both identify the Cochlear implants for children and adults with severe to profound deafness (2009) NICE	**Thank you for your comment. We have amended the guidelines to include reference to the NICE guidance on Cochlear implants**

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				technology appraisal guidance TA166 and Auditory brain stem implants (2005) NICE interventional procedure IPG108 as related NICE pathways, it does not refer to access to these treatment options anywhere else within the draft guidance. The BAA considers the identification and referral of appropriate cases to specialised services to be relevant to the recommendations of the committee in both the "Urgent and routine referral" and the "Monitoring and follow-up" sections of the draft guidance.	**for children and adults with severe to profound deafness TA166 (2009) and Auditory brain stem implants IPG108 (2005).**
British Academy of Audiology	Full	228	Recommendation 32	We are concerned that offering every person fitted with hearing instruments a face to face follow up will limit patient choice as many identify an initial preference for a remote (usually telephone follow up) during their initial care plan. We would disagree with the committee that Face to Face follow ups are the usual method. Telephone follow ups are common place as first line care and as there is no evidence presented in the guidelines to back up this recommendation for face to face over telephone follow ups we feel this should be amended to ensure that it is in line with current practice. Leaving a recommendation for face to face follow up will increase cost of provision and stretch under pressure services with no evidence of the benefit. To offer face to face follow up will reduce appointment availability and increase wait times. Telephone follow ups are generally shorter time slots and gain better attendance rates than face to face follow ups. The inclusion of face to face follow up would create a potential resource burden on the NHS, and does not fit with the introduction of remote follow ups in other areas of practice.	**Thank you for your comment. The committee strongly believe that everyone given a hearing aid should be offered a face-to-face follow up because some people will have difficulty with conversation over the telephone. Also the follow-up appointment may involve checking or adjusting the device which would require the appointment to be in person. However, the committee recognises that some people may have a preference for other methods of delivery and has adjusted the recommendation to include other methods of follow up if the person with hearing loss wishes.**

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British Academy of Audiology	Full	228	17.3.46.32	Should this recommendation not include here that after follow up a self-referral mechanism should be available with recall at 3 years?	**Thank you for your comment. The committee has reconsidered this issue and made an additional recommendation that implementing a system to automatically recall hearing aid users for reassessment regularly should be considered. However, the committee did not recommend a particular frequency for this recall due to lack of evidence. The committee has made a recommendation for further research on monitoring of people using hearing aids, which would include the question of what the optimum period between reassessments should be.**
British Academy of Audiology	Full	252	Section 18.2.45 point 35	This recommendation will be challenging in practice as most audiologists have limited skills in the area of motivational interviewing. Training would be required for each audiologist on this skill and a budget would need to be found to provide adequate training on this to the whole workforce. It would need to be specifically added into curriculums for current and future trainees.	**Thank you for your comment. The committee has recommended that such strategies should be considered. We have added a further comment to this section to make clear that training costs will need to be carefully considered before adopting any particular strategy.**
British Academy of Audiology	Full	60	Point 5.3.46	Inadequate definition of hyperacusis for a GP referring to understand the term, this could lead to many over referrals to ENT rather than routine audiology appointments. Better definition on NHS website is "Hyperacusis is the name for intolerance to everyday sounds that causes significant distress and affects a person's day-to-day activities". https://www.nhs.uk/conditions/hyperacusis/	**Thank you for your comment. The wording has been amended as suggested.**
British Academy of Audiology	Full	77	general	Is there protocol for hyperventilation tests & when they should be used in presence of other results?	**Thank you for your question. We are not sure if the question is about whether the committee recommends a hyperventilation**

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					protocol or if it's about the protocol used in the included paper. Therefore, we are providing a response for both. **A comparison of the effectiveness of different hyperventilation protocols was not specifically addressed within this guideline and therefore the committee did not make any recommendations about this.** **The protocol for hyperventilation that was used in the included paper in the MRI systematic review is described in Mandala 2013 (Mandala M, Giannuzzi A, Astore S, Trabalzini F, Nuti D. Hyperventilation-induced nystagmus in vestibular schwannoma and unilateral sensorineural hearing loss. European Archives of Oto-Rhino-Laryngology. 2013; 270(7):2007-11**
British Academy of Audiology	Full	79	7.2.14. 10	Is there a recommendation for a test that audiologists can include to assess cognitive state?	**Thank you for your question. The guidelines recommend that audiologists should take a 'full history including relevant symptoms, comorbidities, cognitive ability …' A history is not an assessment and we do not expect the audiologist to go any further than a history which reflects what would be recorded in a typical audiological assessment. We did not consider cognitive assessments and therefore cannot comment on which one should be used.**
British Academy of Audiology	Full	93	general	Even if loss is mild or typically considered not within an audible range – if REM can show not adding risk or occlusion but providing aided benefit – should this be included?	**Thank you for your comment. If hearing loss is too profound to be aidable then it would be inappropriate to provide a hearing aid. If a patient with a mild loss can achieve benefit**

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					with a hearing aid this is an aidable hearing loss. An aidable hearing loss is one where the patient will benefit from use of a hearing aid.
British Academy of Audiology	Full	97	Point 15	We are concerned that many clinical settings particularly in community out reach settings do not have access to printing facilities which would allow the personalised care plan to be given to the patient. The use of email as the default for this should be promoted, rather than rely on old technologies.	**Thank you for your comment. The guidelines do not mention printing. There is no reason a copy cannot be electronic, hand written or typed. The format chosen should reflect the needs of the patient.**
British Academy of Audiology	Full	general	general	A welcome and very thorough guideline which serves as a comprehensive overview of the state of audiology and the tools associated including wax removal services. Recommendations made reflect best practice without creating an adverse pressure on services.	**Thank you for your comments.**
British Academy of Audiology	Full	general	general	There is an omission in this draft guidance around identification and onward referral of patients who cannot gain adequate benefit from conventional acoustic hearing aids to specialised services (auditory implant programmes) for assessment. These patients are potentially eligible for hearing implants (middle ear, cochlear and auditory brainstem implants and bone anchored hearing aids). The efficacy of these interventions, which are all NHS commissioned and two of which (cochlear and brainstem implants) are covered by other NICE guidance, is addressed elsewhere and therefore would not require further evaluation by the committee. The referral of these patients by audiology services to specialised services is immensely important to support patient access to these NHS-commissioned interventions.	**Thank you for your comments. The recommendations have been amended to include discussion of implantable devices at the audiological assessment.**

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				We request that the committee acknowledge within the guidance the need for audiology services to (a) identify patients for whom conventional hearing aids are contraindicated, not appropriate, or unlikely to provide sufficient benefit; and (b) consider onward referral of these patients to specialised services when appropriate.	
British Academy of Audiology	Full	general	general	The use of technology in interventions should be promoted – whilst the guidance may well reflect current practice in audiology we would want to encourage the use of technology to facilitate interventions and to make this easier for patients to access remotely.	**Thank you for your comments. We have added comments on this and have amended the recommendations to include discussion of implantable devices at the audiological assessment.**
British Academy of Audiology	Full	general	general	There is extensive reference to information provision for patients – this should be produced in a consistent way and potentially supported through the AOHL work programme/ produced nationally.	**Thank you for your comment. We have amended the guidelines to include support provided by other organisations.**
British Academy of Audiology	Full	general	general	The Action on Hearing Loss programme needs to be referenced more clearly as part of this guidance as many of the areas could potentially be taken forward through these workstreams.	**Thank you for your comment. We have amended the guidelines to include third sector support.**
British Academy of Audiology	Full	general	general	We support the need for research and the areas identified as priorities.	**Thank you for your comment.**
British Academy of Audiology	Full	general	general	The evidence base for hearing interventions needs to be improved and we would support initiatives to facilitate this.	**Thank you for your comment. The committee agrees that these are important issues.**
British Academy of Audiology	Full	general	general	How will implementation of the guidance be monitored to ensure consistent application in practice?	**Thank you for your response. Your comments will be considered by NICE where relevant support activity is being planned.**

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British Association of Audiovestibular Physicians (BAAP)	Full	012	5 -15 and 5.2.4	This appeared confusing until we read the definitions of 'Refer immediately', 'Refer urgently' and 'Refer' on page 57. We suggest these definitions should be moved to the 5.1, the introduction to the section, and under 1.1 on page 12 (Many people read ONLY the summary of guidelines). We think sudden sensorineural hearing presenting within 72 hours should warrant an immediate referral – the sooner the better the outcome from the use of eg steroids.	**Thank you for your comment. We agree and have stated this in the recommendations.**
British Association of Audiovestibular Physicians (BAAP)	Full	013	-	Consider adding to the sub groups, pre-(ototoxic) chemotherapy hearing test	**Thank you for your comment. These cases would come under screening and this is outside our scope. I would hope they would be included in the oncology protocols. They are mentioned in the introduction to the chapter.**
British Association of Audiovestibular Physicians (BAAP)	Full	013	21	Point 9: what is the reference for this recommendation?	**Thank you for your comment. The evidence behind the recommendation appears later in the guideline document in chapter 6. The rationale for making the recommendation based on the available evidence is stated in the 'recommendations and link to evidence' section within that chapter. The committee has reviewed the evidence in light of comments and has amended the recommendation to align with current ENT practice.**
British Association of Audiovestibular Physicians (BAAP)	Full	017	28	'Key recommendations for future research' reads better.	**Thank you for your comment; however, this is standard text and should be consistent with previous guidance.**
British Association of	Full	055	12	Recommendation 1 bullet point 1: Considering there	**Thank you for your comment. The**

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Audiovestibular Physicians (BAAP)				was no clinical evidence (page 56) for intervention, we suggest a distinction is made between sudden sensorineural hearing loss presenting within 72 hours and a similar hearing loss developing within 72 hours but presenting within 30 days without progression after the first 3 days of onset. The former should be referred immediately and the latter urgently. Bullet point 3: All rapidly progressive sensorineural hearing loss irrespective of time of presentation should be referred urgently.	**recommendations made for sudden sensorineural hearing loss are in line with what you suggest.**
British Association of Audiovestibular Physicians (BAAP)	Full	056	12	Recommendation 4: A reference and reason for this recommendation should be given here (or say: 'see notes on page 57). From experience middle ear effusion is over diagnosed in primary care (Audiologists have access to tympanometry, GPs don't).	**Thank you for your comment.** **The committee considers that many GPs would be able to diagnose a middle ear effusion not associated with an upper respiratory tract infection, but has amended the recommendations to include audiological assessment prior to referral or in parallel if there is doubt.**
British Association of Audiovestibular Physicians (BAAP)	Full	060	6	Recommendation 6, bullet point 5 implies vertigo that has resolved or is not recurrent may not be referred. We think any hearing loss associated with vertigo warrant referral.	**Thank you for your comment. The committee considers the recommendation to be appropriate and it is not necessary to refer every person with an episode of vertigo which may or may not be relevant.**
British Association of Audiovestibular Physicians (BAAP)	Full	075	1	Recommendation 9: We are concerned about this on the basis of the DOH criterion of a ≥20 asymmetry at a single frequency between 0.5 and 4 kHz. We are furthermore we are surprised that the Committee felt that these recommendations would lead to the number of referrals remaining the same or decreasing (page 76). Most audiological and ENT services in England use the Sunderland criteria. Sensitivity and specificity data for DOH and Sunderland are broadly similar and	**Thank you for your comment. The committee has revisited the evidence and has reworded this recommendation adopting the Cueva criteria and not changing current ENT practice. Cueva took 15 dB at 2 adjacent frequencies, including 8 kHz (0.5, 1, 2, 4, 8 kHz). We believe these criteria are the most commonly used criteria in currently practice.** **However, due to the limited evidence**

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				so we believe that relying on the DOH criterion would general more MRI scanning without picking up more VSs, bearing in mind whatever criteria used, the pick-up rate is less than 2% (Vandervelde). There is also a risk of picking up more incidental abnormalities irrelevant to the audiovestibular presenting symptoms. Why are asymmetries at 6 and 8 kHz not relevant?	**regarding the most suitable criteria to use and uncertainty on the effect that this might have on referral numbers, the committee has recommended only that clinicians and commissioners 'consider' using these criteria as there is insufficient evidence to support a stronger recommendation.**
British Association of Audiovestibular Physicians (BAAP)	Full	076	-	'Therefore, it was agreed that the Department of Health criteria of ≥20 dB asymmetry of sensorineural (bone conduction) hearing thresholds at any single frequency between 0.5–4 kHz may be the most appropriate protocol for referral for imaging.' Does this document exist? If so, what is the reference?	**Thank you for your comment. The committee has reviewed the evidence and has opted not to change current practice which is now reflected in the wording.**
British Association of Audiovestibular Physicians (BAAP)	Full	096	15	9.2.5 Recommendation 14 bullet point 1: Does this mean the audiologist is expected to assess cognitive abilities? If so, they should have access to appropriate questionnaires	**Thank you for your question. The guidelines recommend that audiologists should take a 'full history including relevant symptoms, comorbidities, cognitive ability …' A history is not an assessment and we do not expect the audiologist to go any further than a history which reflects what would be recorded in a typical audiological assessment.**
British Association of Audiovestibular Physicians (BAAP)	Full	124	1	10.2.4 Recommendation 18 bullet point 2ii: In our experience, GPs are increasingly not offering ear syringing in Primary care. Instilling water in the ear canal for 15 minutes before repeating irrigation is not practical in Primary Care.	**Thank you for your comment. We don't necessarily expect irrigation only in primary care and this may be offered in ear care clinics within the community, possibly linked to audiology clinics. I think it very much depends on how you organise your clinical load. To instil a few drops of water into someone's ears and ask them to wait while you deal with another patient may make the difference to an elderly patient who finds it difficult to travel. People with hearing loss**

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					should not be left with wax which causes them to be unable to wear their hearing aids.
British Association of Audiovestibular Physicians (BAAP)	Full	132	Table 53	Dexamethasone is not the same as Betamethasone	**Thank you for highlighting this. We have corrected it in the full guideline and the appendix.**
British Association of Audiovestibular Physicians (BAAP)	Full	147	1	Pages 15, 147 and 167 Recommendation 22: It is stated on page 149 that 'the committee was not able to support any particular drug or route of administration, but advised that the use of steroids should be considered'. Given that the evidence for drug and route is weak, perhaps it would be reasonable to avoid invasive treatment initially but reserve it as salvage after failure of oral steroids.	**Thank you for your comment. The committee found no evidence that supported a change from current practice but felt that to consider a steroid was reasonable. We have not suggested a route of administration but were interested in results of some research advocating early use of intratympanic treatment and have recommended research. It is up to the individual doctor to assess the case and manage as appropriate.**
British Cochlear Implant Chair	Full	21	3.3.36 3.3.23 & 3.3.24	Whilst we fully appreciate that the Final Scope and draft guidance does <u>not</u> cover "Surgical management of hearing loss", it <u>does</u> identify "Further assessment" and "Management of hearing difficulties" as 2 out of the 3 key areas to be covered. **The BCIG considers the need to refer to specialist services when appropriate to be entirely within the identified scope of this guidance.**	**Thank you for your comment. We have amended the recommendations to include discussion of onward referral for implantable devices and surgical management if appropriate at the audiological assessment.**
British Cochlear Implant Chair	Full	22	3.3.33 3.3.36	Further, the Final Scope and draft guidance both identify *the Cochlear implants for children and adults with severe to profound deafness (2009) NICE technology appraisal guidance TA166* and *Auditory*	**Thank you for your comment. The committee did not consider identifying people for referral for implantable devices and we are therefore unable to provide guidance on this; however, we have amended the**

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				brain stem implants (2005) NICE interventional procedure IPG108 as related NICE pathways, it does not refer to access to these treatment options anywhere else within the draft guidance. **The BCIG considers the identification and referral of appropriate cases to specialised services to be relevant to the recommendations of the committee in both the "Urgent and routine referral" and the "Monitoring and follow-up" sections of the draft guidance.**	**recommendations to advise discussion on referral for implantable devices at the audiological assessment.**
British Cochlear Implant Chair	Full	General	General	**The British Cochlear Implant Group (BCIG) is concerned that there is an omission in this draft guidance around identification and onward referral of patients who cannot gain adequate benefit from conventional acoustic hearing aids to specialised commissioned services (auditory implant programmes) for assessment.** These patients are potentially eligible for hearing implants (middle ear, cochlear and auditory brainstem implants and bone anchored hearing aids). The efficacy of these interventions, which are all NHS commissioned and two of which (cochlear and brainstem implants) are covered by other NICE guidance, is addressed elsewhere and therefore would not require further evaluation by the committee. The referral of these patients by audiology services to specialised services is immensely important to support patient access to these NHS-commissioned interventions.	**Thank you for your comments. We have amended the recommendations to include discussion of implantable devices at the audiological assessment.Assessment and referral criteria for these services were outside the scope of this guideline.**

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				The BCIG requests that the committee acknowledge within the guidance the need for audiology services to (a) identify patients for whom conventional hearing aids are contraindicated, not appropriate, or unlikely to provide sufficient benefit; and (b) consider onward referral of these patients to specialised services when appropriate.	
British Society of Audiology (BSA)	Short	010	4	Vague – not sure though how to define this more clearly as it becomes a list of "options" and each may have different methods for assessing outcomes – some may have none / assessment method is more anecdotal than scientific?	**Thank you for your comment. It is difficult to encompass the whole range and so have used examples.**
British Society of Audiology (BSA)	Short	011	9	Does this differ by country or as it could differ by country and if so this wording may need to be amended to avoid the recommendations being "out of date" as a result of a single country change?	**Thank you for your comment. The guidelines are written for NHS services in England.**
British Society of Audiology (BSA)	Short	014-24	5	Recommendations agreed with, although the delivery of assessing adults with dementia or mild cognitive impairment on a biannual basis may be challenging.	**Thank you for your comment.**
British Society of Audiology (BSA)	Short	015	16-19	No mention of manual removal of wax using probe as an option in recommendations for research, despite being included in standards.	**Thank you for your comment. The committee agrees that this is an important area for further research. However, it was felt that other topics needed to be prioritised due to a more pressing need for evidence in those areas.**
British Society of Audiology (BSA)	Short	03	5	Minor point but please define "adult" as this is often a contentious issue when discussing paediatric / adult services.	**Thank you for your comment. A definition of the population for this guideline is included on page 8 of the short version. The**

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					population is defined as follows: "The guideline covers adults aged 18 and over who present with hearing loss, including those with onset before the age of 18 but presenting in adulthood."
British Society of Audiology (BSA)	Short	04	18	Concerns that lack of explanation of term: local complex audiology pathway may lead to misinterpretation	**Thank you for your comment. The committee understands the ambiguity and has adjusted the wording to 'specialist audiology service for diagnostic investigation, using a local pathway'.**
British Society of Audiology (BSA)	Short	04	27	There is scope with Audiology led wax removal services to accommodate some of this within Audiology Vs ENT in addition to supporting Primary Care where Audiology is embedded within Primary Care.	**Thank you for your comment.**
British Society of Audiology (BSA)	Short	04; 5	27-28; 1-2	Clarification of "refer... if, after initial treatment of earwax... partial or complete obstruction..." to ensure that sufficient attempt is made to treat the earwax before referral when this is rolled out into practice, given number of people affected and reticence to remove wax in primary care.	**Thank you for your comment. We have amended the recommendation.**
British Society of Audiology (BSA)	Short	05	general	There is no reference to frequency of hearing assessment for those with previously diagnosed hearing loss and diagnosed dementia or MCI – this is logical based on the evidence of support needs and lack of carer understanding of hearing loss for this patient group.	**Thank you for your comment. Once the person has been assessed and diagnosed with hearing loss they would have a follow-up appointment and re-access audiology services in the same way as the general hearing loss population. The committee have recommended that a system to recall people for reassessment be considered by audiology services.**
British Society of	Short	05	16	"Consider" - is this appropriate i.e. how will this be	**Thank you for your comment.**

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Audiology (BSA)				interpreted and should this not require awareness raising etc prior to being part of this otherwise it could be poorly interpreted and seen as "refer all…" with the result being to overwhelm Services?	**A strongly worded recommendation would be 'refer all'. In this instance the term 'consider' is used to reflect the strength of the evidence and should be interpreted to mean referral is considered by the health practitioner based on their clinical assessment and with involvement of the patient and/or their carer as part of shared decision making.**
British Society of Audiology (BSA)	Short	05	16-18	Wording is not clear how often this should be applied or in what circumstance – is this referring to one occasion for each person? The wording could then instead read "when no previous referral has been made and again when ".	**Thank you for your comment. The recommendation applies to health practitioners providing care to a person with diagnosed or suspected dementia or mild cognitive impairment at any consultation. Hearing loss is underdiagnosed in this population and the committee made this recommendation to alert health professionals to consider that hearing loss may be contributing to the person's communication difficulties.**
British Society of Audiology (BSA)	Short	05	19	Similar to example 3.	**Unfortunately we are not sure what this comment referred to and so are unable to provide a response. Your other comments have been responded to separately in this table.**
British Society of Audiology (BSA)	Short	05	19-21	Should the statement "without hearing loss" be "without a previously diagnosed hearing loss", as the intention of referral is to ascertain whether they do or do not have hearing loss at the current time?	**Thank you for your comment. Wehave reworded the recommendation to account for this.**
British Society of Audiology (BSA)	Short	05	22	Similar to examples 3 & 4.	**Unfortunately we are not sure what this comment referred to and so are unable to provide a response. Your other comments have been responded to separately in this**

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					table.
British Society of Audiology (BSA)	Short	05	22-24	Can this statement be extended without rewording to include 2 yearly hearing assessment for those with diagnosed LD that are not being assessed within child services, whether this be due to late diagnosis or due to the child services available. Or would an expansion be required to include all, with wording such as "when they transfer from child to adult services (if accessing), and every 2 years when adult age."	**Thank you for your comment. This guideline does not cater for individuals under the age of 18. Transfer to adult services usually occurs at about this time and the guidance given is for an annual check from the age of 14. We are attempting to add missing detail to that annual check by specifying a hearing assessment every 2 years.**
British Society of Audiology (BSA)	Short	05	26	Does this statement require being explicit with regard to who removes it?	**Thank you for your question. Anyone who has the knowledge and skills required to perform the procedure can do this. It is a question of training and ability rather than job title.**
British Society of Audiology (BSA)	Short	05	26-28	Risk of those with co-morbidities such as dementia or learning disabilities being unable to determine whether earwax is indeed contributing to hearing loss, in addition to increased risk of aural care problems in those with learning disabilities. Recommend that there be an additional recommendation related to these groups.	**Thank you for your comment. The recommendation applies to all people with earwax and therefore the committee do not consider it is necessary to have a separate recommendation for this population. For people with dementia and learning difficulties: most will tolerate wax removal and a robust audiological assessment will provide the answer about hearing loss.**
British Society of Audiology (BSA)	Short	06	10	By stipulating electronic irrigator at the point of repeating irrigation, it is not clear what form of irrigation is intended prior to this. Suggest instead opening with "When carrying our ear irrigation with an electronic irrigator..." instead.	**Thank you for your comment. The recommendation has been amended to specify the different types of irrigation that may be used.**
British Society of Audiology (BSA)	Short	06	14-19	Not clear as to why only microsuction or other methods such as with a manual probe have the requirement of practitioner having training and	**Thank you for your comment. We have altered the wording to make it clear that training and correct equipment are necessary**

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				expertise and correct equipment available; it would be logical that this would be the case for irrigation also. Risk of interpretation of irrigation as being the preferable form of wax removal, and therefore contraindications to irrigation are those to all wax removal in primary/community care.	**for all methods of irrigation.**
British Society of Audiology (BSA)	Short	06	20	Clarification suggested whether this refers to removing earwax themselves, such as self-irrigation kits given out some practices, and/or use of manual irrigation devices in community care, such as for domiciliary visits. If the latter, and also to clarify what should be done instead, perhaps include additional sentence such as "A combination of use of wax softeners and manual removal using a probe is recommended for domiciliary community services". Also risk of mis-interpretation of quoting this in isolation to argue against all ear irrigation (often known colloquially as syringing even when using electronic irrigators).	**Thank you for your comment. We did not have sufficient evidence to recommend self-irrigation kits. Electronic irrigators are light-weight and eminently portable for use in community care if needed. We would therefore suggest manual removal using a probe and direct vision where appropriate, wax softeners and then irrigation using an electronic irrigator as is suggested in the guideline.**
British Society of Audiology (BSA)	Short	06	21-24	Consider including 'promotion of measures to reduce build up of wax' - What can the patient do to prevent build up of wax re-occurring? eg use of olive or almond oil. Efforts at prevention of this health problem should surely be a priority given the need to reduce demand on the NHS.	**Thank you for your comment. Unfortunately we did not find any evidence about this but have added a comment about prevention measures in the full guideline.**
British Society of Audiology (BSA)	Short	06	26	Who should refer for this purpose?	**Thank you for your comment. We have amended the wording to clarify but, to answer your question, anyone with the competences and permission to do so.**
British Society of Audiology (BSA)	Short	07	1	Similar to example 7.	**Unfortunately we are not sure what this comment referred to and so are unable to**

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					provide a response. Your other comments have been responded to separately in this table.
British Society of Audiology (BSA)	Short	07	5	Similar to examples 7 & 8.	**Unfortunately we are not sure what this comment referred to and so are unable to provide a response. Your other comments have been responded to separately in this table.**
British Society of Audiology (BSA)	Short	07	17	See above point. It seems surprising to be so prescriptive about assessing restrictions on activity using a validated tool when the recommendations on assessing outcomes is so much vaguer.	**Thank you for your comment. The self-report instruments recommended are provided as examples which the committee considered to be recognised and currently used.**
British Society of Audiology (BSA)	Short	07	22	If indicated.	**Thank you for your comment. The wording has been amended to specify where indicated.**
British Society of Audiology (BSA)	Short	07	Section 1.4	Given that the recommendations include assessment for those with diagnosed dementia or learning disabilities, one might expect the assessment section to similarly mention this. This might alternatively be added to section 1.7, with reference to NICE guidelines that might be used regards these patient groups.	**Thank you for your comment. The recommendations apply to everyone having an audiological assessment and it would be for the audiologist to judge if adjustments to the assessment were required on an individual basis. Similarly in 1.7 the recommendation to tailor services to enable people to participate in their care would apply to those with dementia and learning disabilities as well as the general population.**
British Society of Audiology (BSA)	Short	07	Section 1.4	Family and carers are only mentioned in 1.4.3 despite the evidence that their involvement throughout the pathway results in improved outcomes (see various from Australia including papers	**Thank you for your suggestion. The principles of shared decision making are embedded within all NICE guidance and a link to information on this is provided in the**

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				published recently htat may not have been included). Suggest a recommendation that family and carers are involved throughout the pathway of assessment and management as point 1.4.1, and then subsequent reference to "person and any family and carers present" rather than "person". This would also make the recommendations appropriate for those with a diagnosis of dementia or learning disabilities. This might alternatively be added to section 1.7.	**short guideline. Please see https://www.nice.org.uk/about/nice-communities/public-involvement/your-care. We did not review evidence on involvement of family and carers; however, we have referred to the Patient Experience guideline in 1.7 which makes generic recommedations on the involvement of family and carers that would apply to a hearing loss population. The committee therefore consider it is not necessary to repeat this within section 1.4.**
British Society of Audiology (BSA)	short	08	2	It would be helpful if guidelines expanded on 'communication strategies' as an option and perhaps included term in glossary (full document p 267). Particularly so for the benefit of non-Audiologists.	**Thank you for your comment. We did not find evidence to recommend particular communication strategies, but have discussed different management options within the guideline.**
British Society of Audiology (BSA)	Short	08	11-12	Cross reference to NICE guidance on candidature for Cochlear Implantation would be helpful in the short version – eg 'consider and refer for CI assessment where indicated'. Similarly, for new NICE guidance for Dementia (particularly given specific reference to dementia in these guidelines.)	**Thank you for your comment. The guidelines have been amended to include discussion of onward referral for CI where appropriate within the audiological assessment. The Dementia guideline does not provide guidance on hearing loss and therefore is not relevant to the readership of this guideline.**
British Society of Audiology (BSA)	Short	08	17-19	Add goal setting as another specific along with motivational interviewing and engagement strategies.	**Thank you or your comment. We've amended the recommendation to include goal setting.**
British Society of Audiology (BSA)	Short	08	20	In what level of detail, should this include the types of devices available e.g BTE (open fit, RIE, mould), ITE, ITC, BAHA, etc	**Thank you for your comment. This would be for the audiologist to determine when discussing options with the patient.**
British Society of Audiology (BSA)	Short	08	21-26	It would appear incongruous (and a missed opportunity) to advise patients, when offered hearing aids, on hearing aid technologies yet not consider	**Thank you for your comment. We did not have a question comparing different types of hearing aid as this was not thought to be a**

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				different types of hearing aid, eg postaural vs BAHA, ITE or ITC. eg, offer BAHA where use of a conventional postaural hearing aid is contraindicated – through inability to wear conventional aids.	**high priority area; however, all NHS hearing aids come with microphone and noise reduction features and consideration of the efficacy of these was considered a valid area to review.** **We have also included recommendations on onward referral for implantable devices where appropriate.**
British Society of Audiology (BSA)	Short	08	27-28	Again, with adults with dementia and learning disabilities in mind, suggest that giving information is not sufficient, and it needs to be in an accessible format for the person's needs. This would also be the case for those with dual sensory loss.	**Thank you for your comment.** **Information should be provided in a format that is suitable to meet the person's needs.** **This is covered by the Patient Experience guideline which we have cross-referred to within the information and support section.**
British Society of Audiology (BSA)	Short	08-9	Sections 1.4 to 1.5	1.4.2 to 1.5.1 refer only to issues with communication and benefits of hearing aids with regards communication. This may be particularly relevant regarding adults with learning disabilities, adults with profound hearing loss and adults whose first language is BSL, both of whom may use hearing primarily for spatial/environmental awareness, sensory stimulation such as music, or safety. Without this, recommendation 1.5.1 could be read as there being no evidence of benefit to hearing aids except then for communication, and a risk of being denied for those with other means of communication (sign language, other manual or visual means) or those with limited communication. It also contradicts the recommendation for assistive listening devices such as smoke alarms. Suggest	**Thank you for your comment. We've amended the recommendation to include awareness of warning sounds and the environment, and appreciation of music.**

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				impact of hearing on safety and environmental awareness is included in 1.4.3, 1.5.1 and 1.5.2. If there is not direct empirical evidence to support, suggest that there is theoretical reasoning to evidence that the inability to hear sound of certain level results in inability to hear the sounds that are that level.	
British Society of Audiology (BSA)	Short	08-9	Section 1.5	Suggest adding: Where hearing aids are indicated for adults diagnosed with dementia, learning disabilities or mild cognitive impairment, involve carers and family in discussions where appropriate, and use appropriate explanations such that the person is able to understand and is engaged in an accessible way.	**Thank you for your comment. A recommendation has been made to provide the person and, if they wish, their family or carers with information about hearing loss and how it can be managed. This would include people with dementia, learning disabilities and cognitive impairments.**
British Society of Audiology (BSA)	Short	09	10	It is surprising that the use of a patient reported outcome measure is not recommended eg GHABP/IOIHA. Such PROMS tools can also serve as a framework for discussing and identifying patients hearing/communication needs – it would appear important and prudent to include some guidance use of PROMs related to management of hearing loss.	**Thank you for your comment. A recommendation has been made for audiology services to use self-report tools such as the Glasgow Hearing Aid Benefit Profile or the client –orientated Scale of Movement.**
British Society of Audiology (BSA)	Short	09	11	Is there scope prior to this for other "remote" versions of follow-up e.g. questionnaire, phone, Skype, etc	**Thank you for your comment. We have amended the wording to suggest other forms of delivery could be used if this is the patient's preference**
British Society of Audiology (BSA)	Short	09	11-12	Language use of "hearing aids are fitted" may seem to not support patient centred care, rather use "hearing aids are set up".	**Thank you for your comment. We do not think the wording implies patient-centred care is not supported.**
British Society of Audiology (BSA)	General	General	General	Conductive hearing loss is not mentioned as being excluded from this review, yet there is no discussion whatsoever of the efficacy of bone-conduction testing, hearing amplification, implantation or surgery.	**Thank you for your comment. The wording has been amended to include some aspects of management of conductive hearing losses. We were unable to look at the**

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					subject in detail but have been able to include discussion as part of the audiological assessment.
British Society of Audiology (BSA)	General	General	General	The available evidence is (by current standards) low quality. Instead of using this low-quality data, the recommendations appear to be generated from personal experience. These experiences, however, are evidence of even lower quality than the available literature. This needs to be at the very least admitted clearly. Further, these areas of low-quality evidence should be recommended for future high(er)-quality randomised controlled trials, esp. considering that Humes et al (2017) has shown that no-gain hearing aids are a viable placebo for blinding. There are no research recommendations , for further hearing aid research to confirm/endorse elements of the guidelines eg offering two hearing aids	**Thank you for your comment. When clinical and health economic evidence was of poor quality, conflicting or absent, the committee drafted recommendations based on its expert opinion. The considerations for making consensus-based recommendations included the balance between potential harms and benefits, the economic costs compared to the economic benefits, current practices, recommendations made in other relevant guidelines, patient preferences and equality issues. The consensus recommendations were agreed through discussions in the committee. The committee also considered whether the uncertainty was sufficient to justify delaying making a recommendation to await further research, taking into account the potential harm of failing to make a clear recommendation.** **For clarity and transparency, where the recommendations were made based solely on committee consensus, the following sentence was included in the corresponding 'recommendations and link to evidence' section of the full guideline: As no evidence was found the recommendations were based on consensus of the committee.** **The committee acknowledges that there is a lack of evidence in many areas and research recommendations are needed. However, the**

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					committee could not make recommendations for all those areas and therefore prioritised making research recommendations where it was unable to make guidance recommendations. In the case of hearing aids, although the clinical evidence was weak, our strong and clear original economic evidence showed that the use of 2 hearing aids is cost effective with only a very modest difference in effectiveness compared to 1 hearing aid. Therefore, the committee was able to make a recommendation and did not prioritise this area for future research.
British Society of Audiology (BSA)	Full	012	7-9 Also 12	Why is audio-vestibular medicine not included?	**Thank you for your question. Audiovestibular medicine usually does not have on-call facilities or beds. The lack of emergency cover makes it likely to result in delay if a referral is made to AVM.**
British Society of Audiology (BSA)	Full	012	23	Other groups should be referred as routine if unilateral loss is not resolved	**Thank you for your comment. We have amended the referral criteria to Chinese and south East Asian family origin.**
British Society of Audiology (BSA)	Full	013	21	It be better to specify investigations to be considered only if not investigated before or cause not know for asymmetry?	**Thank you for your comment. We expect those making referrals to follow normal professional practice and only investigate when there is a clinical need to do so.**
British Society of Audiology (BSA)	Full	013	21	I am concerned at how this will be interpreted by professionals. I recognised this is prefaced with 'consider' however in a document of this type not referring will be difficult to justify. This will led to a very large rise in the numbers of referrals for MRI.	**Thank you for your comment. The committee has reviewed the evidence in light of comments and has amended the recommendation to align with current ENT practice. The recommendation is to consider MRI scan if there is a sensorineural hearing loss of 15 dB HL at 2 or more adjacent**

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					frequencies (0.5, 1, 2, 4 and 8 kHz).
British Society of Audiology (BSA)	Full	013	22	Criteria of difference of 20db at single frequency between .5 and 4KHz would initiate too many unnecessary MRI requests. It would be better to go for difference of 20db over 2 frequencies (sunderland) as the difference between the sensitivities and specificities between all of them are not much and the quality is low for all of them (pg 70)	**Thank you for your comment. The committee has reviewed the evidence and amended the recommendation to reflect current ENT practice. The recommendation is to consider MRI scan if there is a sensorineural hearing loss of 15 dB HL at 2 or more adjacent frequencies (0.5, 1, 2, 4 and 8 kHz).**
British Society of Audiology (BSA)	Full	013	30-32	Is every two years justifiable if h/loss as already been ruled out then a less frequent assessment may be acceptable?	**Thank you for your comment. People with dementia or cognitive impairment develop hearing loss at a greater rate than the general population, and so assessing every 2 years would be cost effective. It is also more important to actively check for hearing loss in this group as they are less likely to be able to self-report signs of hearing loss.**
British Society of Audiology (BSA)	Full	013	33-35	Would a less frequent assessment may be acceptable? Or targeted 2 years to specific "at risk" groups	**Thank you for your comment. People with learning difficulties develop hearing loss at a greater rate than the general population, and so assessing every 2 years would be cost effective. It is also more important to actively check for hearing loss in this group as they are less likely to be able to self-report signs of hearing loss.**
British Society of Audiology (BSA)	Full	014	General comment	There is no speech testing mentioned within this section. With the evidence around PTA this would be an ideal moment to introduce speech testing into the routine test battery.	**Thank you for your comment. This research question was not prioritised by the committee.**
British Society of Audiology (BSA)	Full	014	18	Change to 'tympanometry where indicated'.	**Thank you for your comment. The wording has been amended to 'if indicated'.**
British Society of Audiology (BSA)	Full	014	19/20	Discussion with patient should include cause of hearing loss like age. If cause not known like for	**Thank you for your comment. Hearing loss with unknown course was not considered by**

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				younger adults, they would need to be referred via appropriate pathways to try and answer that question (even though diagnosis of cause of loss is outside the scope of this consultation as mentioned in Pg 19 line 23, it is important to highlight it here otherwise the diagnosis aspect can get overlooked by services)	**the guideline committee and would require specialist services outside of consideration of this guideline.**
British Society of Audiology (BSA)	Full	015	23	Aetiology of hearing loss is covered here but if cause not known they should be offered referral to try to answer it.	**Thank you for your comment. Hearing loss with unknown course was not considered by the guideline committee and would require specialist services outside of consideration of this guideline.**
British Society of Audiology (BSA)	Full	015	30 – general comment	This section appears to be too narrow in its methods of wax removal.	**Thank you for your comment. The committee wished to review all commonly used methods of wax removal including earwax softeners, irrigation, mechanical removal and any combination of methods. However, there was a lack of evidence for many of these methods.**
British Society of Audiology (BSA)	Full	016	32	Even though there is no decision about when to recommend patients need to be reviewed again (after fitting review), they do need to be reviewed at intervals (due to pg 18. Line 22). In the absence of recommendation of when, it should be specified that individual organisations to decide when they feel it would be best to offer this. In the absence of this its quite likely some patients especially vulnerable groups may become aided inadequately creating the same issues which this document is trying to address.	**Thank you for your comment. The committee has recommended that hearing services consider creating a system to recall people with hearing devices for regular reassessment.**
British Society of Audiology (BSA)	Full	016	32	Follow up – 6 – 12 weeks – evidence – why not 4 weeks?	**Thank you for your comment. The timing of the initial follow-up appointment requires a balance between allowing time for getting**

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					used to and exploring the uses of hearing aids and waiting too long before problems can be addressed. The committee did not find any published comparative evidence on what the best timing for the initial follow-up appointment should be. Six to 12 weeks is most usual current practice and is recommended by NHS England, and so the committee saw no reason to change this in the absence of any alternative evidence.
British Society of Audiology (BSA)	Full	022	1-10	Given the inclusion of adults with learning disabilities, mild cognitive impairment and dementia, related NICE guidelines would include those that pertain to those conditions too. In the case of the Dementia guideline currently out for consultation, there is both an opportunity to signpost readers to the corresponding document in each guideline. But it would also be relevant that the recommendations, or importance placed on each condition in the presence of the other, is common across the two documents. In the current versions, there is emphasis on hearing well for those with dementia in the hearing loss guideline, but no such inclusion in the dementia guideline.	**Thank you for your comment.** **The purpose of listing related guidance is to provide links to other NICE guidance on assessment and management of hearing. The guideline committee for hearing loss have no impact on the other guidelines although we will pass on our comments as part of the consultation process.**
British Society of Audiology (BSA)	Full	054	14	Typo: "British Academy of Audiologists'" should be "British Academy of Audiology's"	**Thank you for your comment. This has been amended.**
British Society of Audiology (BSA)	Full	059-63	General	The term "local complex pathway" is not mentioned in the full guidance	**Thank you for your comment. The wording has been adjusted to 'specialist audiology service for diagnostic investigation, using a local pathway'.**
British Society of Audiology (BSA)	Full	074	12	Typos "Rule 3000" and "(."	**Thank you for bringing this to our attention. This has been corrected.**

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British Society of Audiology (BSA)	Full	074	12	Typo: there is a . (. rather than just a full stop.	**Thank you for bringing this to our attention. This has been corrected.**
British Society of Audiology (BSA)	Full	074	12	The Rule 300 and the Sunderland protocols had the lowest sensitivities (.	**Thank you for bringing this to our attention. This has been corrected.**
British Society of Audiology (BSA)	Full	074-76	-	In general ABR sensitivity looks high. (Rupa 2003) – patients identified had large VS >2cms which would influence sensitivity ABR Sensitivity by size of VS is not considered or discussed Hyperventilation test – Specificity looks very good. Therefore presence of nystag with hyperventilation should be a strong indication for MRI referral Is there any evidence to consider audiometric changes in serial audiograms? (ie.e significant deterioration in thresholds)	**Thank you for your comment. The guideline committee noted the high ABR sensitivity. However, there are a number of factors why we did not recommend that every patient should have an ABR test prior to MRI scan. Firstly there is the cost of doing ABR on all patients with an asymmetric hearing loss, then there is the delay incurred in joining an extra waiting list for ABR testing. In addition this paper is 14 years old and the sensitivity of MRI scans at that time was not as great as it is now. We currently identify very small tumours on MRI scans and there is no evidence that ABR would be sufficiently accurate in identifying such small neuromas. Current practice is not to perform ABRs prior to MRI scans and we did not have sufficient evidence of clinical and cost effectiveness to recommend otherwise.** **The hyperventilation test seems to be an interesting additional test from the evidence we have; however, sensitivity is only 65%. In addition, if this test was recommended it would entail the acquisition of additional equipment for GPs and audiologists (Frenzel's glasses) and would necessitate additional training (to identify nystagmus confidently) both of which facts make it less**

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					attractive. **We have no evidence about changing audiometric thresholds but common sense dictates that a progressively asymmetric hearing loss demands further investigation even if the first MRI scan was normal. These guidelines cannot cover every clinical eventuality but one hopes that the training of the professionals concerned gives them the skills to realise that a diagnosis has to be sought.**
British Society of Audiology (BSA)	Full	078	15-18	Recently, the Lancet report on modifying factors has been published, which has not been referenced in the document – whether this can be considered as relevant evidence at this stage, it would be relevant to reference in the introduction.	**Thank you for your comment. We have included a reference to the Lancet Commission on dementia prevention, intervention, and care (Livingston 2017) in the main introduction and the introduction for chapter 7 of the guideline.**
British Society of Audiology (BSA)	Full	078	19-25 General	The information included within this document should be echoed in the dementia guideline, which in its draft form includes only makes a general reference to sensory issues confounding test results, and no specific references to hearing or wider impact of hearing loss on those individuals, and value of assessment and rehabilitation.	**Thank you for your comment. We are aware of that and will be making comments to the relevant guideline committee.**
British Society of Audiology (BSA)	Full	080	General	Regarding services for people with learning disabilities, hearing is not routinely checked at the transition from child to adult services, unless hearing testing has continued to be ongoing until that point and the individual is also transitioned within the audiology service. The recommendations would only be further supported by this additional information.	**Thank you for your comment. The Learning Disability Annual Health Check places responsibility to check the hearing of learning disabled people from the age of 14 as part of their annual check. We have made sure that these recommendations are clearer by identifying points in the pathway when hearing is formally assessed,**
British Society of	Full	095	27	Typo: "individual managements plans" should be	**Thank you for your comment. This has been**

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Audiology (BSA)				"individual management plans"	**amended.**
British Society of Audiology (BSA)	Full	097-98	Section 9.2.4	Details are included in the full guidance regarding the committee's comments on this, however there are no recommendations resulting from these comments, giving a risk to these details being lost in implementation.	**Thank you for your comment. The committee did discuss the recommendations widely as is recorded in the recommendations and link to evidence section, and felt that the recommendations covered the most important elements of an audiological assessment without being too prescriptive for any one group of people.**
British Society of Audiology (BSA)	Full	125 and 127		I could not see evidence to rule out the use of home wax removal kits. It appeared to reduce demand on GPs without a significant increase in risk of harm (surprisingly!) The committee's conclusion seemed somewhat subjective	**Thank you for your comment. The committee looked at both the clinical and health economic evidence and discussed the balance between benefits and harms for using home wax removal compared to removal in a clinic. The clinical evidence was of low or very low quality.** **There was a clinically important benefit for successful removal of wax when this was performed by syringing in a clinic compared to removal using home kits. Adverse events were generally not well reported but there was mostly a small or no clinically important difference between the different earwax softeners used and when comparing removal by syringing in a clinic to home kits. In addition, the committee noted that self-irrigation is not commonly recommended in the UK. There are also concerns regarding the safety of self-irrigation due to the difficulty in pressure control by inexperienced individuals. Furthermore, recommending this approach would conflict with the separate recommendation to advise people not to insert objects into their ears. Additional text has been added to the**

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					'recommendations and link to evidence section' to further explain this rationale.
British Society of Audiology (BSA)	Full	128	10.2	"perceived reduction in volume" – should be "loudness"	**Thank you for your comment. We have amended the text.**
British Society of Audiology (BSA)	Full	185-187	1	Reference to the use of decision making tools is welcomed. Use of decision making tools would encourage a more plural and consistent offer to people with hearing loss (other than hearing aids). In the absence of use of specific tools such as option grids in audiology, is it not reasonable to consider and recognise evidence on their value/utility in other health decisions and extrapolate? Recommending that options are considered in a structured and visual way would enhance outcomes of discussion.	**Thank you for your comment. The committee did highlight in the 'recommendations and link to evidence' section that the NICE guideline on patient experience is relevant and applicable to people with hearing loss. Although this is more general, it does outline supporting people when considering different options which is directly applicable when discussing the different interventions available for hearing difficulties and making decisions on the most appropriate strategy.**
British Society of Audiology (BSA)	Full	225	22-27	There is reference to 3 year reviews for those fitted with hearing aids as being specified elsewhere (which is is evidence based*), but inconsistency in practice exists. The provision of hearing aids as an intervention should be recognised as a long-term package (including review and support) rather than just limiting the guidelines to the fitting and follow up phase. There is an opportunity for these NICE guidelines to affirm recall of patients, as relying on patients to self-refer for review may be inadequate (and logically lead to increased non-use rates). This may be particularly true of particular patient groups eg those in care homes. Recommendations on further research would be welcomed. *Reference: Pilot study: Efficacy of recalling adult hearing-aid users for reassessment after three years within a publicly-funded audiology service. Goggins S and Day J. International Journal of Audiology, Volume 48, 2009 - Issue 4 p204-210,	**Thank you for your comment. The committee has reconsidered this issue and made an additional recommendation that implementing a system to automatically recall hearing aid users for reassessment regularly should be considered. However, the committee did not recommend a particular frequency for this recall due to lack of evidence. The committee has made a recommendation for further research on monitoring of people using hearing aids, which would include the question of what the optimum period between reassessments should be.** **The committee is aware of the study by Goggins and Day, which provided evidence that a review after 3 years was helpful, but this study did not compare this approach to**

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					other alternative frequencies of review, or to a control group, so the committee was not able to make a judgement as to whether 3 years is the optimal frequency of review.
British Society of Audiology (BSA)	full	267	-	Define 'hearing aid' in glossary – to distinguish from assistive listening device (useful for those not working in the field of Audiology).	**Thank you for your comment. We have added the following definition to the glossary: 'an electronic device usually worn in or behind the ear of a hearing-impaired person for amplifying sound and aiding perception.'**
British Society of Audiology (BSA)	Full	general		General comment: Can guidance be provided in the short version on what information could be provided to patients in advance of face to face appointments to improve their efficacy? (scope document 3.3) It would appear prudent to ensure that the patient is prepared and have considered information and their needs in readiness for discussion with a healthcare professional. How should such information be provided? This approach would be particularly useful when considering options for intervention.	**Thank you for your comment. This was not a question that was researched for this guideline, so we are not able to give guidance on this question.**
British Society of Audiology (BSA)	Full	General	General	The document as a whole will be of significant value to the profession, especially in commissioning, and the work of the committee and others involved are commended. It also highlights the paucity of high quality evidence in the field, and one hopes that it will also be instrumental in raising the importance of hearing research to funding bodies.	**Thank you for your comment. We hope the guideline will stimulate more robust research.**
British Society of Audiology (BSA)	Full	General	General	Question 1: The biggest impact is likely to be seen from the recommendation of hearing assessment for those with suspected dementia, due to both large numbers of those presenting with this (which the guidance has shown to be cost effective) and also the potential short and long term benefit to individuals	**Thank you for your response. We will pass this information to the NICE resource impact team for their information.**

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				appropriately diagnosed and whose hearing loss is managed, and the subsequent long term benefits on both the healthcare system and society. Equally the health economic details included in the guidelines will equally have significant impact for those with mild to moderate hearing loss, or other patient groups that are at risk of decommissioned services at the current time or for whom services have already been demonissioned.	
British Society of Audiology (BSA)	Full	General	General	Question 2: There may be a significant cost implications for MRI referral on the basis of one frequency at 20dBHL or more for those services in which 2 frequencies were previously used. This would be an cost implication for radiology services, depending on the funding model in place.	**Thank you for your comment. The committee has altered the criteria for referral to MRI following the consultation and is now recommending referral on the basis of 2 adjacent frequencies not 1 frequency. As such, we believe that these criteria now reflect most common current practice, and so do not believe that there will be a significant increase in the total number of MRIs conducted.**
British Society of Audiology (BSA)	Full	General	General	Question 3: Users might be helped to overcome the challenges through tapping into BSA resources, such as events and publications by the Adult Rehabilitation Special Interest Group or Cognition and Hearing Special Interest Group.	**Thank you for your response. We will pass this information to the NICE resource impact team for their information.**
British Society of Hearing Aid Audiologists (BSHAA)	Short	03	3	The title is incorrect. It reads, "*Assessment and referral in primary care"* These referral criteria also apply to ➢ ENT and audiovestibular medicine when referring back to audiology ➢ to audiology (be it in primary, community or secondary care)	**Thank you for your comment. The document has been amended to address this concern and clarify that referral may not be just via primary care.**

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				Correct title, suggestion, "*Assessment and referral for adults with hearing loss/difficulties"*	
British Society of Hearing Aid Audiologists (BSHAA)	Short	03	8	The terms of reference are incorrect. They ➢ omit community audiology settings ➢ the committee recommends wax should be managed in primary and community settings, but these terms of reference only refer to primary care ➢ assume that qualified health care professionals working in primary and community care cannot organise a referral to MRI, this is not always the case. Please correct the terms of reference.	**Thank you for your comment. Headings to primary care have been removed to clarify referral may be made via different routes.**
British Society of Hearing Aid Audiologists (BSHAA)	Short	06	17-19	We support this recommendation. However, lines 17-19 should be moved to the top of the section on earwax management so that it is clear that any of the stated procedures can be provided by audiologists, nurses and other qualified health care professionals provided they have the required *"training and expertise in using these methods to remove earwax and the correct equipment is available".*	**Thank you for your comment. We have made changes to the layout of the recommendations as suggested.**
British Society of Hearing Aid Audiologists (BSHAA)	Short	General	General	People with severe to profound hearing loss might not benefit from hearing aids. There is also evidence that too few people who could benefit are referred on for cochlear implants, and that there is a lack of awareness about NHS referral criteria. We think it is therefore important to refer, more explicitly, to NICE guidance on cochlear implants in the section on hearing aids.	**Thank you for your comment. We have amended the recommendations to include onward referral for implantable devices in line with NICE's technology appraisal guidance on cochlear implants for children and adults with severe to profound deafness and interventional procedure guidance on auditory brain stem implants.**

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British Society of Hearing Aid Audiologists (BSHAA)	Short	General	General	We understand that the NICE evidence reviewed adults with hearing **and** additional signs/symptoms. However, the layout risks increasing false positive referrals to secondary care. The existing layout could also increase the risk of up coding, increase NHS costs and result in adults being seen on less accountable/transparent NHS contracts. Changes are therefore required. **We provide detail on our recommendations in our feedback on the full version. Here we suggest the following changes to the layout in the short version** 1. delete "local complex audiology pathway" line 18 page 4 2. "hearing loss that is asymmetric" (line 20) and "hyperacusis (intolerance to everyday sounds)" (line 23) are removed from this section because 3. GPs should refer this particular group of adults to audiology – within the criteria listed on page 3, lines 5-7. Audiologists can then refer any clinically significant asymmetric hearing loss and/or hyperacusis 4. to account for these changes add a separate section for audiologists, who have access to diagnostic equipment and can therefore refine referral, which states *"Audiologists should refer the following to ear nose and throat or audiovestibular medicine:* *Unilateral or asymmetrical sensorineural hearing loss, defined as a difference between the left and right bone conduction thresholds of 20 dB or*	**Thank you for your comments.** **The committee have reviewed your suggestions and have revised the layout of the guideline to reflect that services are delivered in different settings. The committee agrees skills and competence of staff delivering care are more important than location** **The recommendations have been amended to reflect this and consider the level of detail provided in the recommendations to be appropriate for trained health professionals..** **Reference to a complex pathway has been adjusted to 'specialist audiology service for diagnostic investigation, using a local pathway'.** **The Introduction to the guideline outlines the delivery of services is through a variety of routes.**

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				greater at two or more of the following frequencies: 500, 1000, 2000 or 4000 Hz. *Adults with hyperacusis and hearing loss."* In this section it would also be helpful to clarify, for audiologists who have access to diagnostic equipment, the definitions of "sudden" and "rapid" sensorineural hearing loss in terms of audiometry.	
British Society of Hearing Aid Audiologists (BSHAA)	Full	012	41-42	**Recommendation 7 can be improved. Making this change will be a benefit for all patients and the NHS.** Add a statement to Recommendation 7 to reduce repeat referrals for signs that have previously been examined by ENT or audiovestibular medicine and been discharged, managed or both. This will help reduce unnecessary repeat referrals to ENT or audiovestibular medicine. For example, if an adult reports being aware of a past referral for *"abnormal appearance of the outer ear or the eardrum"*, and the case history and clinical examination suggests to an audiologist that this is longstanding, then it is a better use of NHS resources to ask the GP for a copy of past referral letters from ENT or audiovestibular medicine to assess whether this adult actually requires a repeat referral.	**Thank you for your comment. The committee considers that it is part of general professional practice to make a decision to refer or re-refer someone for a specialist opinion based on the previous history and the clinical findings. The GP will have copies of previous correspondence and should help with a decision in these cases.**
British Society of Hearing Aid Audiologists (BSHAA)	Full	014	18	"*Tympanometry"* As presented this is misleading. This should be corrected in the short and full versions of the guideline.	**Thank you for your comment. The wording has been amended to 'if indicated'.**

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				It should be changed to *"Tympanometry where clinically required".*	
British Society of Hearing Aid Audiologists (BSHAA)	Full	060	6	**Recommendation 6 must be reviewed.** For background context see comment 2 and 9 above. Briefly here: ➢ the layout of this section is likely to lead to over referral to secondary care ➢ the terminology of "complex audiology" in this context is totally inappropriate and has no place in evidence based guidelines 1. the term complex audiology pathway should be removed There is no evidence to support the use of this term here, it has largely emerged post 2012 and is in the main – in an NHS England setting – about procurement, contracts and reimbursement. It is not documented in the literature in this context and not accepted by BSHAA as a legitimate clinical term in this context. As such it has no place in evidence based NICE guidelines. 2. once local complex audiology is removed, the following changes are required: a- "hearing loss that is asymmetric" and b- "hyperacusis (intolerance to everyday sounds)" c- Should form part of Recommendation 13, not Recommendation 6 (reasons explained below).	**Thank you for your comment. The committee has reviewed and revised the referral recommendations. The subheadings have been changed to make clear that referral is from primary and community settings. The wording "complex pathway" has been adjusted to 'specialist audiology service for diagnostic investigation, using a local pathway'. The committee disagrees with your suggestion of moving asymmetric hearing loss and hyperacusis but has amended the recommendation to "consider referral".**
British Society of Hearing	Full	075	General	Recommendation 9, in our view, is at risk of not using	**Thank you for your comment. The committee**

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Aid Audiologists (BSHAA)				scarce NHS MRI capacity efficiently and it should be reviewed. We agree with Recommendation 8, but the number of potential (additional) cases diagnosed using Recommendation 9 does not appear to have been objectively analysed. The cost per additional case diagnosed for example could do more harm than good if implemented nationally. We would also like to draw to NICE's attention that today audiologists refer for a medical opinion if: ➢ "*Unilateral or asymmetrical sensorineural hearing loss, defined as a difference between the left and right bone conduction thresholds of 20 dB or greater at two or more of the following frequencies: 500, 1000, 2000 or 4000 Hz, to ear nose and throat or audiovestibular medicine."* It is therefore not clear why the Committee has suggested a MRI scan might be considered when ➢ *"Consider MRI of the internal auditory meati for adults with sensorineural hearing loss and no localising signs if there is an asymmetry of 20 dB or more at any single frequency between 0.5 kHz and 4.0 kHz on pure tone audiometry"* (Page 75 Full version) This suggests there might be a misunderstanding at a committee level about routine audiology practice in England today. We therefore request that NICE reviews the evidence	**has reappraised the evidence in the light of comments and has decided to recommend a difference of 15dB at 2 adjacent frequencies (at 0.5, 1, 2, 4 and 8 kHz) to reflect current practice in ENT clinics. An explanation of the thresholds used is given in the linking evidence to recommendations section of the guideline.** **The committee recognises that current practice varies across the country, and that a difference of 20 dB at 2 frequencies is used in some areas, but believes that the definition now adopted represents most common current practice. As such, the committee does not believe that these criteria will lead to a significant increase in referrals for the country as a whole, and that standardisation of criteria will be beneficial and may reduce overreferral in some places.** **However, due to the limited evidence regarding the most suitable criteria to use and uncertainty on the effect that this might have on referral numbers, the committee has recommended only that clinicians and commissioners 'consider' using these criteria as there is insufficient evidence to support a stronger recommendation.**

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				supported Recommendation 9 again.	
British Society of Hearing Aid Audiologists (BSHAA)	Full	092	General	**Recommendation 13 should be updated to reflect changes made to Recommendation 6.** The NICE guideline committee used BAA referral guidelines to derive its recommendations. The BAA referral criteria do not suggest what the Committee has written up. The BAA referral criteria – rightly – removed the clinically significant definition of asymmetric hearing loss from referral guidance for GPs because GPs have no way of measuring clinically significant asymmetric hearing loss. The goal was to ensure that GPs refer those adults that would benefit from a hearing assessment – and referral refinement – to audiology. In this case, in the absence of other 'medical' signs and symptoms (as per NICE Recommendations 1 to 5) other adults that report one ear being worse than the other should be referred to audiology first; and certainly not "complex audiology" in order to increase income at a cost to patients, the NHS and taxpayer. Vague use of language such as "hearing loss that is asymmetric" will increase the risk that GPs refer based on subjective symptoms of a difference between the ears. This would be an absurd outcome for NICE guidelines because most adults with age-related hearing loss for example are likely to feel one ear is worse than the other. NICE should also note that the prevalence of hearing loss is based on the	**Thank you for your comment. The committee has reviewed and revised the referral recommendations. The recommendations have been weakened to 'consider' referral if the listed symptoms or signs are present, and the wording has been adjusted to 'specialist audiology service for diagnostic investigation, using a local pathway'.. The committee has clarified terms in the wording of the recommendation or in the recommendations and link to evidence section of the guideline.**

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				"better ear average" – i.e. the very fact the better ear has declined might make a loss in one ear finally more noticeable. In addition to the imprecise definition of "hyperacusis (intolerance to everyday sounds)", this NICE guideline only covers adults that have hearing loss and hyperacusis. If GPs read the existing referral criteria it is easy to assume they should refer somebody with hyperacusis, and if they do this will result in many more false positive referrals to secondary care. Those GPs that read the guideline with more care will find it is specifically referring to hearing loss and hyperacusis, yet they won't have a way to objectively measure hearing loss so again might refer on to secondary care and as a result many of these adults will be false positive referrals. It is also possible, that this poor definition of hyperacusis could be used to up-code patients with mild hyperacusis onto "complex audiology" pathways, without any demonstrable benefit for patients or the NHS. In summary, there is no evidence based, nor economically sound, reason for the way existing referral criteria are laid out. If the drafting committee is strong supporters of the term "local complex audiology" and not clarifying terms and usage of terms such as "hearing loss that is asymmetric" and "hyperacusis (intolerance to everyday sounds)" the BSHAA would like an explanation in writing so that this can be analysed, fact checked and, if required, formally challenged. On balance, we strongly urge NICE to instead change Recommendation 13 from:	

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				Text is *"13. Refer all adults, regardless of their age, who present for the first time* *with hearing difficulties, or in whom you suspect hearing difficulties, to* *audiology services for an assessment, unless they have:* *sudden or rapid onset of hearing loss (see recommendation 1)* *hearing loss with specific additional symptoms or signs (see* *recommendations 2 to 7)."* **Change to** ***"13. Refer all adults, regardless of their age, who present for the first time*** ***with hearing difficulties, or in whom you suspect hearing difficulties, to*** ***audiology services for an assessment, unless they have:*** ***sudden or rapid onset of hearing loss (see recommendation 1)*** ***hearing loss with specific additional symptoms or signs (see*** ***recommendations 2 to 7).*** ***Audiologists should then refer the following cases to ear nose and throat or audiovestibular medicine:*** ***Unilateral or asymmetrical sensorineural hearing loss, defined as a difference between the left and right bone conduction thresholds of 20 dB or greater at two or more of the following frequencies: 500, 1000, 2000 or 4000 Hz, to ear***	

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				nose and throat or audiovestibular medicine. ***Adults with hyperacusis and hearing loss to ear nose and throat or audiovestibular medicine."***	
British Society of Hearing Aid Audiologists (BSHAA)	Full	265	General	**Please include the BSHAA, British Society of Hearing Aid Audiologists in this section.** This is because the final guideline scope (and because the final version of the full guideline should also now do so) refers to BSHAA guidance. We appreciate that the committee might not have had a BSHAA member, but overlooking one of the largest professional representative bodies for audiologists in the UK is not acceptable, especially given that a large percentage of BSHAA members are commissioned to provide NHS services under AQP.	**Thank you for your comment. We have reviewed the referral criteria and in doing that have referred to your document and have made note of this in the acronyms section.**
British Society of Hearing Aid Audiologists (BSHAA)	Full	267	General	The definition of audiology reads: *"Audiology. A healthcare science encompassing hearing, tinnitus and balance. Audiology services provide assessment, identification, intervention and rehabilitation services for children and adults with suspected or confirmed hearing, tinnitus and balance disorders."* **Change this to the definition agreed by the sector and that is now used by NHS England** in the national commissioning framework. The definition can be found in Appendix 3 of NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups.	**Thank you for your comment. We have tried to introduce clarity and simplicity to this guideline document by considering hearing loss as a sign and not a diagnosis and by only using diagnosis for the fundamental underlying cause. We have looked at the definition you are referring to and think that this may complicate matters by referring to diagnosis. Therefore, we would prefer to keep the original wording of the definition.**
British Society of Hearing Aid Audiologists	Full	267	General	Hearing Loss.	**Thank you for your comment. The bandings come from the reviews; they are in the**

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(BSHAA)				The BSHAA does not understand why the BSA criteria are used here. Not all audiologists rely on these descriptors of mild to profound hearing loss, especially because they do not include any reference to the real-world impact of hearing loss on adults. These are also outdated bandings. NHS England now uses different bandings to describe hearing loss (see page 51 of NHS England's commissioning framework). These criteria are based on a published paper in the European Journal of Public Health. We therefore ask that NICE updates the definitions of mild to profound hearing loss to reflect the broader sector consensus (hence NHS England using it) and therefore uses Stevens et al. 2011, *Global and regional hearing impairment prevalence: an analysis of 42 studies in 29 countries European Journal of Public Health*, Vol. 23 pages 146–152. **Table one.**	**glossary to provide explanation for the systematic reviews, we are not recommending them.**
British Society of Hearing Aid Audiologists (BSHAA)	Full	268	There are no line numbers.	The current definition of hyperacusis, in the context of the guideline, could be misread and result in increasing false positive referrals to secondary care. "*Hyperacusis. Intolerance to everyday sounds."* We recommend this definition is changed to capture the following facts: ➢ hyperacusis can vary in severity. We therefore recommend using a more comprehensive	**Thank you for your comment. We have amended the definition to make clearer it is Intolerance to everyday sounds that causes significant distress and affects a person's day-to-day activities.**

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				definition, e.g. that used by NHS Choices NHS Choices Hyperacusis, https://www.nhs.uk/conditions/hyperacusis/ ➢ this particular NICE guideline only covers hyperacusis with hearing loss. The referral recommendations therefore do not stand for hyperacusis for adults without hearing loss. We therefore recommend in our feedback above changing the way in which hyperacusis is cited and described.	
British Society of Hearing Aid Audiologists (BSHAA)	Full	General	General	**Description of BSHAA** BSHAA is the professional body which represents and promotes the interests of the independent hearing aid profession mainly within Great Britain and Northern Ireland but globally too. Members are highly trained hearing care professionals who have extensive and unrivalled experience and knowledge of the hearing instruments that are available to help with hearing loss. The Society (BSHAA) was founded in 1954. Today all Hearing Aid Dispensers are registered with the Health and Care Professions Council (HCPC). The HCPC is the regulator set up by the U.K. Government to hold the register and ensure that registrants maintain their standards for their training, professional skills, education and health. Hearing Aid Dispensers (HAD) are by definition healthcare professionals providing hearing care. The title (HAD) is protected in law and one can only use it if on the HCPC register. The term 'audiologist' is not protected and is used by HAD and non-regulated hearing care practitioners alike. Other than specialist medical practitioners, only HADs are regulated and	**Thank you for your comment.**

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				authorised to practice hearing care autonomously. With more than 1,700 fellows, members or associate members on its books, BSHAA represents the majority of Hearing Aid Dispensers on the HCPC register. Under the Any Qualified Provider regime, many HADs provide community-based (including domiciliary) hearing care on behalf of the NHS	
British Society of Hearing Aid Audiologists (BSHAA)	Full	General	General	**1. The British Society of Hearing Aid Audiologists (BSHAA) welcomes and supports many of the recommendations in this draft NICE guideline.** **2. However, the BSHAA also has significant concerns and these need to be addressed before the final guideline is published.** The BSHAA is both surprised and disappointed that the guideline committee – despite limitations cited on page 19 of the full version about limited evidence to support certain recommendations – has based several, very important, referral recommendations on selective use of sector guidelines. BSHAA and British Academy of Audiology (BAA) referral guidelines were clearly referenced in the final NICE guideline scope (page 10, https://www.nice.org.uk/guidance/gid-cgwave0833/documents/final-scope). Yet BSHAA referral guidelines have been ignored and, therefore, it is not clear how the committee could have compared, debated and questioned any differences. We urge the committee to review this.	**Thank you for your comment. This was an omission and a reference to this document has been added to the guideline. Reference to complex audiology pathway has been adjusted to 'specialist audiology service for diagnostic investigation, using a local pathway.'**

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				The BSHAA and BAA referral guidelines are also cited on pages 68 and 69 of NHS England's commissioning framework, a document that the committee refers to many times in its discussions (full version). Page 68 of NHS England's commissioning framework (second paragraph) shows that it is well known that the BAA and BSHAA agreed to address certain issues of contention regarding referral criteria. It is therefore not clear why the guideline committee was of the view: ➢ "*There are several clinical guidelines for GPs and audiologists outlining the circumstances in which they should consider referral for more specialist medical care – for example the British Academy of Audiology' Guidance for Audiologists and for Primary Care which reflect a broad clinical consensus" (page 53 full version).* The BSHAA – as a professional body representing HCPC registered audiologists that work in NHS and private practice in the UK – would very much want to endorse the final NICE guideline. We would also normally agree that when NICE recommends changes in ➢ *"****….clinical practice that can be done quickly*** – like changes in prescribing practice – ***should be shared quickly. This is because healthcare professionals should use guidelines to guide their work – as is required by professional regulating bodies*** such as the General Medical and Nursing and Midwifery Councils" (page 11 short version)* However, in its current form, not only will this be	

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				impossible, the BSHAA might also and regrettably be forced to explain to its members and other regulated health professionals that they do not have to follow certain recommendations made by NICE. This is a situation we would like to avoid at all costs. Therefore, amendments which would make the final guideline more evidence based and neutral are suggested in our feedback below. We ask NICE, the National Guideline Centre and guideline committee to address our concerns about specific referral criteria based on the principles of evidence based health care and probity for which NICE is world renowned. In particular, the BSHAA considers that the significance of a 'complex audiology pathway' as described has no clinical basis, but is instead motivated by the limitations of the funding models currently in place, and risks both ready access to and value for money of the care provided. BSHAA does not recognise, nor accept, that there is any clinically evidence based reason for a NICE guideline to include: ➢ ***"a local complex audiology pathway",*** in its current form/context (page 12 line 32, page 60 full version, page 4 line 18 short version). **This should be removed** because it has no place in evidence-based NICE clinical guidelines. The references to "hearing loss that is asymmetric" and "hyperacusis" that appear in the same sections should then be noted elsewhere (see our feedback below). We understand that there might not be a BSHAA	

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				member, or a Health and Care Professions Council registered Hearing Aid Dispenser, on this NICE guideline committee. That, however, should not influence NICE's recommendations. This experience, however, means that the BSHAA will now consider writing to NICE separately to reduce the risk of a similar scenario arising when NICE develops its tinnitus guideline.	
British Society of Hearing Aid Audiologists (BSHAA)	Full	General	General	The BSHAA fully supports the economic models in Appendix N and O. The BSHAA fully supports the recommendations that arise from this analysis – i.e. hearing aids are cost-effective for the NHS and adults with hearing difficulties in both ears should be offered two hearing aids.	**Thank you for your comment.**
British Society of Hearing Aid Audiologists (BSHAA)	Full	General	General	We are surprised and disappointed that, despite the evidence it reviewed, the guideline committee did not address the issue of a GP appointment being used to generate a referral to direct access audiology. In the absence of other signs or symptoms (e.g. Recommendations 1 to 5) adults with hearing difficulties do not need to see a GP for a medical work-up. The committee will know that since the NHS was founded, to present, that all adults in England with hearing difficulties and the ability to pay have been able to access an audiology appointment without seeing their GP. In the NHS there is no clinical evidence or risk based reason for the GP to be involved in the vast majority of adult hearing pathways. For example, if there was a significant risk, clinical or	**Thank you for your comment. The committee is aware of the importance of direct access pathways and have included reference to this in the full guideline document. It is not within the remit of this guideline to specify how services are configured and this will be determined locally.**

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				evidence-based reason then legalisation in the UK would have been reviewed and all adults – NHS and private – would need a GP letter to access audiology. Statutory registration by HCPC authorises Hearing Aid Dispensers to practice autonomously without additional supervision or external clinical governance NICE should therefore not be in a position of confusing commissioning policies and evidence in a UK setting. The only reason a GP appointment is required is because the GP acts as an economic gatekeeper. This in the vast majority of cases means the GP in the NHS pathway serves an administrative role when adults present with hearing difficulties and no other symptoms. Given 9 million adults in England have a hearing loss and the risk of an underlying pathology without symptoms that would normally prompt an adult to visit their GP, the current NHS pathway in England is not evidence-based. It is historical and based on an untested economic assumption – e.g. the GP will manage referrals and therefore control total expenditure. Given the NHS is trying to free up GP capacity for more serious conditions and that NHS Commissioners have started to remove the GP from audiology pathways (as cited in NHS England's framework which the committee refers to several times), it is no clear why NICE is not sharing this with the public, NHS Commissioners and health care providers?	

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				Therefore, although those with the ability to pay (and which the NICE guideline does not cover) have always been able to access audiology without a GP referral, it is not clear why NICE has ignored that NHS regions now allow adults, without signs/symptoms of a medical condition, to access audiology without seeing a GP first. The committee should also be aware that some more progressive local commissioners have introduced full open access and self-referral to NHS-provided hearing care, leading to reduced waits and lower unit costs of provision. On balance then, and given the evidence base and NICE's duty to advance equality, we think NICE should be more transparent in its guideline. It should make clear 1. NHS Commissioners in England have started to allow adults with hearing difficulties to access NHS hearing care without the need for GP visit or GP referral letter. 2. All adults with the ability to pay can access hearing care directly from a registered audiologist working in the private sector. 3. The evidence and existing service provision in the UK does not provide an evidence or risk based reason for GPs to be the primary contact in the NHS adult hearing pathway. However, it is a local Commissioning choice as to whether NHS Commissioners allow local adults to access services without a GP appointment.	

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				This would then, rightly, avoid NICE guidelines being incorrectly used by the media and others to suggest all adults in England need to see a GP in order to access support for their hearing loss. When this is clearly not the case. We understand that NICE does not cover private care; and that is not our point at all. However, it is still important that NICE guidelines are evidence-based and do not contradict UK legislation. In this case audiologists (Hearing Aid Dispensers) regulated by the Health and Care Professions Council are legally allowed to see adults with hearing difficulties without any GP referral. The public, Commissioners and other health professionals have the right to these facts so that they are not mislead into believing they have to visit a GP because there is, for example, a significant risk there might be an underlying medical condition that explains their hearing difficulties.	
British Society of Hearing Aid Audiologists (BSHAA)	Full	General	General	We fully support NICE's decision to remove the arbitrary age threshold that is in place for access to NHS audiology across England. Current age thresholds in NHS audiology are not evidence based and this should have been addressed many years ago. Furthermore, the recent Lancet commission on dementia demonstrated that effective care of hearing in mid-life (45-60) is the single biggest life-style risk factor for dementia in later-life over which individuals have control. Also, WHO data suggests that 1.2 billion young	**Thank you for your comment.**

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				people in the world between the ages of 12 and 35 years, are at risk of permanent hearing loss due to unsfae listening habits. This NICE recommendation is a major step forward and will help improve equality in access to adult hearing services in England. This is also consistent with BSHAA's recommendations to NHS England and which NHS England implemented in July 2016[i].	
British Society of Hearing Aid Audiologists (BSHAA)	Full	General	General	We fully support the guideline committee in recommending that adults with earwax can and should be managed in primary and community settings wherever possible – i.e. it is neither a good use of secondary care capacity nor a justifiable demand on individuals' time to see these adults in a hospital setting. What is not clear, especially given NHS England's commissioning framework and Monitor (now NHS Improvement) evidence, is why the committee has avoided making the same recommendation, based on the same logic, about the provision of adult hearing services? The committee membership must know about the overwhelming and longstanding consensus across the UK – and especially in the NHS in England – about delivering adult hearing care closer to home and out of secondary care settings? We ask the committee to review why it is has made the recommendation it has for earwax management but avoided mentioning that adult hearing care can and should also be provided in primary and community based settings whenever possible.	**Thank you for your comment.** **The committee were able to recommend that wax removal should be provided by primary of community services because a question on settings for this intervention was reviewed within the guideline. Whilst the committee would agree providing adult hearing care services closer to home is better for the patient, we were not developing a service delivery guideline and are therefore not able to specify how services should be configured.**

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				The WHO resolution signed in May 2017 by UK Government (alongside 193 other nations) calls for "*integrated strategies for ear and hearing care within the framework of their primary health care systems*"	
British Society of Hearing Aid Audiologists (BSHAA)	Full	General	General	The guideline should make it clear that audiologists that perform a hearing test can fit hearing aids before referring to ENT or audiovestibular medicine. That having to refer on for a medical opinion should not delay providing hearing aids, unless it is clinically contraindicated. This will, rightly, leave it to each qualified audiologist to make the decision in partnership with a patient and based on the particular case in question. With the availability of and advents in instant fit hearing devices (as opposed to custom-made), audiologists are able to provide a one-stop service from assessment to fit. The medical opinion on a medical condition should not delay the treatment of a permanent hearing loss, unless clinically contraindicated.	**Thank you for your comment. The guidelines have been amended to make it clearer that referrals for a medical opinion and for audiological assessment can be in parallel.**
British Society of Hearing Aid Audiologists (BSHAA)	Full	General	General	It should be made clearer that adults that require a medical opinion should be referred back to audiology for hearing aids, where this is required. These adults should **not be coded on to "complex audiology pathways"** just because they have had an appointment with a medically qualified doctor. For example: ➢ if an adult has a noise induced hearing loss or a permanent conductive loss, and ENT discharge them to an audiologist for hearing aids and	**Thank you for your comments. The wording has been amended to make it clearer that referral to audiology can take place in parallel to other referrals such as ENT. We have adjusted the wording 'complex audiology pathway' to 'specialist audiology service for diagnostic investigation, using a local pathway.'**

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				ongoing management, the NHS should not be paying more for hearing aids, and audiology care simply because the adult has seen ENT. When the actual role the audiologist plays in such care is examined and compared to the work required to fit somebody with age-related hearing loss, nothing justifies changing how these patients are coded from an audiology perspective. NICE guideline should not inadvertently or otherwise legitimise such practices ➢ if a GP, as is often the case, refers an adult to ENT and this a false positive referral – e.g. a patient does have one ear that is worse than the other but actually has age-related hearing loss – and ENT refer back to audiology. Then these adults should not be coded as "complex audiology" because it attracts a higher tariff, reduces patient choice and has less robust service specifications in place etc. NICE guidelines should not facilitate such scenarios. It is vitally important – for patients and the NHS – that perverse incentives are not generated by NICE guidelines. This is why we insist on NICE removing the much disputed, and often misused, term "complex audiology" as it appears in the draft NICE guideline. As noted in point 2, BSHAA considers that the term "complex audiology" is influenced more by tariff constraints than by clinical ones, in order to cover the cost of more difficult patients who require more extensive assessment	
Chief Scientific Officer's Office, NHS England	General	-	-	It is appreciated the significant amount of work that has gone into this document. It is very informative.	**Thank you for your comment.**

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Chief Scientific Officer's Office, NHS England	FULL-Hearing aids	-	-	Whilst acoustic aids are implied, there should be included solutions where by bone conduction hearing devices can be used. These are not always surgically applied but by head bands and now recently 'stick on' devices. It is stated that the management does not encompass surgical solutions but these are implied and cochlear implantation is referenced as TA 166 (2009).	**Thank you for your comment. Acoustic hearing aids could include bone conduction devices and this has now been made clear in the guideline.**
Chief Scientific Officer's Office, NHS England	FULL-5.3.46	60	-	Is the committee able to clarify and recommend a timeline for duration of discharge before referral should be considered? Whilst secondary care does not wish to be inundated with 'otorrhoea' there are still a significant number of patients who present with cholesteatoma with a protracted history of discharge which has not been acted upon. Can the committee clarify the reasoning for referring with a 1 week history of pain in and around the ear? It can be appreciated that a 'normal looking ear' is very unlikely to be the source of pain and a referred pain along the neurological distribution can hide pathology. Would a slightly longer time frame not be considered (for example, 4-6 weeks)?	**Thank you for your comment. The committee considers the healthcare practitioner would need to judge the appropriate timing of referral based on their clinical assessment and it is not possible to specify this within a recommendation.** **The recommendation to refer if the person still has pain after one week and has not responded to treatment is based on the consensus of the committee. It is felt that a longer period may be difficult for the patient to manage. However, the recommendation is to consider referral and would be dependent on what was thought appropriate by the healthcare practitioner.**
Chief Scientific Officer's Office, NHS England	FULL - 3.3.33	22	-	Page 22 cites cochlear implants – it might be appropriate as mentioned above to cite BCHDs (see "Clinical commissioning policy: Bone conducting hearing implants BCHIs) for hearing loss (all ages) NHS England 16041/P")	**Thank you for your comment. This section only cites other NICE related guidelines. Reference has been made to NICE guidance on implantable devices.**
Chief Scientific Officer's Office, NHS England	FULL – section 9	-	-	With sensorineural hearing loss it should be evaluation of the bone conduction hearing levels.	**Thank you for your comment. We have clarified this.**
Chief Scientific Officer's Office, NHS England	FULL – section 19	-	-	Under Section 19, it is clear that with microsuction the practitioner must have training and expertise. However, in Section 18, there is no mention of	**Thank you for your comment. We have revised the wording in line with your suggestion.**

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				training. Removal of wax still produces a number of medico-legal claims. It should be specified that the 'practitioner' which tends to be the nurse has had certificated training and ongoing clinical governance. That the procedure should be fully documented from ensuring irrigation is appropriate, verbal consent and formal report.	
Chief Scientific Officer's Office, NHS England	FULL – 7.2	79	-	It is greatly appreciated that research recommendations are about the link between dementia and hearing loss. There are a few well recognised studies with cochlear implants (severe to profound loss) been helpful. It is a shame that we have to wait for signs of dementia – which has potentially significant financial costs on society. A series of presentations have been made on 'Bend the Spend' to allocated funds to seriously look at older age groups. For example, the average 75 year old male who has not been exposed to noise would benefit from a hearing aid. Would the committee considered primary care paying more attention to this age group or encourage the population to have hearing tests? It is understood that 'screening' is not part of this process but perhaps it should be. These guidance notes are important – what mechanism will be in place to ensure compliance within the private audiological services/hearing aid industry?	**Thank you for your comments. Screening all people of a certain age for hearing loss is outside of NICE's remit as this would need to be recommended by the National Screening Committee. We limited our focus to specified groups where we felt the association was so strong and the benefit so significant that the committee could provide guidance. The committee has therefore recommended routine hearing tests for those either diagnosed with or suspected of having dementia.** **NICE guidance is developed for the NHS in England and is applicable to private audiological services delivering NHS care. Those commissioning hearing services would have responsibility for auditing services being provided.**
Chief Scientific Officer's Office, NHS England	FULL – 6.2.41	75	9	It is appreciated that the criteria for recommendation for MRI scanning is a minefield with very little consensus. It is noted that Section 6.2.41 (Page 75, item 9) 'Consider MRI of the IAM' as opposed to 'must'.	**Thank you for your comment. The wording has been changed to make the criteria clearer. We do not agree that retesting is necessary and will lead to unnecessary workload and delay without significantly changing referral rates.**

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				With the inter and intra observer errors of audiology and particularly bone conduction would it be considered that 'on repeat audiology' there is a consistent asymmetry – on page 76, it states in grey print bone conduction. It is suggested that this is actually highlighted in the Gold section, item 9 (page 75).	
Chief Scientific Officer's Office, NHS England	FULL – 5.2.42	56	-	Item 4 is limited to Southeast Asian families but it is recognised that Chinese origins have a notable incidence to Post Nasal Space cancers. It is recommended that the committee consider including: 'The East Asian people or East Asians is a term used for ethnic groups that are indigenous to East Asia, which consists of mainland China, Hong Kong, Macau, Japan, Taiwan, Mongolia, North Korea and South Korea.'	**Thank you for your comment. We've amended the recommendation to consider urgent referral (to be seen within 2 weeks) to an ear, nose and throat service for adults with hearing loss and a middle ear effusion not associated with an upper respiratory tract infection, for adults of Chinese and South-East Asian family origin.**
Chief Scientific Officer's Office, NHS England	FULL – 3.3.36	21	-	Page 21 specified not covering surgical management – this does cover a lot of important issues and perhaps need to stipulate when 'hearing aids' don't work or can't be used an Otologists' opinion for surgical options should be sought. Surgery is mentioned briefly in Section 5.12, page 54.	**Thank you for your comment. The committee has amended the recommendations to include discussion of onward referral for surgical management if appropriate at the audiological assessment.**
Chief Scientific Officer's Office, NHS England	FULL – 10.3.46	-	-	It is felt that the indications and especially contraindications are not complete enough. There are a number of NHS publications. Attached is one from Scotland – it highlights a number of important contraindications for consideration (see page 13).	**Thank you for your comment. The full guideline on Page 126 does refer to the NICE Clinical Knowledge Summary on earwax which contains a comprehensive list of contraindications. We also understand that a knowledge of contraindications is a part of training and competence.**

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Chief Scientific Officer's Office, NHS England	FULL – 10.2.41	-	-	As mentioned previously regarding the management of ear wax and appropriately trained practitioners.	**Thank you for your comment. We have amended the document to make clear practitioners should have the competences to carry out the procedures.**
Chief Scientific Officer's Office, NHS England	FULL	12	3	As this is a summary, and most likely to be used by most rather than reading through the entire document, I would suggest it is made clear who the onward referrals are from and to. i.e., from Primary care or AQP services to ENT, AVP or specialist Audiology services depending on local service provision and protocols. In that way, where only AQP or routine adult hearing aid service provision exists, professional should refer all patients with distressing tinnitus, memory or mental health problems or learning disabilities to specialist Audiology centres where their care can be more appropriate given. This links onto comment No. 8 below. All onward referrals should state preferred mode of communication of family or carers. Including BSL/written/verbal etc There should be recognition that some areas are trialling self referral without GP as gate keeper. The evidence and pathways should be acknowledged here as innovative.	**Thank you for your comment. The recommendations have been amended to clarify as suggested.**
Chief Scientific Officer's Office, NHS England	FULL	12	3	Given that this section also includes immediate referrals in lines 16 & 19, for clarity this should be clearly cited in the title. Would recommend: "Immediate, Urgent and Routine Referrals	**Thank you for your comment. This has been amended to 'immediate, urgent and routine referral.'**
Chief Scientific Officer's Office, NHS England	FULL	12	10,14,16, 19,30	Given that most readers will in the main use the summary guidelines, it would be extremely helpful (as	**Thank you for your comment. These timescales have now been added to the**

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				cited on pg 57) to quote the expected timescales for each referral type here too. i.e., Immediate referrals to be seen within 2-days; Urgent within 2-weeks etc. In that way both commissioners, and clinicians can print of the summary and use this as part of their quick ref guides and in service specifications etc.	**recommendations where appropriate.**
Chief Scientific Officer's Office, NHS England	FULL	12	38	Whilst quite rare pulsatile tinnitus can be bilateral, and bilateral tinnitus can change in nature to become severely distressing, hence should not be purely unilateral tinnitus that gets referred. Would suggest: 'Tinnitus that is unilateral and persistent, pulsatile, has significantly changed in nature or is distressing. In England we need pts with distressing tinnitus to be referred to specialist audiology teams for advanced support and counselling rather than go through AQP process and then may or may not be picked up for onward referral. Agree and this should reference the new nice guidance on tinnitus being compiled at present	**Thank you for your comment. We have amended the criteria to include bilateral pulsatile tinnitus with hearing loss.**
Chief Scientific Officer's Office, NHS England	FULL	13	4	Given that on page 61 you are specifically focusing on persistent otaligia, it is important to be consistent and concise. Would recommend inserting the sentence should read 'Persistent pain affecting either ear……'	**Thank you for your comment. Having reconsidered this issue the committee preferred the existing wording, as it considered the specific description 'lasted for 1 week or more' to be a clearer.**
Chief Scientific Officer's Office, NHS England	FULL	13	6	Ditto with 'history of Persistent discharge……'	**Thank you for your comment. The committee discussed this and felt that putting time limits or numbers of episodes would not be helpful and could lead to unnecessary delay in some and unnecessary referral in others. We agreed that the GP should have the freedom to refer as he or she sees fit based on clinical need.**
Chief Scientific Officer's Office, NHS England	FULL	13	6	Request clarification of how long should the history of discharge be. And define 'recurrent' – if after X	**Thank you for your comment. The committee discussed this and felt that putting time**

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				episodes, referral should be made.	**limits or numbers of episodes would not be helpful and could lead to unnecessary delay in some and unnecessary referral in others. We agreed that the GP should have the freedom to refer as he or she sees fit based on clinical need.**
Chief Scientific Officer's Office, NHS England	FULL	13 79	27, 30, & 33 7.2.4	Not all audiology services (specifically AQP) are set up to support people with dementia, mental health concerns or learning disabilities. Therefore to differentiate between those that do routine adult hearing loss and those service which provide more specialist Audiological care, it is strongly suggested that you use the phrase 'specialist audiology services' rather than just audiology services where a GP could inadvertently ref a patient to an AQP provider who cannot support these complex cases and hence has to do onward referral which in turn inappropriately adds an extra step and delay to the care of these complex cases who are in greater need for quick and efficient specialist care. Buy differentiating between specialist and routine audiology services that will aid more effective referrer decision making. ?? this was argued in AQP roll out and was seen a discrimatory to not include learning disabilities etc so need to be careful of this however agree that triage at GP to determine level of skill required to do assessment and meet needs should be reflected..	**Thank you for your comment. The majority of those with dementia and learning difficulties will be able to perform a normal pure tone audiogram without needing referral to specialist audiology services. If the degree of disability is such that there is doubt then the GP, in discussion with the local audiologist, can plan the best pathway of care for the patient. It is highly likely that all patients will go to the local audiologist in the first instance when their disability is mild and progress to more specialist services. Children transitioning to adult services should have had their needs assessed previously and the best service identified.**
Chief Scientific Officer's Office, NHS England	FULL	14 124	32 10.2.4	Whilst it is appreciated that in the main ear wax removal needs to occur in primary care and community settings, there is a fundamental absence of recognising and supporting the need for Audiology providers (who will see most patients with wax in their	**Thank you for your comment. The committee has changed the wording to make it clear that wax removal is not dependent on a particular service but is dependent on someone who is trained and has the right equipment. The**

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				clinics, after ENT) to also dewax after training. This needs to come out much more strongly in the recommendations. I would suggest recommendations 16, 19 reads: 'Offer to remove wax in primary care, community and Audiology services…….' Wax removal could happen at Pharmacy?	**committee believes that patients should have this basic care delivered locally whenever possible, before patients are referred to ENT. Wax removal could also happen in pharmacies if they have the trained personnel, equipment and clinical space.**
Chief Scientific Officer's Office, NHS England	FULL	15 181	21 12.2.4	In this section need to include Information standards….the patient's preferred communication methods. Need to acknowledge Deaf population and their preferred language. See above for all referrals	**Thank you for your comment.** **The guidelines only cover adults with acquired hearing loss which effectively excludes those using BSL as a first language. Their needs would be covered by more general recommendations.** **Cross reference has been made to the Patient Experience guideline which provides generic recommendations on provision of information and tailoring to the needs of the patient.**
Chief Scientific Officer's Office, NHS England	FULL	16 228	34	Recommendation 32: Offering Face to face follow-up, fully support this but given that technology allows for video conferencing (hence face to face) can we be more explicit to include this and exclude postal questionnaires as substitute for follow-up. What about telephone follow-ups?	**Thank you for your comment. The committee has revised the recommendation to allow delivery of the follow-up appointment by other methods if this is the preference of the patient.**
Chief Scientific Officer's Office, NHS England	FULL	16 229	40	There is no mention on how often hearing reassessment should occur to review for deterioration and hence effective use of their communication tools. This really is fundamental to ensure continued use. We look towards the committee to give guidance on whether 3-year review is recommended or should we just wait for patient to request a reassessment of their hearing? Bearing in mind that gradual deterioration of hearing is not often noticed by the individual. It is	**Thank you for your comment. The committee has reconsidered this issue and made an additional recommendation that implementing a system to automatically recall hearing aid users for reassessment regularly should be considered. However, the committee did not recommend a particular frequency for this recall due to lack of evidence. The committee has made a**

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				accepted that there is variation across the country, but it is for NICE guidance to help reduce this unwarranted variation. What does the committee consider good practice? Would recommend at the very least that all services advise patients about having their hearing checked for deterioration every 3-years and give them information on how to contact the services as required.	**recommendation for further research on monitoring of people using hearing aids, which would include the question of what the optimum period between reassessments should be. The committee has also recommended that all hearing aid users should be provided with information on how to contact services if required sooner.**
Chief Scientific Officer's Office, NHS England	FULL	59	1 & 6	The title suggests you are only looking for routine referrals for medical opinion, but in actual fact you are looking for immediate, urgent and routine. Would suggest you remove the word 'routine' from you review question and statement.	**Thank you for your comment. This title is in fact for the routine referral question only and is different from the previous question on urgent referral.**
Chime Social Enterprise	Full	228	17.3.46	Telephone Reviews. These were introduced into the NHS following a national study by Adrian Davis. They are in general not conducted by audiologists but trained admin staff. 1) Patients are always give the choice of a face to face first follow up or telephone. Many choose telephone and are happy with that route not wishing a further scheduled appointment. Patient choice should not be removed. 2) To assume it would be cost neutral to go to face to face for the whole caseload is wrong – mismatch of staff and also a call room could utilise many admin staff freeing up clinical rooms for other audiologist duties. Introduction of your recommendation place undue pressure on the service, increases costs and will increase waiting times. It also removes patient choice.	**Thank you for your comment. We have reworded the recommendation to facilitate patient choice.** **We however disagree that it is appropriate to use 'admin staff' to conduct telephone appointments whilst more qualified staff conduct face-to-face appointments. In person and telephone appointments should be conducted by equally qualified staff and include the same level of detail and rigour.**
Chime Social Enterprise	Full	229	17.3.46	With regards to a three-year model. I do not think there was any evidence for this when it was introduced in AQP. As you say there is different	**Thank you for your comment. The committee has reconsidered this issue and made an additional recommendation that**

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				practice across the country. We have operated a five-year model successfully now for 15 years. Patients need reviews when they signal that they require them during the 5-year period. Routinely after 5 years they are reassessed for new hearing aids – this fits with the aid obsolescence cycle. We estimate 90 % of patients have effective aiding for 5 years. There has to be facility for the 10% to come sooner if hearing or other circumstances change. There is danger in cementing a three-year pathway and looking the system into significant extra expense.	**implementing a system to automatically recall hearing aid users for reassessment regularly should be considered. However, the committee did not recommend a particular frequency for this recall due to lack of evidence. We are aware of both 3-year and 5-year cycles operating in different areas, but have been unable to compare the success or cost effectiveness of these. The committee has made a recommendation for further research on monitoring of people using hearing aids, which would include the question of what the optimum period between reassessments should be. The committee has also recommended that all hearing aid users should be provided with information on how to contact services if required sooner.**
Cwm Taf University Healthboard	Short	04	16	I am questioning the practicalities of whether Audiology (in the case of a local complex audiology pathway) would be the most appropriate professional to accept and see patients with middle ear problems as 1.1.17 suggests that it may be appropriate. Perhaps come clarification may be required	**Thank you for your comment. The committee has amended the recommendation to clarify that referral would be to an ear, nose and throat, audiovestibular medicine or specialist audiology service for diagnostic investigation, using a local pathway.**
Cwm Taf University Healthboard	Short	06	1 & 14	The micro suction and manual removal of wax indicates "training and expertise in using these methods to remove earwax". This is not written in line 1 perhaps implying that training is not required – some parity or clarification would perhaps be useful in advising training for all methods of wax removal	**Thank you for your comment. The wording has been amended to clarify staff should be trained in whatever method of wax removal is used.**
Cwm Taf University Healthboard	Short	06	25 onwards	I think this may be covered but wanted to ensure that patients with unilateral tinnitus would be potentially suitable for MRI scanning and that the guidance allows certain patients who have vertigo to also be referred for MRI scanning, again if deemed suitable	**Thank you for your comment. Our remit is to cover adults with hearing loss. If, in addition, they have signs that suggest a vestibular schwannoma, such as unilateral tinnitus, then MRI should be considered, and this is covered. Vertigo is rather different because**

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					vestibular schwannomas rarely give rise to vertigo and one would need to do a full assessment on a patient to determine the cause of the vertigo. Most causes of vertigo do not require an MRI scan and if they do, it should rarely be an MRI scan of the IAMs. We therefore have not included vertigo as a reason for MRI but suggest that the patient is referred for a medical assessment.
Cwm Taf University Healthboard	Short	07	3	Should the audiological asymmetry be extended to include other frequencies – not just 0.5Hz to 4KHz?	**Thank you for your comment. The committee does not believe that there is any evidence or precedent for including other frequencies. However, the committee has reappraised the evidence in the light of comments and has decided to recommend a difference of 15dB at 2 adjacent frequencies (0.5, 1, 2, 4 or 8 kHz) to reflect current practice in ENT clinics.**
Department of Health	General	-	-	I wish to confirm that the Department of Health has no substantive comments to make, regarding this consultation.	**Thank you for your comment.**
ENT UK	General	General	General	We appreciate the huge amount of work that has gone into this but worry it's very thoroughness may make it a little unwieldy for primary care.	**Thank you for your comment.**
ENT UK	General	General	General	We could not find a pathway for patients who fail to benefit from hearing aids because they are either unable to wear them of are too impaired to aid. These patients should be referred on into ENT services.	**Thank you for your comment. We have added reference to onward referral but will not limit this to ENT. We have amended the recommendations to include discussion of implantable devices as part of the audiology assessment.**
ENT UK	General	General	General	We feel surgical options of management such as cochlear implants and bone conduction devices should be mentioned with some guidance of when to refer on.	**Thank you for your comment. We have amended the recommendations to include discussion of implantable devices as part of the audiology assessment. We are unable to give specific guidance as this is outside our**

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					scope.
ENT UK	Full	012	5	State sensory hearing loss to try to avoid too many referrals	**Thank you for your comment. This pertains to referral of a sudden hearing loss when we want the GP to refer the patient then and there to ENT services. To identify a sensory loss would take not only a referral to audiology to take place, but a full assessment including an ABR and other tests of retrocochlear function before one can be sure that any hearing loss is purely sensory. That takes time and effort that is really not warranted and will stop the individual getting urgent care. Furthermore, we are just as interested in neural hearing losses occurring acutely.** **It is because of the urgency that we do not want the GP to delay the referral trying to decide which bit of the auditory anatomy is affected.**
ENT UK	Full	012	10	Hearing loss over 30 days ago does not need urgent referral	**Thank you for your comment. The committee is of the opinion that the cause of a sudden hearing loss requires urgent investigation. We would be much happier if autoimmune disease, enlarging vestibular schwannomas CVAs and other causes of sudden hearing loss were dealt with urgently even if the presentation was a little delayed.**
ENT UK	Full	012	24	Not sure if South East Asian is the correct terminology. Should mention Chinese who have a high incidence of post nasal space tumours	**Thank you for your comment. We've amended the recommendation to consider urgent referral (to be seen within 2 weeks) to an ear, nose and throat service for adults with hearing loss and a middle ear effusion not associated with an upper respiratory tract infection, for adults of Chinese and South East Asian family origin.**
ENT UK	Full	015	18	"Consider a steroid" seems very vague advice. Whilst	**Thank you for your comment. The committee**

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				we appreciate the lack of great evidence we feel this is perhaps too vague advice to be useful. Perhaps at least the options should be stated	**found that the evidence underpinning steroid administration in idiopathic sudden sensorineural hearing loss was not sufficiently robust to make a more definite recommendation. Neither did we have sufficient evidence to contradict current practice which is to consider steroids. This is explained in the full version of the guideline. Our conclusion is the same as the Cochrane review on the same subject. We therefore believe that it is the decision of the medical team whether to treat with steroids or not and what drug or route to use. The recommendation about immediate referral is in order to investigate the cause urgently and then to decide what is in the patient's best interest. That step should occur as soon as possible so that if steroids are indicated they can be given urgently.**
ENT UK	Full	016	14	Should there be some audiological advice on thresholds for hearing aid referral. ?? 30dB	**Thank you for your comment. The committee did not feel that this was appropriate and that management should be based on needs. We feel that it is the audiologist who makes a decision about amplification based on training and experience and in discussion with the patient.**
ENT UK	Full	060	6	What is a "local complex audiology pathway"	**Thank you for your comment. The wording has been adjusted to 'specialist audiology service for diagnostic investigation, using a local pathway'.**
ENT UK	Full	075	8	Recommendation 9 should suggest repeat audiometry to avoid referral for spurious testing.	**Thank you for your comment. We trust that audiologists will retest if they feel it is necessary and that retesting is not needed for the majority of cases.**
ENT UK	Full	076	32	"Specific mention was made of unilateral tinnitus, which should prompt referral even if the hearing loss	**Thank you for your comment. We agree that tinnitus should be persistent before referral**

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				is symmetrical" Although only referral is recommended, this will result in a lot of unnecessary MRI scans especially as the tinnitus is not classified in any way. Should there be a minimum duration, intermittent, fluctuating or constant, severity (eg disturbing sleep). We would favour a statement that says there is no evidence for QALYs as a result of screening of VN in tinnitus patients and the clinical impression is that it is far less worthwhile than in hearing loss. We note the American Academy of Otoloaryngology Head and Neck Surgery no longer recommend screening of unilateral tinnitus in the absence of hearing loss as picking up vestibular Schwannoma is very uncommon and those picked up are usually small and merely observed.	**takes place. The recommendation has been revised to make the criteria for referral more specific thereby reducing the chance of unnecessary MRIs being carried out.**
ENT UK	Full	124		Recommendation 18. Ear irrigation should be performed by appropriately trained personnel	**Thank you for your comment. We have altered the wording to make it clearer that all methods of ear irrigation should be undertaken by staff trained in the procedures.**
Hearing Loss and Deafness Alliance	Short	14-17	General	The Recommendations for research should also include a randomised controlled trial (RCT) on screening adults for hearing loss. The importance of early diagnosis and identification has been recognised within the government's Action Plan on Hearing Loss which sets out an objective to ensure that all people with hearing loss are diagnosed early and managed effectively once diagnosed. Without hearing aids and support, research shows that hearing loss leads to people not reaching their full potential at work, and too often leads to early retirement and loss of income. Hearing loss also	**Thank you for your comment. The committee could only make research recommendation on topics where an evidence review was carried out and no evidence was available, which precluded making a recommendation. Screening was not included in the scope of this guideline and therefore we could not make a recommendation for further research on this topic.**

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				doubles the risk of developing depression and dementia. There is good evidence that hearing aids improve employment prospects, quality of life, social activity and mental health. It is therefore clear that proper diagnosis and management of hearing loss improves health and well-being. However, only one third of people who could benefit from hearing aids currently have them, and most people with hearing loss delay seeking help for 10 years, waiting on average until they are in their mid-70s. A universal screening programme for hearing loss would identify and help those who would benefit from hearing aids and other rehabilitation sooner. It would also offer reassurance to those with unimpaired hearing, and would help inform the public at large about the disabling effects of hearing loss and the effectiveness of interventions. Moreover, its long term benefits to social well-being and health make it cost effective: a recent independent analysis found that screening at the age of 65 would be most cost-effective, with an estimated benefit-cost ratio of 8:1 over 10 years. (Davis et al (2007). Acceptability, benefit and costs of early screening for hearing disability: A study of potential screening tests and models. Health Technology Assessment 11:1–294; Action on Hearing Loss, 2010 Hearing Matters) In 2015 the Alliance in partnership with a number of charities submitted a consultation response to the National Screening Committee (NSC) for the introduction of a hearing screening programme for adults. However, in 2016 the NSC, announced its decision on not to support a hearing screening programme, on the basis that there was a lack of evidence, particularly from a RCT. (also Lamb and	

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				Archbold, Adult Hearing Screening: Can we afford to wait any longer? Ear Foundation and Action on Hearing Loss 2016). The NSC has stated: "Further research in the UK is required before screening can be recommended in the UK. It has been suggested that a large scale Randomised controlled Trial (RCT) of screening for hearing impairment 35+ dB hearing impairment or poorer should be undertaken within the 55 – 74 age group". A RCT investigating screening for hearing loss among adults will provide the evidence required to meet the criteria set by the NSC. And could potentially lead to the introduction of adult hearing screening, improving health and wellbeing, reducing social isolation, keeping people in work longer, increasing awareness of hearing loss, reducing the stigma around hearing loss and normalising help seeking. The Action Plan on Hearing Loss also commits to Public Health England (PHE) to continue to periodically review the evidence for screening hearing loss in older adults against the NSC criteria.	
Hearing Loss and Deafness Alliance	Short	15	20	The use of hearing aids and incidence of dementia is an important research recommendation which should be prioritised. The significance of this research area is recognised by the James Lind Alliance, Priority Setting Partnership on Mild and Moderate Hearing Loss, which identifies the effect of early fitting of hearing aids on the rate of cognitive decline as a key research question. (Jla.nihr.ac.uk. (2017). Mild to Moderate Hearing Loss Top 10 | James Lind	**Thank you for your comment. The committee agrees that this is a priority for research and has therefore included a recommendation for further research on this topic.**

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				Alliance. [online] Available at: http://www.jla.nihr.ac.uk/priority-setting-partnerships/mild-to-moderate-hearing-loss/top-10-priorities.) Current evidence shows that hearing loss is the largest modifiable risk factor for dementia. Although existing evidence on the association between hearing aids and cognition is limited, it suggests a positive association. For example, a prospective study by Amieva et al (2015) showed no difference in the rate of change in MMSE score over the 25 year follow up period in participants with hearing loss using hearing aids compared to the control group (participants without hearing loss). In contrast, participants with hearing loss who did not use hearing aids declined more rapidly on the MMSE than the control group, the findings suggest that hearing aid use decreases cognitive decline. Findings from Dawes et al (2015) study showed hearing aids to be associated with better cognition, which was independent of social isolation and depression. Suggesting that positive effects of hearing aid use on cognition may be due to improvements in audibility or associated increases in self-efficacy, rather than social isolation or depression. Furthermore, in a cohort study by Deal et al (2015) decline in cognitive function was found to be greatest among participants who did not wear hearing aids then compared to those who did. (Amieva, et al., (2015) Self-Reported Hearing Loss, Hearing Aids, andCognitive Decline in Elderly Adults: A 25-Year Study. J AmGeriatr Soc. 2015 Oct;63(10):2099-104; Lin FR. (2011) Hearing loss and cognition among older adults in the United States. J Gerontol A Biol Sci Med Sci, 66: 1131–36; Dawes et al., (2015) Hearing Loss and Cognition:	

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				The Role of Hearing Aids, Social Isolation and Depression http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0119616, Deal et al., 2015 Hearing Impairment and Cognitive Decline: A Pilot Study Conducted Within the Atherosclerosis Risk in Communities Neurocognitive Study. Am Jr Epidemiol. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4408947/) This research recommendation is particularly important in light of the recent proposals to decommission hearing aid provision across the country by several CCGs (Please refer to comment 5). The need to understand the association between hearing loss and incidence of dementia is imperative for reducing inequalities in health.	
Hearing Loss and Deafness Alliance	Short	5	16-18	**Question 2.** Although CCGs are facing financial pressures, this should not impact patient care. There are a number of effective alternative ways that CCGs can respond to financial challenges without decommissioning hearing aid services for people with mild and moderate hearing loss. The Commissioning Framework for Adult Hearing Loss Services is guidance published by NHS England to support CCGs to commission high quality, cost effective audiology services, which enables CCGs to reduce costs of hearing services without restricting provision. There are several case studies of good practice cited within the Commissioning Framework for Adult Hearing Loss Services, this includes West Hampshire CCG, which redesigned the hearing care pathway for adults in the local area resulting in significant cost	**Thank you for your comment. It is outside our remit to suggest ways of reorganising services as this relies on specific knowledge of competences enjoyed by each element of the local pathway. Reference has been made to Action plan on hearing loss within the full guideline.**

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				savings. The pathway was co-produced with Ear, Nose and Throat (ENT) doctors and audiologists, and designed around patient needs allowing all audiology providers to refer directly into ENT, and provides ENT an efficient method of offering users a choice of community audiology services. These changes have resulted in a more integrated model of care which is tailored to patient needs. **Question 3.** To help CCGs to overcome challenges they should refer to the following national strategy and guidance documents: • The Action Plan on Hearing Loss: To tackle the growing public health challenge of hearing loss, the Department of Health and NHS England published the Action Plan on Hearing Loss in 2015. The Action Plan is a national Government strategy, which demonstrates a commitment to tackling hearing loss at a national level, and clearly lays out the evidence base around the impacts of hearing loss and the need for improved awareness, technology and services. The Action Plan proposes to address hearing loss through promoting prevention of hearing loss, improving both the commissioning and integration of services, providing innovative models of care and ensuring that people of all ages with hearing loss are actively supported and empowered.	

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				• The Commissioning Framework: The Commissioning Framework for Adult Hearing Loss Services was published by NHS England in 2016, and is one of the main outputs from the Action Plan on Hearing Loss. It is a crucial document for promoting good practice amongst commissioners, providing tools and practical guidance to support CCGs to make informed decisions to achieve good value for local populations, provide services which are of high quality, consistent and integrated. The Framework suggests improving services by basing services on local needs, monitoring outcomes, considering flexible and innovative commissioning models, streamlining pathways, signposting well to support services and improving accessibility, convenience and choice. • Joint Strategic Needs Assessment (JSNA) Guidance: This guide has been co-produced by NHS England, the Local Government Association, the Association of Directors of Public Health and other stakeholders, as part of ongoing work of the Action Plan on Hearing Loss working groups and will be published in 2018. The guide provides the data, evidence and insight local authorities and NHS commissioners need to develop robust hearing needs assessments to meet local needs. It will allow decision makers define the future health, care and wellbeing needs of their local populations with regards to hearing loss and to signpost to guidance on how audiology services can help them to meet these needs.	

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				• What Works Guides on Hearing Loss NHS England has also co-produced with the Alliance as part of the Action Plan working programmes a series of What Works Guides covering transition to Adulthood, Employment and Ageing Well with Hearing Loss. https://www.england.nhs.uk/publication/what-works-guides-action-plan-on-hearing-loss/ These should be promoted widely to patients, commissioners, education providers, employers and care providers.	
Hearing Loss and Deafness Alliance	General	-	-	We welcome that hearing loss is increasingly being recognised as a national priority within the UK. This is demonstrated by the government's Action Plan on Hearing Loss, the NHS England's Commissioning Framework for Adult Hearing Loss Services, investment in the work programmes around the Action Plan and the now the draft NICE guidelines for adult hearing loss. Recently hearing loss was recognised as a global health issue by the World Health Assembly (WHA), formed of the member states of the World Health Organisation (WHO) which approved and adopted a resolution to intensify action to prevent deafness and hearing loss.109 The resolution calls upon governments to integrate strategies for ear and hearing care within the Framework of their primary health care systems, implement prevention and screening programmes for high-risk populations, establish training programmes for health workers, and improve access to high-quality cost-effective assistive hearing technologies and products. WHO are planning to produce a global report on hearing and provide support to countries to help them reduce	**Thank you for your comment.** **The committee are aware of technological developments within the hearing loss field but this was not identified in our searches and published evidence not found. Therefore it is not possible to make comment but may be included within future updates of the guideline.**

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				hearing loss. http://www.who.int/mediacentre/news/releases/2017/vector-control-ncds-cancer/en/ Whilst we believe that the draft guidelines have come at a critical time when we have seen budget cuts to hearing aid services and proposals to cut provision of hearing aids; it is imperative that the guidelines are disseminated and used widely to help reduce the local variation in access and quality of hearing aid services across the UK. The guideline should not be used in isolation and audiology services should work with their local CCGs and local authorities to help ensure that money is invested properly; services are more cost effective; more integrated; person-centred and people are easily able to access a range of high quality audiology care and support locally. The Action Plan on Hearing Loss states that "hearing loss is not just a health issue- it is societal and requires an integrated approach across a range if Government departments, non-departmental, public bodies and stakeholder organisations across the public, private and third sectors, including children, young people and adults with hearing loss themselves." It is imperative that NHS England, PHE, Department of Health, other Government departments, key stakeholders across the voluntary, professional, private sectors and people with hearing loss continue to collaborate to ensure that the objectives of the Action on Plan on Hearing Loss are being worked towards and met; the Commissioning Framework for Adult Hearing Loss Services, What Works Guides and the NICE guidelines for hearing loss is promoted, implemented and used effectively in local CCG areas.	

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				The draft guidelines need to take into consideration the rapidly changing landscape of technology and the inevitable significant changes that will occur in delivery of audiology and social care services consequently. Throughout the health and social care sector, there has been an increasing use of innovative digital technology such as m-health, e-health and telehealth/medicine. Specifically, within audiology, we have seen trials of self-fitting hearing aids, remote fitting hearing aids and telehealth. In addition to this, hearing aids have become better connected with other devices, such as mobile phones through Bluetooth, and many now can connect to apps that allow better self-control of the devices. Assistive listening devices are better designed through streamers and apps to improve access to speech and help individuals communicate. The draft guidelines make little or no reference to these changes and could soon some elements could therefore be considered redundant and not relevant. It is therefore recommended that the draft guidelines state that changes in technology and service provision should be monitored; services should be encouraged to innovate, trial and research effectiveness of new technologies devices and delivery of services. A review of the NICE guidelines for hearing loss should be agreed by the committee to ensure the latest developments are incorporated.	
Hearing Loss and Deafness Alliance	Full and Final Scope	-	3.3.33 3.3.36	Further, the Final Scope and draft guidance both identify the Cochlear implants for children and adults with severe to profound deafness (2009) NICE technology appraisal guidance TA166 and Auditory brain stem implants (2005) NICE interventional	**Thank you for your comment. We have amended the guidelines to signpost to this guidance.**

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				procedure IPG108 as related NICE pathways, it does not refer to access to these treatment options anywhere else within the draft guidance. The identification and referral of appropriate cases to specialised services to be relevant to the recommendations of the committee in both the "Urgent and routine referral" and the "Monitoring and follow-up" sections of the draft guidance.	
Hearing Loss and Deafness Alliance	Full	18	3-27	This section should include the wider costs of hearing loss. The economic burden of hearing loss is wider than just the costs related to unemployment, it also includes the costs related to the use of health and social care services and the monetary value of the lost quality of life. Findings from The Ear Foundation (2014) show the financial cost of hearing loss to society to be approximately £136 million per annum in 2013, this includes approximately £76 million per annum associated with additional use of GP services and £60 million associated with additional use of social care services. Furthermore the report estimates the net burden of illness in terms of reduced quality of life associated with hearing impairment to be approximately £26 billion in 2013. (Archbold S, Lamb B, O'Neill C, Atkins J. (2014). The Real Cost of Adult Hearing Loss: reducing its impact by increasing access to the latest hearing technologies. The Ear Foundation; O'Neill, Lamb, Archbold. (2016) Cost implications for changing candidacy or access to service within a publicly funded healthcare system? Cochlear Implants International 17:sup1, 31-35, DOI: 10.1080/14670100.2016.11611232016.)	**Thank you for your comment. We agree that there are a wide range of economic impacts of hearing loss. We have added additional comments into this section.**
Hearing Loss and Deafness Alliance	Full	21	3.3.36	Whilst we fully appreciate that the Final Scope and draft guidance does not cover "Surgical management	**Thank you for your comment. We have amended the recommendations to include**

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		21 22	3.3.23 & 3.3.24	of hearing loss", it does identify "Further assessment" and "Management of hearing difficulties" as 2 out of the 3 key areas to be covered. There is a need to refer to specialist services when appropriate to be entirely within the identified scope of this guidance.	**discussion of onward referral for implantable devices and surgical management if appropriate at the audiological assessment.**
Hearing Loss and Deafness Alliance	Full	78	15-18	This section should also make reference to the recent Lancet Commission (2017) on dementia prevention, intervention, and care. The commission identifies hearing loss to be the largest modifiable risk factor for dementia in middle age, and calls for better management and prevention strategies of hearing loss and other risk factors to reduce the burden of risk.(Livingston G. (2017). Dementia prevention, intervention, and care. The Lancet. doi: 10.1016/S0140-6736(17)31363-6.)	**Thank you for your comment. We have included a reference to the Lancet Commission on dementia prevention, intervention, and care (Livingston 2017) in the main introduction and the introduction for chapter 7 of the guideline.**
Hearing Loss and Deafness Alliance	Full	General	General	The Alliance is formed of the leading organisations working on hearing loss across the public and private health sector, voluntary organisations, patients groups and professionals. Many Alliance members will respond individually and therefore this response aims only to address some of the general strategic points and some general omissions. For more information on the Alliance see; https://hearinglossanddeafnessalliance.wordpress.com/ We welcome the opportunity to respond to the consultation on NICE's draft guidelines on 'Hearing loss in adults: assessment and management'. Hearing loss is a growing public health challenge and is increasingly seen as a national priority. This is	**Thank you for your comments.**

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				demonstrated by the Department of Health and NHS England's Action Plan on Hearing Loss published in March 2015 https://www.england.nhs.uk/wp-content/uploads/2015/03/act-plan-hearing-loss-upd.pdf , and NHS England's Commissioning Framework for Adult Hearing Loss Services published in April 2016 https://www.england.nhs.uk/2016/07/hearing-loss-services/ where the Alliance was involved in the production of these documents as a key partner. The NICE guidelines will add to these key documents, strengthening the case for the prevention and management of hearing loss. They will also enable providers and commissioners to recognise the impact of hearing loss on individuals, and the economic that unaddressed hearing loss places on the health and social care system.	
Hearing Loss and Deafness Alliance	Full	General	General	There is a concern that there is an omission in this draft guidance around identification and onward referral of patients who cannot gain adequate benefit from conventional acoustic hearing aids to specialised services (auditory implant programmes) for assessment. These patients are potentially eligible for hearing implants (middle ear, cochlear and auditory brainstem implants and bone anchored hearing aids). The efficacy of these interventions, which are all NHS commissioned and two of which (cochlear and brainstem implants) are covered by other NICE guidance, is addressed elsewhere and therefore would not require further evaluation by the	**Thank you for your comments. We have amended the recommendations to include discussion of onward referral for implantable devices or surgical management within the audiological assessment.**

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				committee. The referral of these patients by audiology services to specialised services is immensely important to support patient access to these NHS-commissioned interventions. The committee needs to acknowledge within the guidance the need for audiology services to (a) identify patients for whom conventional hearing aids are contraindicated, not appropriate, or unlikely to provide sufficient benefit; and (b) consider onward referral of these patients to specialised services when appropriate.	
Imperial College Healthcare NHS Trust	-	4	16-20	Clarity is required on referring adults with asymmetric hearing loss as I am aware that some referrers are changing guidelines to refer asymmetric hearing loss via AQP (non-complex) pathways. If asymmetric hearing loss is a red flag then it should not be referred to non-complex pathways	**Thank you for your comment. We have redrafted our referral criteria to clarify this point. We would expect adults with an asymmetric hearing loss to be seen within the AQP pathway (non specialist pathway) for assessment and management of the hearing loss. Investigation of the cause will require an additional referral to specialist services.**
MED-EL UK Ltd	Full	012	General	Urgent and routine referral: The non-use of hearing aids can identify a number of factors including perceived audiological gain / benefit, fit, or psychological barriers to use. We would like to suggest that routine referral back to audiology services be included within this section for patients presenting to their GP with a previously diagnosed hearing loss who have become non-users of their hearing aids.	**Thank you for your comment. The committee has recommended that hearing services consider having a system for recalling people back for regular reassessment which would include this group.**
MED-EL UK Ltd	Full	014	20	Discuss with the person: We would like to suggest that the guidance also include a recommendation relating to discussions	**Thank you for your comment. This has been addressed and the recommendations amended within the audiological assessment to include discussion of onward referral to**

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				with appropriate patients (based on hearing aid trials and audiological testing outcomes) about the potential for referral for auditory implantation (such as cochlear implants, bone conduction implants, and middle ear implants)	**these services if they may be of benefit.**
MED-EL UK Ltd	Full	015	25	The inclusion of local and national peer-to-peer support organisations / groups provided to patients at this stage may also be beneficial to include within the guidance, particularly for patients initially diagnosed with hearing loss. In our experience, such groups provide valuable information and real-life stories that patients can relate, which facilitates patients feelings as though they are able to make an informed choice, and in many cases positively influences a patient's acceptance, ongoing use, and self-management / troubleshooting of auditory aids	**Thank you for your comment. We have included reference to other organisations for support and trust that the audiologist will be aware of the local support networks.**
MED-EL UK Ltd	Full	016	32	For patient who have presented with a hearing loss within criteria for auditory implantation or have additional medical needs such as otitis externa (whereby hearing aids may not be the most suitable option), additional follow up appointments may be needed to assess the audiological benefit of a hearing aid, and therefore consideration for referral to an auditory implant programme for further assessment against implant candidacy criteria	**Thank you for your comment. The committee has recommended that hearing services consider creating a system to recall people with hearing devices for regular reassessment.**
MED-EL UK Ltd	Full	016	41	It is equally important to advise adults who have a hearing aid how they can contact audiology services in future if they find a reduction in the benefits from hearing aids – we would seek to ask that this addition be included in the guidance	**Thank you for your comment. We have clarified the wording on how to contact audiology services for assistance with any changes to hearing.**
MED-EL UK Ltd	Full	018	32	In some instances, GP's may also refer patients directly to auditory implant programmes for assessment for cochlear implantation. Further advice in regards to direct GP referral is available via the British Cochlear Implant Group (BCIG) website www.bcig.org.uk	**Thank you for your comment. We have included onward referral for implantable devices within the audiological assessment. Referral by GPs was not considered by the committee and we are therefore not able to comment on this.**

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MED-EL UK Ltd	Full	021	36	We understand that this guidance does not cover the surgical management of hearing loss, however we feel that as the provision and trialling of hearing aids prior to surgical intervention is an essential step, inclusion of the referral pathways and management of these patients through audiology services is an important inclusion - as per our comments above	**Thank you for your comment. Surgical management is a specialised area and was excluded from the scope as we are unable to cover all areas; however, we have amended the recommendations to state referral for surgical management should be discussed if appropriate at the audiological assessment.**
MED-EL UK Ltd	Full	022	7	We feel that it's important to reference the updated commissioning policy for bone conduction and middle ear implants: Clinical Commissioning Policy: Bone conducting hearing implants (BCHIs) for hearing loss (all ages), Reference NHS England: 16041/P	**Thank you for your comment. Bone conduction and middle ear implants were not included within the scope of this guideline and we are therefore unable to refer to the document you cite. The committee has specified discussion of these devices when considering management options as part of the audiological assessment.**
MRC Institute of Hearing Research, University of Nottingham	Full	general	general	Para 4.4 on p.48 states "The committee is required to make decisions based on the best available evidence of both clinical effectiveness and cost effectiveness". On p.52 under 4.5 it is then stated "When clinical and health economic evidence was of poor quality, conflicting or absent, the committee drafted recommendations based on its expert opinion." This implies that the committee's expert opinion is intrinsically evidence with quality better than 'poor', which is at odds to the general stringency of the NICE approach to evidence. Surely a committee consensus opinion, if tested with the quality grading tools, would struggle to achieve a 'poor' rating. A further problem with the statement from p.52 quoted above is that 'poor' is actually not one of the levels of evidence quality used in the reviews, whereby the statement becomes imprecise. While the committee consensus opinion is a valid approach in the absence of any evidence, it ought to be signalled at each occurrence that no particular	**Thank you for your comment. This section summarises the general methodological approach for all our guidelines. "Poor" is not intended to be a technical term or relate directly to the GRADE system of classifying the quality of evidence as High, Medium, Low or Very Low. Instead it refers to the judgement of the committee on the overall quality and reliability of the evidence. This will take into account the GRADE quality, but also other factors relating to the applicability of the evidence (such as the age, location or specific techniques used in the studies concerned). The committee may make a decision that the evidence cannot be relied upon for a particular research question, even if its GRADE quality is higher than Very Low. Therefore, in the absence of reliable evidence, the alternatives are making no recommendation or making a recommendation based on the expert**

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				quality of evidence behind this opinion should be assumed by the reader.	**consensus of the committee. This is the same in the case where no evidence is found. This does not necessarily imply that the committee's consensus is of 'higher' quality than the published evidence, but that it may be more directly related and applicable to the research question under investigation.**
MRC Institute of Hearing Research, University of Nottingham	Full	general	general	There are no recommendations regarding the assessment or management of conductive or mixed hearing losses, yet there are no statements to the effect that such losses are outside the scope of the guideline.	**Thank you for your comment. We have amended the recommendations to include bone conductor aids within the audiological assessment. We are unable to cover all aspects of hearing loss and expect audiologists to use their own professional body's recommendations for situations we have been unable to cover.**
MRC Institute of Hearing Research, University of Nottingham	Full	general	general	Hearing aids attract the largest number of recommendations of any category in the summary guideline, and fill two substantial chapters in the full review. Given this prominence, and in light of the generally low quality of evidence which is found for most of the corresponding review questions, it is surprising that no future research recommendations involving hearing aid prescription (specifically 1 vs. 2 aids) or technology (technical features) are included in the "key research recommendations" summary (p. 17). It is also difficult to see why the question of appropriate outcome measures for directional microphones and noise reduction features attracts a subsequent research recommendation (Full 16.3.4, p. 223), but the question of 1 vs 2 hearing aids does not (Full 15.3.4, p. 212).	**Thank you for your comment. When considering the evidence for 1 compared to 2 hearing aids, the committee needed to decide whether it would be more appropriate to make a recommendation for practice or for research. The committee agreed that the clinical evidence for this question is much more limited that would be desirable; however, it noted the known benefits of binaural stimulation, their experience of the difference for patients of wearing 2 hearing aids, and the strong and clear original economic evidence showing that the use of 2 hearing aids is cost effective with only a very modest difference in effectiveness compared to 1 hearing aid. The committee therefore agreed there was sufficient evidence to recommend upholding the current practice of offering 2 hearing aids.** **The alternative would have been not to make**

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					any recommendation for practice, but to have made a recommendation for further research instead. This would have given clinicians no guidance for several years, and there would have been a risk of some funding bodies believing it would be acceptable to change their policies to funding only 1 hearing aid per person without guidance to the contrary. **Whilst further research to establish the exact degree of additional benefit given by a second hearing aid would be of great interest to everyone involved in audiology, and would be very worthwhile, it would be very unlikely to affect the recommendation made in this guideline, which the committee believes is already robust, and hence it is not a priority for further research specifically to inform future versions of this guideline, which is the purpose of NICE's research recommendations. Although directional microphones and adaptive noise reduction technologies are widespread, their benefit in real life is still unknown. Therefore, the committee agreed that a research recommendation on these technologies should be prioritised.**
National Cochlear Implant Users Association	Full	16	34 et seq	It is important to recognise that many CI users, and virtually all users of Bone Conduction devices will have started their journey into deafness with a relatively low level of hearing loss, for which hearing aids are an appropriate solution, but that over time their hearing will continue to decline to the point at which they should be assessed against the appropriate criteria for provision of CIs and Bone Conduction devices, e.g. TAG 166. The only reliable	**Thank you for your comment. The committee has recommended that hearing services consider creating a system to recall people with hearing devices for regular reassessment.**

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				way in which these assessments can be triggered is if the audiology team responsible for the provision of hearing aids is required as part of the Guidelines to regularly assess the patient's hearing loss going forwards, so that the patient can be given appropriate advice [and onward referral if appropriate] as their hearing continues to decline. We recommend that the "Monitoring and follow-up" requirements summarised in paragraphs 32-34 of your "Full list of recommendations" should be extended to highlight the need for regular follow up on those patients where the rate of decline of their hearing means that they may soon need to consider options such as a CI or Bone Conduction device.	
National Cochlear Implant Users Association	Full	21	36	We recognise that your Guidelines are not intended to cover the "Surgical management of hearing loss", and thence that they do not include specific recommendations relating to Cochlear Implants and Bone Conduction devices – including Middle Ear Implants. Nevertheless we are concerned that the Guidelines make no attempt to define appropriate patient care pathways though which patients who are initially being treated with hearing aids can migrate to CIs and Bone Conduction devices if their hearing continues to deteriorate. We consider such pathways as being an important part of any Guidelines on the "assessment and management" of hearing loss.	**Thank you for your comment. We have amended the recommendations to include discussion of referral on for specialist services such as implantable devices during the audiological assessment if deemed appropriate.**
National Community Hearing Association	Short	013	12-14	**NICE has not reviewed and updated statistics that it previously agreed to do during the guideline scope consultation. Please update statistics.** **Current text reads:** *"Hearing loss is a major public health issue affecting about 11 million people in the UK. Because of our ageing population it is estimated that by 2035 there*	**Thank you for highlighting this. We have changed the wording in the introductions of the short and full versions of the guideline to your suggested wording.**

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				will be around 15.6 million people with hearing loss in the UK – a fifth of the population." **Change to:** *"Hearing Loss is a major public health issue affecting over nine million people in England. Because age-related hearing loss is the single biggest cause of hearing loss, it is estimated that by 2035 there will be around 13 million people with hearing loss in England – a fifth of the population."* (Reference: Section 4.1 page 12 in NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups) **Current text reads:** ***"****Hearing loss is a major public health issue affecting about 11 million people in the UK.29 Because the population is ageing it is estimated that by 2035 there will be around 15.6 million people with hearing loss in the UK – a fifth of the population. Hearing loss ranks second in terms of prevalence of impairment and fifth for disease burden."* **Change to:** *"Hearing Loss is a major public health issue affecting over nine million people in England. Because age-related hearing loss is the single biggest cause of hearing loss, it is estimated that by 2035 there will be around 13 million people with hearing loss in England – a fifth of the population. Hearing loss is now one of the most common long-term conditions in older people and the sixth leading cause of years lived with*	

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				disability in England" (Reference: Section 4.1 page 12 in NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups) **Feedback** This NICE guideline covers health care in England[ii]. We raised the point about NICE using UK statistics and odd references to the burden of disease during the guideline scope consultation. NICE responded at the time: ▪ *"….will look into this data more thoroughly with the guideline committee during the development phase with a view to quoting more up to date figures in the final guideline document"* and ▪ *"These are widely quoted figures and at this stage of the guideline, we are only using them to highlight the impact of hearing loss. Should they be used in any of the evidence reviews during the guideline development process, these studies will be critically appraised and discussed by the guideline committee before including them in the guideline"*[iii] This has not been done. For example the reference NICE uses for its population statistics had very little detail and would not have allowed the data to be "critically appraised". Also the statement *"Hearing loss ranks second in terms of prevalence of impairment and fifth for disease burden"* is not referenced and not clear.	

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				We would ask NICE to use NHS England's data, which can be traced back and checked in the referenced documentation. This would also mean that the NICE guideline would be consistent with the data already used by NHS England and the POPPI dataset, and a forthcoming national Joint Strategic Needs Assessment Tool (co-produced by NHS England, Local Government Association, the Association of Directors of Public Health et al).	
National Community Hearing Association	Short	013	26	**Correct wording so that it is consistent with text in the Full version.** **Current text reads:** *"how to manage earwax in primary care and when to refer people for specialist"* **Change to** *"how to manage earwax in primary and community care and when to refer people for specialist"* **Feedback** This would make the text consistent with the Committee's recommendations (Full version).	**Thank you for highlighting this. We have corrected the wording as suggested.**
National Community Hearing Association	Short	015	27-19	These statistics may need to be reviewed because the primary sources that they are based on, studies by Lin et al., have been excluded in the Appendices (see our comments on subgroups, Full version).	**Thank you for your comment. Lin et al was excluded from the clinical evidence review in the subgroups chapter because it did not address our clinical question and did not provide the data the committee needed for decision making (see table 16 in section 7.2). However, this does not preclude the committee from using it as a reference for statistics quoted in other sections of the guideline.**
National Community	Short	03	General	**Section: *"1.1. Assessment and referral in primary***	**Thank you for your comment. The wording**

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Hearing Association				***care"* should be reordered. Feedback and recommendations below.** **Feedback:** 1. Current text suggests that only primary care (and in its narrowest sense i.e. GPs) will use the criteria listed in section 1.1. This is not the case. For example ▪ audiologists will also refer based on the criteria listed in 1.1.2-1.1.8. Audiologists might be based in primary, community or secondary care settings ▪ GPs, ENT and audiovestibular medicine should also use section 1.1.1 to ensure they refer back to audiology if they think their patients might benefit from a hearing assessment and hearing aids etc. ▪ the layout therefore needs to be reviewed (suggestions below). We also provide more extensive comments on the evidence used in the Full version separately (as requested). 2. The Committee also relied on existing referral guidance to derive these recommendations. Those referral guidelines covered adults with and without hearing loss. In contrast the NICE guideline covers adults with hearing loss and additional symptoms. This difference is at risk of being missed because of how the Short version has been laid out. For example ▪ not all cases of hyperacusis (line 23, page 4) warrant referral, but on reading the Short version this is not as clear as it could be ▪ one has to study the Full version in some detail to	**has been revised to make clear the recommendation does not just apply to primary care.** **The circumstances in which people with hyperacusis may be referred has been clarified.**

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				find the Committee is suggesting people with hearing loss **and** hyperacusis require further investigation to exclude the need for medical intervention (page 62 Full Version), and the incidence of such cases is likely to be very low whereas the incidence of hyperacusis is likely to be much higher ▪ therefore the existing layout in the Short version is likely to lead to over referral and a significant risk of up-coding patients as a result ▪ the layout therefore needs to be reviewed (suggestions below). We also provide more extensive comments on the evidence used in the Full version separately (as requested). 3. The way section 1.1 is laid out is confusing because it does not reflect how patients are likely to present and be referred on. For example ▪ asymmetric hearing loss is undefined (line 20, page 4) ▪ most people with hearing loss have a better ear (after all prevalence of hearing loss is measured using the better ear) ▪ if a GP were to read this Short version (as is most likely) they might end up referring subjective reports of asymmetric hearing loss to ENT in secondary care, or worse still the wording might be misused knowingly to direct patients inappropriately into "local complex audiology" pathways which is not supported by evidence ▪ moreover line 16 on page 4 states to "refer" (i.e. routinely according to page 11, lines 1-7), which shows there is unlikely to be a medical emergency in these scenarios ▪ in these cases it would make more sense, in a real-world setting, and be more consistent with	

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				the final guideline scope and economic model in Annex N, to refer all these patients to audiology, for audiology to measure the level of asymmetric hearing loss and only then refer clinically significant asymmetric hearing loss on to ENT or audiovestibular medicine ▪ the layout therefore needs to be reviewed (suggestions below). We also provide more extensive comments on the evidence used in the Full version separately (as requested). 4. There are multiple other issues that are caused by the way this section of the Short version is laid out. The layout needs to be reviewed (suggestions below). We also provide more extensive comments on the evidence used in the Full version separately (as requested). **Recommended changes:** ▪ **Change** "1.1. Assessment and referral in primary care", **to** "1.1. Assessment and referral". This will allow all health professionals to use the referral criteria and address some of the problems explained above. It will also be more consistent with key terms of reference in the final guideline scope. ▪ To aid dissemination and reduce the risk of confusion – particularly for busy GPs – please can the Committee consider rewriting lines 12 to 21 on page 3? The goal here is to ensure patients are either	

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				referred • immediately (within 24 hours, line 3 page 11) to ENT or A&E, or • urgently (within 2 weeks, line 5 page 11) to ENT or audiovestibular medicine. It would be helpful if this could be simplified in the Short version. For example it is unlikely many busy GPs will remember this level of detail, especially given how rare (5-20 per 100,000 people per year) this form of hearing loss is. The existing text is also confusing and unclear – e.g. in its current form the reader is required to switch between pages 3 and 11 of the Short form of the guideline and page 132 of the Full version to deduce that: ▪ sudden hearing loss is defined as a hearing loss that develops over a period of 3 days or less ▪ rapid hearing loss is defined as a hearing loss that develops over a period of 4 to 90 days ▪ only sudden hearing loss that has occurred within the last 30 days requires referral within 24 hours to ENT or an emergency department ▪ other forms of sudden and rapid hearing loss should be referred within 2 weeks to ENT or audiovestibular medicine ▪ sudden hearing loss here specifically refers to *"sudden sensorineural hearing loss (SSNHL)"* which is actually defined as *"as a loss of hearing of 30 dB HL or more, over at least 3 contiguous frequencies, that develops within 3 days"* – i.e. not solely based on a patient reporting sudden or rapid hearing loss ▪ given the time lines involved for "rapid hearing	

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				loss", it might be very difficult in many cases to diagnose a rapid hearing loss from history and symptoms alone and pure tone audiometry would form a key part of the diagnostic process. Therefore audiologists might justifiably have more detailed referral criteria than GPs in order to reduce the number of false positive referrals and false negatives etc. We therefore feel the text in the section **Section: "Sudden or rapid onset of hearing loss" (lines 11-21 page 3 Short version)** ▪ **Change to:** ***"Sudden or rapid onset of sudden sensorineural hearing loss*** *Hearing loss that cannot be explained by external or middle ear causes is likely to have a sensorineural cause. Refer all adults with a sudden or rapid onset of sensorineural hearing loss as follows:* • *If the hearing loss developed suddenly over a period of 72 hours or less and within the last 30 days, refer within 24 hours to ear, nose and throat an emergency department. If it has been more than 30 days refer within two weeks to ear, nose and throat or audiovestibular medicine service.* • *If the hearing loss developed over a period of 4 to 90 days then refer within two weeks to ear, nose and throat or*	

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				audiovestibular medicine service." • *Audiologists with access to diagnostic tests should note that a sudden sensorineural hearing loss (SSNHL) is defined as a loss of hearing of 30 dB HL or more, over at least 3 contiguous frequencies, that develops within 3 days. They should refer SSNHL meeting this definition based on the timelines noted above.* [**Please note:** it would also be helpful for the Committee to define the diagnostic definition of 'rapid' hearing loss in dB and frequencies in the final bullet point] ▪ Delete "local complex audiology" from line 18, page 4. (This has no meaning in evidence base NICE guidelines - see our comments on the Full version) ▪ Delete "hearing loss that is asymmetric" from line 20, page 4. For reasons given above, this is not well defined and is not helpful in terms of how people present for support and intervention. In the absence of the symptoms listed on lines 1-15 page 4, there is no reason why these patients should not go first to audiology. Audiologists should then be advised to refer clinically significant asymmetric hearing loss as they will have diagnostic test to measure this in the first instance (see below) ▪ Delete "hyperacusis (intolerance to everyday sounds)" from line 23 page 4	

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				This is in fact hyperacusis with hearing loss (Full version, page 62). In a real-world setting GPs are unlikely to be able to objectively measure hearing loss. GPs should therefore be referring this group of adults to audiology. Most people with reported hyperacusis would benefit from seeing an audiologist first. The audiologist should assess patients for hearing loss and, if there is no hearing loss, the Committee's recommendation for referral of hyperacusis would not stand – i.e. by definition it would fall outside the scope of this particular NICE guideline and audiologists in this instance should follow other clinical guidelines. The Committee has also not reviewed any evidence for hyperacusis without hearing loss and therefore should not inadvertently extend the scope of this guideline. If an audiologist measures hearing loss and notes hyperacusis the adult should be referred for the reasons noted on page Full version page 62) (see below). ▪ For the reasons given above, add another bullet point after line 10 on page 3 as follows. *"Audiologists should refer* • *unilateral or asymmetrical sensorineural hearing loss, defined as a difference between the left and right bone conduction thresholds of 20 dB or greater at two or more of the following frequencies: 500, 1000, 2000 or 4000 Hz, to ear nose and throat or*	

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				audiovestibular medicine • *adults with hyperacusis and hearing loss to ear nose and throat or audiovestibular medicine."*	
National Community Hearing Association	Short	05	General	We have more detailed comments on wax removal (see our comments on the Full version below). If the Committee does change its view on a statement made in the Final version, then a section on self-management of earwax might need to be added to the Short version too.	**Thank you for your comment.**
National Community Hearing Association	Short	06	17-19	**Reorder this section on wax management. Feedback and recommendation below.** Although we have more detailed comments on wax removal (see our comments on the Full version below), here we would like to raise an issue with the layout of "Section 1.2. Removing earwax in primary and community care" in the Short version. The existing draft could be misread as community nurses or audiologists not being able to perform all the stated procedures. This is because the clarification ▪ *"the practitioner (such as a community nurse or audiologist) has training and expertise in using these methods to remove earwax and the correct equipment is available"* does not appear until later in the section. We appreciate this is not what the Committee meant. This is why it is important to clarify at the start of this section that the vast majority of impacted wax can be managed in primary and community care settings, and does not need to be referred to secondary care	**Thank you for your comment. We have clarified that earwax can be removed in primary or community ear care services, and have also changed the layout of the recommendations as suggested.**

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				(i.e. repeating the recommendations in Full version). Then to **make clear at <u>the start</u> of this section** that any of the listed procedures can be performed by ▪ *"practitioners (such as GPs, community nurses or audiologists) who have training and expertise in using these methods to remove earwax and the correct equipment to do so".* This would then allow the entire section to be read as 'all of these procedures can be provided in primary and community care, provided staff are trained and the correct equipment is available', which we believe on reading the Appendices and Full version of the guideline is what the Committee actually means.	
National Community Hearing Association	Short	07	1-4	**Current text reads:** *"Consider MRI of the internal auditory meati for adults with sensorineural hearing loss and no localising signs if there is an asymmetry of 20 dB or more at any single frequency between 0.5 kHz and 4.0 kHz on pure tone audiometry"* **Feedback** We have more detailed comments on this text (see our comments on the Full version below). If the Committee does change its view, this section will also need to be updated.	**Thank you for your comment. The committee has reappraised the evidence in the light of comments and has decided to recommend a difference of 15dB at 2 adjacent frequencies (0.5, 1, 2, 4, 8 kHz) to reflect current practice in ENT clinics.**
National Community Hearing Association	Short	07	22	**Text needs to be clarified. Feedback and recommendation provided.** **Current text reads:** "*Tympanometry" (*Short version page 7, line 22. Full version page 14, line 18m and page 97 Full version) *"Basic assessment for hearing loss includes, as a minimum, a history, examination of the ears, pure*	**Thank you for your comment. The wordingof the recommendation has been amended to specify where indicated.**

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				tone audiometry and tympanometry" (Full version, page 18, line 17-18) **Change to:** *"Tympanometry where clinically indicated" (*Short version page 7, line 22. Full version page 14, line 18m and page 97 Full version) *"Basic assessment for hearing loss includes, as a minimum, a history, examination of the ears and pure tone audiometry, and tympanometry where clinically indicated"* (Full version, page 18, line 17-18) **Feedback** In the Short version the layout is misleading. For example, it suggests every single adult will have tympanometry performed regardless of case presentation. However the Committee did not find evidence to support this (Full version and Appendices). Furthermore, the guideline the Committee relied on heavily to inform its referral criteria also does not recommend the use of tympanometry on all adults, e.g. it states *"Tympanometry (performed if there is any indication of middle ear effusion)"*[iv]. The choice of wording and presentation is therefore wholly reliant on Committee opinion rather than evidence. This has potential unjustifiable resource implications – e.g. whereas this equipment might at present be shared by several audiologists a requirement to perform this test all patients might require new equipment to be purchased and in addition servicing and equipment cost are also likely to increase due to increased use. We would therefore	

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				ask the Committee to change the text in the Short and Full version – an alternative form of words is suggested above.	
National Community Hearing Association	Short	09	11-12	**Current text reads:** *"Offer adults with hearing aids a face-to-face audiology appointment 6 to 12 weeks after the hearing aids are fitted."* **Feedback** We believe this will need to be changed. We offer more feedback on this point (see comments on Full version).	**Thank you for your comment. The current timing for review is 6 to 12 weeks which the committee believes allows time for acclimatisation and reflects current practice. We had no evidence to persuade the committee that this timing was wrong.**
National Community Hearing Association	Short	1	7	**Corrections required.** **Current text reads:** ***"This guideline covers** assessing and managing hearing loss in primary and secondary care. It offers guidance for primary care on removing earwax, and when to refer to secondary care or audiology services. It also provides recommendations for secondary care on using MRI and treating sudden sensorineural hearing loss. For audiology services, the guideline offers advice on providing hearing aids and assistive listening devices, and giving information and support to people with hearing loss.."* **Change to:** ***"This guideline covers** assessing and managing hearing loss in primary, community and secondary care. It offers guidance for primary and community care on removing earwax. It explains when to refer to	**Thank you for your comment. The wording of the document has been adjusted to address these concerns. The issue was around a desire to have clearly defined sectors rather than the more fluid approach to provision of services in audiology that the committee recognises.** **The committee has reviewed and revised the layout of the guideline to reflect that services are delivered in different settings. The committee agrees skills and competence of staff delivering care are more important than location.** **The recommendations have been amended to reflect this.**

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				audiology services and when to refer to the ear nose and throat or audiovestibular medicine service. It also provides recommendations on using MRI and treating sudden sensorineural hearing loss. For audiology services, the guideline offers advice on providing hearing aids and assistive listening devices, and giving information and support to people with hearing loss." **Current text reads:** *"1.3 Assessment and management in secondary care"* (Short version, line 25 page 6) **Change to** *"1.3 When to refer for MRI and how treat idiopathic sudden sensorineural hearing loss in adults"* **Explanation:** Current text is not consistent with the agreed terms of reference in the final guideline scope or other parts of the guideline and this needs to be corrected. For example: ▪ Current wording excludes many, and some of the largest, providers of NHS adult hearing care in England who operate in community-based settings. To many key stakeholders, including NHS Commissioners and the Committee[v], primary care refers to the four contractor professions and secondary care typically refers hospitals. This point was accepted during NICE's consultation on the guideline scope[vi]. This is why NICE agreed to change its terms of reference to	

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				include: • *"Settings that will be covered. All settings where NHS care is commissioned or provided" (page 6 Appendix A: Scope).* • *"Assessment in community or secondary care, including medical assessment" (page 11 Appendix A: Scope)* • *"Management in community or secondary care: hearing aids, management strategies, information and support" (page 11 Appendix A: Scope)* • *"Providers now include high street chains as well as local audiology departments. The guideline will be relevant to all providers of adult services in England" (page 14 Appendix A: Scope)* Unfortunately the guideline in its current form fails to do this. Therefore current text needs to be updated to include community providers. ▪ The Full version refers to managing earwax in primary and community care settings. Therefore the key terms of reference at the start of the Short version should also reflect this. ▪ Audiology is provided in community and secondary care settings and therefore existing wording should be updated to reflect this. ▪ Current text assumes that all MRI scans will be arranged by professionals working in secondary care settings, when in fact ENT and audiology services based in community based settings can refer for an MRI based on recommendations in	

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				this guideline. Current text also assumes that sudden sensorineural hearing loss is always treated in secondary care, when again community based ENT might initiate treatment. It is important to also note that there was limited good quality evidence to support recommendations on MRI and treatment of sudden hearing loss, and even more sparse evidence to support a particular clinical setting. We have therefore suggested the changes above so that guidance is presented in a more balanced and appropriate way. We appreciate that this and other text in the guideline might simply be based on Committee experience – e.g. including settings they have worked in. However, this should not overly influence the clinical settings in which patients can be seen in the post Five Year Forward View world. Please also note that new models of NHS care are emerging all the time and the NHS in England has a clear mandate to reduce dependency on hospital (secondary care) capacity and pressures on GPs (in primary care).	
National Community Hearing Association	Short	10	2-3	**Consider adding text. Feedback and a suggestion provided.** **Current text reads:** *"For adults with hearing loss in both ears who chose a single hearing aid, consider a second hearing aid at the follow-up appointment."* **Change to** ▪ *"For adults with hearing loss in both ears who chose a single hearing aid, consider a second*	**Thank you for your comment. We are unable to comment on contractual agreements.**

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				hearing aid at the follow-up appointment. However if a further aid is fitted, this should be performed under the original pathway fee and the patient should not be coded as being fitted under two unilateral pathways." **Feedback:** We agree with the recommendation. However NHS Commissioners have reported concerns that this offers providers an incentive to claim two unilateral fitting pathways for each patient who is provided with two hearing aids. Although it is not NICE's role to write commissioning guidance, wording like this can create odd and unhelpful workarounds at a net cost to the NHS and taxpayer; costs which are ultimately borne by patients in foregone NHS care. We would therefore suggest that that the Committee change the text as described above. This would make any over-use of scarce NHS resources explicit and, like other areas of up-coding as described in other sections, make it difficult for any provider – regardless of organisational form – to justify such behaviour.	
National Community Hearing Association	Short	10	12-28	**Inconsistent wording used. Correction required.** The Full and Short versions of the guideline use different terminology for this section. ▪ The Full version uses *"information and advice"* (page 15 and page 170) ▪ The Short version uses *"information and support"* (page 10) ▪ These have different meanings. Using consistent	**Thank you for your comment. We have corrected this so the same terms are used across documents.**

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				terms, and ideally those linked to the review questions and protocol, would be helpful. Please correct.	
National Community Hearing Association	Short	11	22-26	**Concerns about acceptance and dissemination of the guideline in its current form.** **Current text reads:** *"Changes recommended for clinical practice that can be done quickly – like changes in prescribing practice – should be shared quickly. This is because healthcare professionals should use guidelines to guide their work – as is required by professional regulating bodies such as the General Medical and Nursing and Midwifery Councils." (Ref. Short, page 11. Lines 22-26)* **Concerns – feedback** We would normally agree and would fully support the implementation of NICE guidelines for this very reason. Unfortunately, **1. Referral criteria** In its current form no audiologist registered with a statutory regulator (e.g. the Health and Care Professions Council) would have to use significant parts of Recommendation 6 or 13 to guide his or her decisions when making referrals. This is because the overriding duty of any regulated health professional is to put the patient first and	**Thank you for your comment.** **For earwax the committee investigated a question on the best location of services as it was aware of divergent practice giving rise to unnecessary costs and judged that this was a priority research question for this guideline. The committee did not prioritise location of services for any of the other research questions within this guideline. There is a limit to the number of questions that could be investigated, and the committee judged that other questions had a higher priority. The committee is aware that audiology services are provided in different ways across the country, but believe that local commissioners and providers can determine appropriate local pathways and service configurations to deliver services most effectively and efficiently.** **Consequently, the committee has made no recommendations regarding where audiology services other than earwax removal should be provided. The committee supports the availability of audiology provision within the community and has made no recommendations that would limit the use of community services if they are available locally. The committee has recommended referral to ENT or an emergency department only for those symptoms that require urgent or specialist input.**

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				follow evidence based practice. At this stage certain sections of the NICE referral criteria fall short on both of counts. The referral guidance which the Committee has produced so far is based on selective use of the grey literature. As such it is highly likely to drive false positive referrals to secondary care, increase the risks of up-coding and inappropriate use of scarce NHS resources, and is also at risk of being biased toward a medical model of care and the settings in which Committee members work or have worked. **These issues about referral criteria (which we provided feedback on in other sections of our response) clearly need to be addressed before publication.** **2. Selective and potentially biased approaches** We very much support the Committee's decision to make a strong case for not referring people to secondary care settings for wax management. We agree that this is not the best use of ENT resources and there are significant savings to be made by managing this in primary and community based settings. We also agree this alternative approach has significant benefits for patients. The Committee rightly reaches these conclusions on the basis on sound judgement – i.e. not evidence on clinical settings (Section 10, Full version).	**Changes have been made to the guideline to ensure that this is clearer.**

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				If the Committee applied this approach consistently to its recommendations, it would also have found that ▪ about 350,000 ENT appointments are coded each year for "clearance of the auditory canal" in adults[vii]. Given the Committee knew about 2.3 million people in the UK have problems with earwax each year sufficient to need intervention (Short version, page 15, lines 13-14), this suggests most people are already managed outside secondary care (even after adjusted UK statistics to reflect England) ▪ about 2 million patient contacts per year are reported by NHS hospitals in England for adult hearing services which can be delivered out of hospital, but much less progress has been made here[viii] ▪ by not using the grey literature selectively, a 2015 report by an independent NHS regulator – a report that was submitted during the NICE guideline development phase and which both the Action Plan on Hearing Loss[ix] and NHS England framework[x] that the Committee uses refers to – showed that there are significant advantages to delivering more adult hearing care in community based settings[xi]. The Committee appears therefore to have ▪ overlooked the same and more robust arguments for NHS hospitals in England not to use scarce capacity to provide non-medical adult hearing services – e.g. 1.1 million aftercare visits per year[xii] ▪ made no mention of the need for greater capacity to meet the ageing population's hearing needs and how existing secondary care capacity cannot	

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				meet this demand alone – especially not given the Committee's recommendations to raise awareness of and refer more adults sooner to NHS audiology ▪ missed the evidence on key savings and quality improvements associated with the introduction of community based capacity for adult hearing services[xiii,xiv]. That the widely reported benefits of offering adult hearing care closer to home and in community based settings has been overlooked and the management of earwax in these settings picked instead, makes this guideline, in its current form, biased and distorted. To provide some context charities since 1988, the Department of Health since 2007 and NHS England have supported the need for more adult hearing care to be delivered out of secondary care and in primary and community based settings. Although we understand this is a guideline for England, in addition to changes in England, Wales and Scottish Governments have also committed to deliver adult hearing services in primary and community based settings. This NICE Committee is the first *not* to make this recommendation, despite there been a stronger case for this today than ever before. It is therefore difficult to understand why the Committee appears to have avoided this topic but focussed on wax management. **We would ask that the Committee reviews and compares the evidence and rationale for recommending earwax management to be delivered in primary and community care**	

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				settings, yet not making similar recommendation for adult hearing services.	
National Community Hearing Association	Short	General	General	We have significant concerns about the way in which referral criteria have been derived, described and written up in both the Short and Full version of the guideline. The NICE format (and checklist) makes providing feedback on large sections of text difficult. We therefore include our main feedback on referral recommendations in the Full version later in our response (see feedback below).	**Thank you for your comment.**
National Community Hearing Association	General	General	General	We have reviewed all documents related to the *Hearing loss in adults: assessment and management* draft guideline. We acknowledge that ▪ the Committee was confronted with significant challenges – e.g. certain recommendations are based on Committee consensus due to no or very low quality evidence. Our response therefore takes the following in to account • *"… one of the issues the guideline committee has encountered when preparing this guideline is that the quality of evidence on which to base recommendations is not high" (Full version, page 19, lines 34-36).* ▪ recommendations based on evidence that is graded as low to very low quality or in which there is a low to very low level of confidence, are subject to a greater degree of uncertainty[xv]. Unfortunately, despite this, we still have significant concerns about certain recommendations that were decided by Committee consensus. In our view, in its current form	**Thank you for your comment.** **The committee does not believe any evidence has been supplied that our recommendations are systematically biased in any direction. Regarding committee members interests, these have all been declared in accordance with NICE's declarations of interests policy. The recommendations, the evidence on which they were based, and the committee's declarations of interests have all been published and subject to stakeholder consultation to invite others to determine any ways in which the recommendations may be improved.** **We regret that subheadings were introduced into the short version of the guideline which, by not including the word "community" may have given the impression that some recommendations were focussed more on primary or secondary care than on community care. These subheadings were not consistent with the content of the recommendations themselves, which in general did not specify where or how services should be provided. The**

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				▪ we only have minor points on sections that are based on evidence of moderate to high quality which we support – e.g. provision of hearing aids ▪ we have significant concerns about sections that are based on less robust evidence and we make recommendations to address these concerns – e.g. we suggest how to address biases that risk increasing NHS cost without demonstrable benefits. Therefore, although there is much that is good with this draft guideline, our feedback naturally focusses on sections that we have concerns with. Our feedback is also more substantive and detailed than we would normally expect to have to submit at this stage of guideline development. This is necessary for many reasons including but not limited to our views that: ▪ the grey literature[xvi] has been collected and used selectively and that this has had an adverse impact on certain recommendations which, if left unaddressed, could have significant and unnecessary resource implications for the NHS ▪ the Committee has taken an inconsistent approach on several topics – e.g. it makes firm recommendations on clinical settings based on no or limited evidence for wax management and yet inexplicably overlooks the fact that many of its arguments about NHS resources and unnecessary referrals to secondary care also hold true for adult hearing care ▪ use of language needs to be addressed in order to avoid the final guideline being biased – e.g. the guideline risks misleading readers into	**subheadings have been corrected in the final version.**

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				believing that most adult hearing care has to be provided in hospital (secondary care) settings. We are concerned that many of the issues raised might have arisen from bias in the process. Throughout, we rely on NICE's definition of bias: ▪ ***"Bias can occur by chance, deliberately or as a result of systematic errors in*** *the* ***design*** *and execution of a study****. It can also occur at different stages*** *in the research process,* ***for example, during the collection, analysis, interpretation****, publication* ***or review of research data****. For examples see selection bias, performance bias, information bias, confounding factor, and publication bias." (our emphasis) (Ref. Full version, p. 269)*. We do not make any claims about the causes of the potential bias but focus instead on addressing the issues we feel are key. We do however make some recommendations on managing conflicts of interest in the final phase of guideline development in order to minimise the risk of the final guideline being open to challenge which we feel would be detrimental to the NHS which needs clear, evidence-based guidelines. Overall our goal below is to ensure that the final guideline serves the best interests of patients, the NHS and taxpayer; and not any single group of professionals or providers whatever their organisation form or own value judgements. We would be happy to discuss any of our feedback in	

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				more detail with the Committee, the National Guideline Centre or NICE.	
National Community Hearing Association	General	General	General	We fully support conclusions drawn from the economic model in Annex N and O. We also believe the cost effectiveness analysis in Annex N is robust when subjected to sensitivity analysis. However we have some concerns about certain aspects of the economic modelling and assumptions, some of which are also linked to the referral criteria. We therefore include this feedback after our main feedback on the Full version of the referral guidance (see below).	**Thank you for your comment. Your further comments on the economic modelling are replied to below.**
National Community Hearing Association	Full	012	1	**If possible – given this is the Full version – please consider changing and reordering this section.** We understand that the number order of the recommendations is based on the order in which they are made in the Full version of the guideline. This however makes the summary confusing and difficult to read – e.g. referral guidance (routine and urgent referral and referral to audiology) is separated by text on when to do an MRI and about subgroups. The order in the Short version of the guideline is more logical (however that too needs some revision, as per our comments above). So although we appreciate that NICE might have a rigid format when writing up the Full version, we think the order of recommendations is both confusing and unhelpful. We suggest the following two changes to reduce the risk of confusion. **Current text reads:** ***"Urgent and routine referral*" (page 12, line 1)** **Change to** ***"Routine, immediate and urgent referral".***	**Thank you for your comment. The version of the recommendations that will be published on the NICE website is the Short version. However, we've amended the heading of the recommendations on immediate, urgent and routine referral in the Full version for consistency.**

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				This will reflect the terminology used in the guideline (e.g. see Short Version page 11, lines 1-7) and allow the recommendations to be presented in a logical way. **Reorder text** Recommendation 13 should, in our view, be the first bullet point on page 12. Not the last bullet point on page 13. This would ensure all referral guidance was in the same place and presented in a logical order. At present it is easy to lose the fact that the vast majority of adults will actually be referred based on text buried at the bottom of page 13.	
National Community Hearing Association	Full	012-13	1-24 and 36-43	**This section highlights key concerns that we have about the referral criteria. It explains why we are concerned and makes recommendations to address these concerns. See below.** **<u>Important context and background</u>** Our concerns about the referral criteria are interlinked and it is therefore not possible to separate this feedback (i.e. because of common structural issues we provide this feedback in one place, as agreed by email with the guideline developer. Instead of including page and line numbers in the columns on the left we include them next to applicable text below). **This section therefore highlights our feedback on all the Recommendations linked to referral criteria in the Full Version:** ▪ **We have concerns about the following**	**Thank you for your comment and suggested changes.** **The ugent and routine referral recommendations have been revised by the committee in light of comments received.** **The wording "complex audiology pathway" has beenadjusted to 'specialist audiology service for diagnostic investigation, using a local pathway'. .** **The committee considers the inclusion of hearing loss that is asymmetric and hyperacusisis appropriate but has weakend the recommendation to "consider referral" in these cases.** **Whilst the committee expects clinicians to use their clinical judgment in determining the**

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				Recommendations: 6 and 13 (this section) ▪ **We think that the following Recommendations could be made clearer/improved: 1 and 7 (these are addressed in our feedback on the Short version and elsewhere in our response)** ▪ **We have no major comments on Recommendations, 2, 3, 4 and 5.** We have provided feedback separately on layout of referral criteria elsewhere in our feedback. This section therefore discusses the evidence base and process, and why changes are required. **<u>Process and potential sources of bias</u>** There are biases in the draft NICE guideline and these need to be addressed – as noted above we rely on the NICE definition of bias ▪ ***"Bias can occur by chance, deliberately or as a result of systematic errors in the design and execution*** *of a study. It* ***can also occur at different stages in the research process, for example, during the collection, analysis, interpretation****, publication or review of research data. For examples see selection bias, performance bias, information bias, confounding factor, and publication bias." (our emphasis) (Ref. Full version, p. 269)*. For example, during the guideline scope consultation we advised NICE that there was a risk that literature searches might be framed and designed with a "medical pathway bias". We explained this was problematic because this did not reflect how the vast majority of patients accessed	**significance of minor asymmetry between the ears, the committee was conscious that GPs would not have access to tools to determine the degree of asymmetry, so it would not be possible to use a quantified criterion in that case. The recommendation asks clinicians to consider referral to a range of alternative services that may be able to assess the patient further. The recommendation does not state where those services should be located, and this may include community services.** **The committee believes that the recommendation is clear that people with hearing loss and hyperacusis should be considered for referral. The definition of hyperacusis has been clarified.** **The research papers you have highlighted in the last bullet point were considered but were excluded because they were about 'direct referral from a GP' but were not specific about the signs and symptoms on the basis of which the referral was made. In our review, we were searching for papers that specifiy a set of criteria or signs and symptoms so that we could consider them when making a recommendation.**

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				adult hearing care in England – e.g. millions of adults with hearing difficulties can be managed by (non-medical) audiology and as such it was important that the literature searches factored this in. NICE reassured us this was not an issue. We were also reassured by the following text in the final guideline scope because it suggested NICE had taken stakeholder feedback seriously ▪ **"*Which causes of hearing difficulty can be identified and treated by audiology services*" (page 7 Appendix A: Scope)** Unfortunately in the end key review questions and search protocols appear to have been framed with a "medical pathway bias". This, based on our analysis of the Full version and Appendices, contributed to ▪ key research papers being excluded. For examples see pages 429 and 430 of the Appendices. This shows Abdelkader 2004, Koay 1996 and Swan 1994 have been excluded on the basis they referred to direct referral by the GP to audiology. This might also have contributed to other papers on the topic not being detected[xvii]. Briefly here, the papers in question contributed to the NHS adopting similar referral criteria used by private sector audiology and the national role out of Direct Access Audiology (DAA). In effect the guideline reports a lack of evidence on referral criteria because research on DAA referral criteria was excluded, but then the Committee relies on one guideline on DAA from the grey literature to inform its recommendations. This makes little	

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				sense ▪ this process appears to have then contributed to the Committee noting there was a lack of evidence and then, most unfortunately, selectively using a referral guideline from a single entity. Which now means the draft guideline has • inappropriately introduced the term "a local complex audiology pathway" (page 12 and 60 Full version, page 4 short version). In its current form this has no place in evidence based NICE guidelines. In this context, this terminology originates from guidance created in response to lower NHS tariffs and reforms post 2012 – i.e. this term in its current usage is not rooted in the domain of evidence based health care. It is also a rather controversial and often misused term. As such it should be removed and we provide feedback to that effect elsewhere in our submission • incorrectly, imprecisely and inappropriately refers to "hearing loss that is asymmetric" (page 12 and 60 Full version, page 4 short version). It cannot be that all people with asymmetric hearing loss need to be referred to "complex audiology" or a medically led service – e.g. if that was the case the entire economic model in Annex N would have to be rewritten and ENT and "complex audiology" would see many more referrals and the NHS would find it was spending more for no demonstrable marginal gain	

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				• imprecisely refers to hyperacusis, we also suggest how to address this issue below and elsewhere in our response So although we agree with the Committee that ▪ *"The main referral pathway for an adult with hearing loss is direct from their GP to audiology services. Primary management involves provision of hearing aids though the NHS by audiology services. For those who do not meet these criteria and require medical input referral is direct to ENT or audiovestibular medicine services"* We think this was lost during guideline development and as a result certain biases have emerged. We address these issues in more detail below. **<u>Recommendation 6 and 13</u>** We support the Committee's original aim to focus its attention on ▪ *"symptoms and signs that that should alert a GP or audiologist to the need for a medical assessment by an ENT surgeon or an audiovestibular physician, without wishing to limit discretion in other cases" (Full version, page 19, lines 24-27)* We understand the Committee aimed to: ▪ *"When clinical and health economic evidence was of poor quality, conflicting or absent, the committee drafted recommendations based on expert opinion. The considerations for making consensus-based recommendations include the balance between potential harms and benefits, the economic costs compared to the economic*	

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				benefits, current practices, recommendations made in other relevant guidelines, patient preferences and equality issues" (Lines 1-5 page 52 full) We also support the following text that are linked to referral Recommendations ▪ *"The review questions in this chapter have been investigated with the aim of helping primary healthcare professionals and audiologists decide which symptoms and signs would indicate the need for more specialist medical assessment and with what degree of urgency"* and ▪ *"To identify who needs to go to secondary or specialist medical care in addition to (non-medical) audiology, that is they need audiological assessment but also medical care" (Objectives, stated under 'C 1.2. Routine referral p.39 Appendices).* ▪ *"In this guideline we consider 'diagnosis to refer to the medical diagnosis of the underlying cause, or aetiology, of the condition" (Full version, page 19, lines 16-17).* ▪ *"variation in assessment and management pathways for hearing loss can have a major impact, adversely affecting individual's outcomes and prognoses, and contributing to the overall financial and psychological burden of hearing loss. Identifying the correct routes of referral and optimal management pathways for people with haring loss is therefore very important" (Full version, page 19, lines 29-32)* However this is not what the Committee has achieved in Recommendations 6 and 13.	

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				Feedback on Recommendation 6 ▪ **Remove "a local complex audiology pathway".** The Committee introduces the term "a local complex audiology pathway". There is no evidence to support this. Prior to choice and competition reforms in 2012 to the best of our knowledge only one teaching hospital in England had a documented and formally commissioned "complex audiology pathway". This large hospital trust's "complex audiology" service only had between 2 and 13 referrals a month[xviii]. Following the introduction of choice and competition reforms in the English NHS audiology service, there were concerns that reimbursement might no longer cover the cost of providing adult hearing care for all patients. This prompted the British Academy of Audiologists (BAA) to request its Service and Quality Committee to develop guidance to address what was, an economic issue. That guideline clearly states it is not evidence-based and is written to facilitate discussions with NHS Commissioners[xix]. The term "complex audiology pathway" in an English NHS setting is therefore not something we expect to be included in NICE guidance on referral; and especially not in the way it has been noted in the draft guideline.	

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				In its existing form it this is also likely to legitimise up-coding of patients with non-clinically significant asymmetric hearing loss and hyperacusis. There is no evidence base to support this (see below). This will increase costs for the NHS and not provide demonstrable benefits for patients overall. We would be happy to submit examples of regions that inappropriately refer to adults with hearing loss as being on "complex pathways" in confidence. However as we understand it, that is a procurement, competition issue and NHS Standard Contract issue, and not an issue for NICE. On balance then we ask NICE to remove the term "a local complex audiology pathway". If local ENT or audiovestibular medicine leads wish to refer patients with suspect medical conditions to audiology, or want audiology to refine referrals, this should be organised locally and providers and Commissioners should adhere to NHS England's commissioning framework – e.g. this will ensure services are compliant with NHS regulations and the NHS Standard Contract[xx] (i.e. "a local complex audiology pathway" is not something NICE guidelines should include). ▪ **Move both** ○ **"hearing loss that is asymmetric"** (line 34, page 12 Full version), and ○ **"hyperacusis** (intolerance to everyday sounds)" (line 37, page 12 Full version) **to recommendation 13 (as described below**).	

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				Hearing loss that is asymmetric Most adults with hearing loss will have a level of asymmetry – e.g. the prevalence of hearing loss itself is given in terms of better ear average. The text in its current form is therefore likely to lead to up-coding and over referral to secondary care. The Committee has failed to define clinically significant asymmetric hearing loss. To some extent this is understandable because the vast majority of GPs have no way of measuring clinically significant asymmetric hearing loss. However, in the absence of other signs and symptoms (cited in recommendations 1-6) otherwise well adults with hearing difficulties can all be referred to audiology. Audiology is then ideally placed to measure hearing loss and refer any clinically significant asymmetric hearing loss on to ENT or audiovestibular medicine. In addition to the above, as the text currently stands (both complex audiology and hearing loss that is asymmetric), NICE will have to redo the economic model in Annex N. Changing the text as suggested here will leave the economic model (which better reflects reality) unchanged. We have provided feedback to that effect to the NICE health economist (see below). *Hyperacusis (intolerance to everyday sounds)* We understand that the Committee is actually	

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				referring to adults with hearing loss **and** hyperacusis (page 62, full version). This detail however is easily lost and there is a risk that this will generate false positive referrals to secondary care. For example GPs are unlikely to have the equipment to measure whether there is a clinically significant hearing loss and the current definition of hyperacusis is far too simplistic (we suggest an alternative in our comments on the glossary). Therefore GPs might read the NICE guideline and over refer adults with hyperacusis to secondary care. In addition to this, in not clearly defining hyperacusis, it is possible that providers can use mild sensitivity to sounds to suggest adults with hearing loss should be on "complex pathways". These pathways often have no service specification and cost the NHS more than the so called 'routine' adult hearing pathway – i.e. leaving both patient and NHS worse off as a result. We would be happy to submit more detail if that would be helpful. Given that not all cases of hyperacusis warrant referral and those that do can, by definition of the guideline, be referred routinely, we think all adults with hearing difficulties and hyperacusis should be referred to an audiologist for a hearing assessment (we provide more detail on this elsewhere in our submission). Also if an adult does not have a hearing loss but	

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				has hyperacusis they are not covered by this NICE guideline. In that case audiologists will manage or refer hyperacusis in accordance with their scope of practice their registered status and other guidelines. If a person has hearing loss and hyperacusis the audiologist can refer to exclude causes that require treatment, such as dehiscent superior semi-circle canal which may require surgery (page 62 Full version). We therefore strongly advise against the use of hyperacusis in Recommendation 6 and think it should be moved to Recommendation 13. We also recommend a more robust definition (see comments on the glossary above). **Recommendation 13** We ask NICE to add clarity to Recommendation 13. This will help ensure GPs refer patients to audiology and audiologists can reduce the number of false positive (and false negative) referrals to ENT and audiovestibular medicine. This will also address the changes made to Recommendation 6 above. These patients do not need to go to a "complex audiology pathway", and the NHS does not need to pay more for these patients to be seen and then potentially fitted with hearing aids simply due to the way in which NICE guidelines have been drafted. **Therefore add the following to Recommendation 13** (addressing issues with Recommendation 6 while maintaining patient safety)	

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				"Audiologists should refer ***Unilateral or asymmetrical sensorineural hearing loss, defined as a difference between the left and right bone conduction thresholds of 20 dB or greater at two or more of the following frequencies: 500, 1000, 2000 or 4000 Hz, to ear nose and throat or audiovestibular medicine.*** ***Adults with hyperacusis and hearing loss to ear nose and throat or audiovestibular medicine."*** Please note we use the definition of asymmetric hearing loss that has been used in NHS England's commissioning framework, page 69, and that is used across the NHS in England.	
National Community Hearing Association	Full	013	25-35	**NICE should challenge any attempt to add inappropriate text to this section during its consultation. Feedback below.** Despite our feedback about the excluded studies by Lin et al. (comment 31), we broadly welcome recommendations 10, 11 and 12. However it is important to minimise the risk of the Committee being misled – during the consultation process – to introduce the term "complex audiology pathways" here. In the recent past we have experienced attempts to reclassify all these (and other groups) of adults as "complex audiology patients".	**Thank you for your comment.** **The committee understands the ambiguity and has adjusted the wording 'complex audiology pathway' to 'specialist audiology service for diagnostic investigation, using a local pathway'. This wording is in line with other professional bodies and this is noted in the committee discussion.**

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				If the Committee was misled to also add the term "complex audiology" here, then in a real-world setting (procurement, commissioning, pathways, access, choice etc.) this would mean adults with learning disabilities and/or dementia would automatically have less choice about where they access their care, based solely on their dementia or learning disability – i.e. not their individual abilities, preferences or needs. **To overcome legal challenges, especially those linked to the Equality Act 2010, this situation must be avoided; complex audiology must not be added to this section.** If the Committee is lobbied to introduce the term "complex audiology" in to recommendations 10, 11 and 12, then it should request evidence to support this and be mindful of potential conflicts of interest that might be influencing such recommendations. The Committee might also be reassured to know that this was discussed in detail during co-production of NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups. It was decided people should not automatically be excluded from patient choice or face other unfair restrictions based solely on assumptions (see page 68 of NHS England's commissioning framework).	
National Community Hearing Association	Full	016	1-10	**Misunderstanding the concept of cost effectiveness needs to be reviewed. If there is a bias then this also needs to be addressed.** Section: "Assistive listening devices" (ALDs).	**This NICE guideline is written from the perspective of the NHS and personal social services – that is to say, those aspects of social services that are funded by the NHS. The NHS does not pay for ALDs. Therefore in section 14.2.4 we were assessing the cost**

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				The text on page 16 (Full version, and page 10 Short version) appears to be impartial at first glance - e.g. it does not appear to show a bias towards traditional NHS providers, charities or the private sector. Which is welcomed and what we would expect to see in NICE guidelines. However, these recommendations are based on Section 14 of the Full version of the guideline and we would like to understand what the Committee actually means in order to better understand its reasoning and to rule out any bias. On page 194 it states: ▪ *"The committee cannot comment on the value that users would receive from such purchases [i.e. purchasing ALDs privately] due to the lack of clinical and economic evidence for this review",* yet then adds ▪ *"The committee is hence content that the recommendations made in this review to advise people with hearing loss regarding ALDs will be cost effective compared to not giving such advice."* This appears to be a mistake. For example cost effectiveness is based on cost and clinical evidence – i.e. cost per unit of benefit (effect). Therefore if the Committee finds there is a lack of evidence and it cannot bring itself to make any comment on people paying for ALDs, it is not clear how it can infer ALDs are cost-effective for the taxpayer. The NHS does not provide ALDs and often people living in England will be confronted with the choice of either paying for ALDs or acquiring them from social	**effectiveness of the NHS giving information to people about ALDs, not the cost effectiveness of providing ALDs. It is for other bodies or individuals to decide if ALDs are cost effective and affordable, which is hence outside of the remit of NICE guidance. The committee is not advocating the use of ALDs, or encouraging other bodies or individuals to pay for them; it is highlighting the existence of these devices and encouraging people to look into them further and discuss options with the other bodies responsible.**

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				services, the fire service, or the government Access to Work Scheme (or a mixture). We fully support the Committee in raising awareness of schemes that aim to promote equitable access to ALDs and other support for people that have sensory impairment. We are however concerned that the Committee might also be projecting value judgements on to what are supposed to be evidence based guidelines. Can the Committee explain why there is a lack of clinical and economic evidence in this review for one model of delivery and not another? If the Committee has inadvertently made a biased recommendation we would ask it to address this.	
National Community Hearing Association	Full Short	016 8	12-31 10-28	**Support these recommendations but ask the Committee to consider making text clearer.** We strongly support the recommendations on "Hearing aids" and "Hearing aid and microphones and noise reduction algorithms" (Full version) and "Hearing aids" (Short Version). We provide feedback on the economic model in Annex N and O separately. We agree that adults should be offered hearing aids based on their ability to communicate, not solely on the threshold of hearing loss detected by pure tone audiometry. We also agree that adults should be offered two hearing aids if they have hearing loss in both ears, that everybody fitted with hearing aids should be taught how to use and care for them and how to get maximum benefit from them. We would also like to thank the Committee for acknowledging that the NHS offers technology with both directional and omnidirectional microphones and noise reduction features and, albeit indirectly and less confidently, that these features are often	**Thank you for your comment. We have covered discussion of onward referral for those with severe to profound hearing loss within the audiological assessment.**

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				underutilised (page 182, 221 and 224 full version). However, we think the recommendations on hearing aids would benefit from further clarifications based on the evidence reviewed. This is as follows: **1. We ask the Committee to consider adding text to the section:** ▪ add: ***"Age should not be used as eligibility criteria for NHS hearing aids. Age is a protected characteristic in the Equality Act 2010 and access to NHS hearing aids should not be restricted based on an age threshold because there is no evidence to support this".*** Reasoning: ▪ The Committee will be aware that several NHS Clinical Commissioning Groups (CCGs) have held public consultations on rationing access to hearing aids. ▪ Although this point about age might seem obvious to those with a working knowledge of the Equality Act 2010 and the evidence base, CCGs have included age criteria in consultation documents about restricting access to hearing aids. For example both Enfield CCG and South Norfolk CCG included a reference to an age of 50 during their public consultations on rationing access to NHS hearing care. ▪ In our view this is an opportunity for NICE to make clear that age should not be used in any criteria to ration access to NHS hearing care. This, in our view, would also be consistent with section 3.3 (page 3) of the NICE Equality Impact Assessment.	

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				2. We ask the Committee to clarify its position on people with severe to profound hearing loss and to clearly cross-reference NICE guidance on cochlear implants and other devices. Reasoning: ▪ We understand why the Committee decided to focus on mild to moderate hearing loss in its literature search questions, protocols and discussions linked to hearing aids (Full version and Appendices). ▪ However it is less clear whether the needs of the population with more severe hearing loss (N =650,000) has been sufficiently addressed. ▪ NHS Commissioners that have run costly and pseudo evidence-based public consultations on rationing access to hearing aids have claimed there is insufficient evidence to provide hearing aids for mild to moderate hearing loss. However, the greater level of uncertainty – at least in the published literature – is linked to the benefit for people with more severe losses, something NHS Commissioners have tried to avoid confronting because their real goal has always been to try and reduce total expenditure rather than make evidenced based resource allocation decisions. ▪ It is important, in our view, for the Committee to clearly state that people with more severe levels of hearing loss might not always benefit from hearing aids and to clearly refer to NICE guidance on cochlear implants and other devices. 3. **We would like the Committee to make it clear that its recommendations rely on quality care**	**The recommendations are very clear that 2 hearing aids are recommended for people with bilateral hearing loss, and providing only 1 hearing aid is not an acceptable option. The recommendations are very clear that a comprehensive follow-up appointment should also be offered.** **The utility weights are based on a real life study in which people were given hearing aids. Whilst the study is likely to represent a good standard of care, it is unlikely that everyone had their hearing aids fitted perfectly, but that there was a range of success of hearing aid fitting within the study group. The benefit was measured soon after hearing aid use started, but it was not**

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				and two hearing aids being provided when people have a loss in both ears. Reasoning: ▪ Although we note that the sensitivity analysis in Annex N would make hearing aids cost-effective even with large non-compliance rates, the opportunity cost (both on the individual and the NHS) makes this an undesirable outcome. ▪ We think the Committee needs to make clear that its utility weights (forming the most sensitive part of the economic model in Annex N) are dependent on the correct fitting of hearing aids, people with a hearing loss in both ears being offered two aids and each person receiving ongoing support (aftercare and follow-up) – e.g. if people with bilateral hearing loss are only fitted with one aid, or not provided with accessible aftercare, the utility weight will be much lower than 0.06; and therefore the service provided will be less cost-effective ▪ If the Committee feels it cannot make these recommendations in the Full or Short version of the guideline, then we would ask it to make it clearer in Annex N that ○ *"utility gains are likely to significantly reduce where there is insufficient capacity to deliver quality care or where providers are paid to provide two hearing aids but only provide one."* This will help ensure local services evolve to meet the population's hearing needs in a sustainable way for the NHS. Otherwise the NICE guideline	**reported whether a subsequent follow-up appointment had been received. The modelling cautiously assumed that hearing aid users will on average receive only 80% of the benefit of people in the utility study (i.e. they will be 20% less effective at using their hearing aids). The benefit may in practice increase over time if patients are enabled to use their hearing aids better due to good aftercare, or may decrease over time if people are not followed up and hearing aids are not maintained. The model also varied the utility weight widely in sensitivity analysis and found that hearing aid use was still highly cost effective even at only 50% of the base case benefit (0.03).** **Whilst the results of the modelling therefore do not depend on the quality of aftercare, the committee does strongly recommend follow-up and aftercare, and good aftercare will increase the cost effectiveness of providing hearing aids. Providing hearing aids but not providing follow-up will waste money on hearing aids that may not be used by those patients who have not been adequately assisted in how to use them.**

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				risks allowing providers – e.g. who do not have sufficient capacity to meet local needs – to agree block and other opaque contracts and cite NICE guidelines to claim their services are cost-effective. Clarity here will therefore make it easier to challenge some important root causes of unwarranted variation across England and make it difficult to use the NICE guideline as cover for the provision of suboptimal standards of care.	
National Community Hearing Association	Full	016	33-35	**Recommendation 32 (including supporting evidence, discussions and analysis in Section 17) needs to be reviewed.** **Recommendation 32:** *"Offer adults with hearing aids a **face-to-face** audiology appointment 6 to 12 weeks after hearing aids are fitted"* and the **Feedback** The guideline states that recommendations are based on the Committee assessing ▪ *"… whether the net clinical benefit justified any differences in cost between alternative interventions"* (lines 43-44 page 51 Full version). It also states that it is ▪ *"important that audiological care is patient-centred and that people should have the opportunity to make informed decisions about their care and treatment in partnership with their healthcare professionals (NICE guideline GC138) and this is reflected in the guideline"* (lines 41-43 page 19 Full version).	**Thank you for your comment. The committee has altered the recommendation to allow for the possibility of alternative methods of communication, if that is the patient's preference. The text in section 17.3.4 has also been expanded to clarify the reasoning.** **The committee fully supports patient choice, but wants to avoid a situation where people not able to use a telephone are offered only a telephone appointment, and so are left unable to use their hearing aids.** **The committee continues to believe that a follow-up appointment should be as rigorous, containing the same elements, and thus take the same length of time, whether conducted by phone or in person. It also strongly asserts that all follow-up appointments should be conducted by equivalently qualified staff. These judgements were based on consensus of expert experience. They imply that the cost of different methods of communication should be almost identical. The committee agrees that this is not the case in current practice: telephone follow-up appointments are often shorter or conducted**

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				Recommendation 32 fails to achieve both these objectives. We explain why below. **<u>Costs</u>** The Committee notes ▪ "*The cost to the NHS of a follow-up appointment is dependent on the length of time the audiologist spends conducting the appointment. Hence, whether an appointed is conducted by phone or face-to-face (at an audiology clinic) does not affect the cost of the appointment if both are the same length. Therefore there is no economic reason not to favour face-to-face appointments"* (page 230 Full version, lines not numbered). This is not correct. Face-to-face follow-up appointments require additional capacity compared to follow-ups conducted remotely. This means there are greater costs associated with face-to-face clinics. Further evidence can be found by comparing NHS face-to-face and remote follow-up reference cost data (after accounting for the limitations with reference cost data that we explain elsewhere). It is important that when the Committee reviews this recommendation it does not change its cost perspective and assume fixed cost as it has selectively done in other parts of the Full version (we provide feedback on this later in our response). The Committee might also be able to ask the health economist to adjust the utility weight in the economic model described in Annex N. For example the Committee can explain what it thinks the utility weight	**by less well qualified staff, and thus are currently shown as cheaper in NHS reference costs. However, if conducted in full using appropriate staff this difference in cost would disappear.** **Whilst the committee is aware that this is likely to require additional resources, that is the case for many recommendations made by NICE, and these need to be taken into account when systems and pathways are next reconsidered and redesigned at a local level. The committee believes that the current pattern of diverse audiology providers is able to quickly deal with any potential change in demand, given that appropriate funding is available. The impact of the recommendations in this guideline on resources is addressed in the resource impact assessment accompanying this guideline.** **The committee agreed that high quality follow-up is a vital part of ensuring that people can use hearing aids effectively, and this is therefore an integral part of a highly cost effective intervention (providing hearing aids) which is a very good use of NHS resources compared to interventions with a lower cost effectiveness. Not providing a follow-up appointment risks wasting the money already spent on the hearing aid and previous assessment and fitting appointments if a person is left without the support to be enabled to use their hearing aids successfully.**

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				would be if every person was offered a follow-up in a format of their choice and based on their level of clinical need – e.g. a longstanding hearing aid user wanting a skype or telephone catch-up vs. a user that needs several face-to-face follow-up visits. We are confident that, with or without adjusting for costs, this will show there is no strong case for recommending everybody has a face-to-face follow-up. **Capacity** In addition to cost escalation it is important to note that in 2007 there was a waiting list crisis – e.g. adults had to wait for up to two years for an NHS audiology appointment in England. Following a Health Select Committee enquiry the NHS was forced to redesign services in order to make more use of existing and, what is still today, insufficient secondary care capacity to meet the Nation's hearing needs – e.g. the Committee might wish to review historical reported activity here, http://the-ncha.com/growth-in-the-english-nhs-adult-audiology-service/, with graph 1 showing a gap between fits and follow-up appointments emerge in 2006/7 when many hospitals in England started to experience significant capacity shortfalls. One of the "service innovations" between 2007 and 2010 included redesigning pathways to reduce the need for follow-up appointments in audiology. If the NHS reintroduces face-to-face follow up for all adults fitted with hearing aids, then many providers are likely to experience significant capacity issues again. If the Committee feels it must recommend face-to-face follow-up care, it should also make a	**There are no data on the impact of follow-up appointments on quality of life.** **The committee has added an additional recommendation that a system for routine recall should be considered, and has clarified in its discussions that such systems are currently already in place in some areas though not in others.**

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				recommendation to increase capacity to avoid systems failure. The impact on capacity and potential solutions needs further consideration. For example if some adults want to and can have follow-up needs met remotely this should be allowed, especially if doing so means there is more capacity to offer adults that need multiple face-to-face follow-ups the time they need in order to benefit from NHS hearing care. Without careful consideration Recommendation 32 could therefore actually worsen inequalities in access and outcomes. **Respecting patient preferences** Although we fully agree with the Committee that every patient should have a follow-up, we do not agree that every patient needs a face-to-face follow-up. In our view, each patient has the right to choose how to access follow-up care and this should be a joint decision at the point of fitting and form part of the Individual Management Plan (IMP). We also believe the Committee's recommendation for everybody to have a face-to-face follow-up is inconsistent with NICE guidelines on joint decision making and treating each patient as an individual. NHS England's model service specification in contrast, which the Committee incorrectly cites as the NHS Standard Contract, states that every adult should have a follow-up but does not dictate how this is provided. The NHS England model service	

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				specification – co-produced by NHS England, charities, Commissioners and a broad range of professional associations – aims to improve quality of care while respecting the wishes of individual patients and avoiding the risk of systems failure in the NHS. We urge the Committee to take a more objective and analytical view of clinical need and the NHS hearing service in England. **<u>Important historical data and fact checking</u>** The Committee statement ▪ *"Currently there is no automatic system to recall people for ongoing monitoring and it is up to the individual to self-refer when they need their hearing reassessed or require assistance with their hearing device"* (page 229, no line numbers provided). needs to be reviewed and corrected. Firstly, this might be true based on the Committee's own experience – e.g. where members work – but **it is not true for all providers.** Many providers now commissioned to deliver NHS adult hearing services in England are for example fined if they do not offer follow-up care and are not paid if they do not review patients at agreed periods. Thus many (but not all) providers in England do automatically recall people and personal experience, in Wales or elsewhere, should not be generalised to the whole of England and stated as fact. Secondly, where there are still gaps – despite how easy modern technology makes it to recall patients – the Committee's comments overlook the fact that this	

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				is a chronic issue. For example, gaps in follow-up care and no "automatic recall for ongoing monitoring" have been reported as problems in NHS audiology for about 36 years. Although it is difficult to compare various studies – because different audiences are asked different questions – this issue can be traced as far back as 1982[See endnote xxi for list of 12 references]. We agree that there are significant gaps in the provision of follow-up care in the NHS (lines 17-18 page 225 Full version). We also agree that good follow-up care and accessible and ongoing aftercare is critical to ensuring people benefit from hearing aids (page 230, full version no line numbers). However gaps in follow-up care have been driven by ▪ a lack of capacity (as explained above) ▪ NHS Commissioners failing to commission services with an accountable adult hearing service specification[xxii] ▪ providers and Commissioners not enforcing contracts that they should be enforcing It is because of this historical failing that we have long argued that all adults fitted with hearing aids should be offered a follow-up appointment. We have also referred NHS Commissioners to a 2015 independent review of the NHS adult hearing service which found ▪ *"In the patient survey, patients' satisfaction with their hearing aids was correlated with whether they were offered a follow up appointment. Significantly more of those who were offered a follow-up appointment were ultimately very satisfied with their hearings aids than those who*	

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				were not offered a follow-up appointment (68% very satisfied compared to 46%)"[xxiii] It was this review by the NHS regulator (Monitor, now NHS Improvement) that led to the development of NHS England's commissioning framework and thus NHS England's recommendation about how follow-up care should be delivered (see below). Although we appreciated that Committee has not used this independent review of the NHS adult hearing service, despite being aware of it[xxiv], this does mean it has reached a consensus without necessarily analysing the provision of adult hearing services in England in sufficient detail. **Summary** Although we strongly support the need for every patient to be offered a follow-up and that this is very important (Full version, page 176 lines 406), we do **not** think the Committee has the level of evidence or economic case to recommend that every adult is offered a face-to-face follow-up. We ask the Committee to reconsider Recommendation 32, we suggest: ▪ *"Offer adults with hearing aids a **follow-up** audiology appointment 6 to 12 weeks after hearing aids are fitted. Adults should be offered a choice of face-to-face or non-face to face follow-up (using a variety of mediums, for example, telephone, internet or written review)"* *(Reference, page 8, NHS England's model adult hearing specification)*[xxv]	

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				This is based on NHS England's recommendations and lessons learnt from Monitor's review of the NHS adult hearing service. We believe this alternative Recommendation would also be more consistent with the NICE recommendation ▪ *"When offering people audiology appointments follow recommendation 1.3.1 in the NICE guideline on patient experience in adult NHS services"* (page 10 lines 27-28), because 1.3.1 states o *"Adopt an individualised approach to healthcare services that is tailored to the patient's needs and circumstances, taking into account their ability to access services, personal preferences and coexisting conditions. Review the patient's needs and circumstances regularly."*	
National Community Hearing Association	Full Short	017 9	11-12 17-18	**We support this wording and it should remain as it is.** We fully support the following wording ▪ *"provide information on communication, social care or rehabilitation support services **if needed"*** (our emphasis). We think it is very important to ensure patients, providers and Commissioners understand that not all adults will need this additional support/information, but those that do should be given the information they need to make informed choices.	**Thank you for your comment.**

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				Providers that offer such services (including charities) have made claims about other providers under referring patients in the past. However they have not been able to explain what a "normal" referral rate is. In such cases it has not been clear whether the motivation to increase referrals has been driven by a desire to help or due to a conflict of interest or both.	
National Community Hearing Association	Full	017	36-37	**Review the research recommendation on the first-line treatment for sudden idiopathic sensorineural hearing loss.** Although we understand why the Committee has included this as a research recommendation and agree that in principle it is an important issue, it is not clear whether the Committee has discussed why there is significant uncertainty on this topic and that this uncertainty is likely to remain even with further research. For example, because sudden idiopathic sensorineural hearing loss is relatively rare and can be temporary and resolve spontaneously, it is difficult to develop robust randomised control trials and to derive a statistically robust outcome for any given intervention. The Committee is of course welcome to suggest any research topic it wishes. It would just be very helpful – given the Committee has reviewed the body of evidence – if NICE could explain in more detail why existing research attempts have not reduced uncertainty and then justify why it thinks future research, based on this recommendation, will. At the end of this process the Committee might decide it is happy with this research recommendation or suggest a new research question that will also improve patient care.	**Thank you for your comment. We have amended this to focus on the routes of administration of steroids. It now reads as follow: 'What is the most effective route of administration of steroids as first-line treatment for idiopathic sudden sensorineural hearing loss?'** **The committee has recommended that steroids could be considered for treatment and therefore has prioritised a recommendation for research on routes of administration.** **This may be a rare condition but it can be devastating. The committee was interested in the new work that is being done looking at first-line intratympanic injections of steroid for sudden SNHL and thought results seemed promising. We are suggesting a new approach and this is outlined in the Appendices.**

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National Community Hearing Association	Full	018	17-18	**Please insert missing reference** to support the statement about economic costs. The reference is, *International Longevity Centre UK. (2014) 'Commission on Hearing Loss: Final Report'. Available from: http://www.ilcuk.org.uk/images/uploads/publication-pdfs/Hearing_loss_Commission_final_report_-website.pdf*	**Thank you for your comment. This reference has been added.**
National Community Hearing Association	Full	018	24-27	**An underlying assumption needs to be reviewed because it might stem from the campaign literature. Feedback and recommendations below.** **Current text reads:** *"It takes time for people to accept they have a difficulty and 1 study found that on average there is a 10 year delay in people aged 55 to 74 years seeking help for their hearing loss. Around 45% of adults who report hearing problems to their GP are not referred to NHS hearing services, with reports that they are advised to wait until their symptoms are more severe."* **Feedback:** We understand that campaign literature has for many years cited *"45% of adults who report hearing problems to their GP are not referred to NHS hearing services, with reports that they are advised to wait until their symptoms are more severe".* We therefore understand why this statistic and subsequent reasoning is now the norm. However, it is	**Thank you for your comment.** **The text has been corrected to read "Between 30% and 45% of adults...", referencing the NHS England commissioning framework.** **We note that the figure of 45% came from the Davis 2007 HTA report, but has been misreported in some places to imply that this refers to 45% of people presenting to their GP not being referred, when in fact it referred to 45% of people receiving a hearing assessment in their study and found to have hearing loss who had previously reported hearing difficulties to a GP and not been referred for an assessment.** **However, the committee is not aware of any evidence that the likelihood of referral has increased in recent years, and notes that Benova 2014 looked at a wider age range. People over 75 are much more likely to be referred for hearing assessment than people under 75.**

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				regrettable to see a NICE use that same data and base its recommendations on the same flawed reasoning. Although some people who visit their GP are not always referred, it is important to acknowledge that this situation has improved over time and equally important not to – albeit inadvertently – single out GPs as the primary barrier to treatment. Of course, at the same time, it is important to note that past reviews have not been favourable about the quality of referrals that GPs do make[xxvi] (and this is another reason we ask the Committee, elsewhere in our response, to consider the costs and benefits of a GP in this particular pathway). It is also important to acknowledge and help tackle the main problem; **most people with hearing difficulty do not report it to a health care professional.** For example a logistic regression of data from cross-sectional survey data by Benova et al. (2014) showed that in England, only 46% of adults with a self-reported difficulty reported this to a health professional and of those 73% were referred[xxvii] - i.e. making it 27% of patients rather than 45% that were not referred. Despite the evidence that a lack of public awareness is the main issue campaign groups, and now NICE, continue to base recommendations on outdated research and policy ideas. For example Committee discussions have led to keeping the GP as the primary entry point for	**The committee agrees that people with hearing difficulty not reporting it to a healthcare professional is a key problem. For this reason the committee has recommended that staff should proactively identify people who appear to have hearing difficulties and ask them if they would like to be referred for a hearing assessment, not just wait until hearing difficulties are reported.** **The question of direct access to audiology is responded to in our replies to your other comments on that topic. This was not a research question prioritised for this guideline, and so the committee has not made any recommendations on this point. However, the committee has not discouraged direct access to audiology where it is available, and has not recommended that a GP must be seen before a hearing assessment.**

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				audiology. In doing so NICE has missed the opportunity to highlight there is no evidence to support the need for GP visit before seeing audiology in the vast majority of cases. Coventry and Rugby Clinical Commissioning Group and other regions are now removing the need for a GP referral and encouraging providers to increase awareness of local NHS hearing care[xxviii]. In contrast Committee discussions have grappled with how to make a system, that has many barriers to access, function marginally better. The following extract from page 94 of the NICE Full version demonstrates the issue: ▪ *The definition of 'early intervention' was discussed and it was suggested 'early' could be defined as 'at the time of first presentation to the GP' with an awareness of hearing problems. The committee highlighted the importance of education and training of health and social care professionals across all sectors in improving referral of people for hearing difficulties. It was felt that hearing loss is not always considered a priority in a GP's appointment. While that may be as a consequence of short appointments and a lot to cover, it is acknowledged that there is a tendency to overlook sensory health in clinical practice. There was concern at reports of GPs being reluctant to refer .The committee also recognised that many people do not report hearing loss to their GP (or any other medical professional) until it has been present for a long time (around 10 years24). Given the advantages and cost effectiveness of managing hearing loss at an*	

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				earlier stage, the committee agreed that in addition to referring people for assessment when they directly report hearing problems, GPs, other healthcare professionals and carers should actively consider the possibility of hearing problems in the course of routine consultations or care for other conditions. For example, if a patient appears to be having problems hearing the healthcare or social care professional when he or she is talking to them, they should specifically ask about hearing difficulties and recommend referral for audiological assessment. Given this NICE guideline shows hearing care is very cost effective and earlier intervention is favourable, we believe the Committee in focussing on GP referrals has missed an opportunity to highlight GP appointments can be saved and access to adult hearing services improved by offering open access audiology as NHS Coventry and Rugby CCG and other regions have done and are in the processes of doing. We hope the Committee will be able to review its discussion on page 94 and consider the evidence for needing to see a GP in order to access audiology. It would also be helpful for the Committee to consider the impact on GP appointments if their current recommendations are implemented – e.g. more GP appointments would be required to refer many more older adults with hearing loss to audiology, and given each GP visit costs £36 (Annex N) and there are challenges with GP capacity this seems to be a poor use of GP time given the risk profile associated with adults that have hearing difficulties without any other medical signs or symptoms. Ultimately it is always	

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				patients that lose out when NHS resources (GP appointments, costs) are wasted, because they then have less access to health care than they would have otherwise had. If the Committee decides it cannot recommend what is already being delivered in parts of England, then we would ask the Committee to at least update its text on the proportion of GPs that do not refer for an audiological assessment to the following: • *"Adults with hearing loss wait on average 10 years before they seek help and of those that report issues to their GP, 30% to 45% are not referred on for a hearing assessment. This means there is significant unmet need" (Reference: Section 4.3 page 15 in NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups).*	
National Community Hearing Association	Full	018	29	**Current text reads:** *"The main referral pathway for an adult with hearing loss is direct from their GP to audiology services."* **Feedback** This is an important statement and, in our view, something that could have been considered in more detail when research questions and review protocols were designed. If this had been done then certain studies might not have been excluded because they covered GP referral to audiology (See our feedback on Full version of the referral criteria below).	**Thank you for your comment. The committee did not question this route of referral because it is happening but instead looked at referral into secondary care where we felt there were more issues. Studies were excluded when they did not fulfil the research criteria.**
National Community	Full	018	33-35	**Correct a statement so that it is based on**	**Thank you for your comment. We note that**

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Hearing Association				**evidence/analysis.** **Current text reads:** *"Audiology services are provided in a number of NHS settings. In some parts of England this is through the AQP (any qualified provider) scheme, which means that people have a choice of services ranging from traditional hospital or clinic-based audiology services, to independent high street providers."* **Change to** *"Audiology services are provided in a number of NHS settings. In about 60% of England this is through the AQP (any qualified provider) scheme, which means that people have a choice of where to access their hearing care, including traditional hospital settings, independent high street providers, social enterprises and charities."* (Reference for about 60% and different settings: Monitor, 2015. NHS adult hearing services in England: exploring how choice is working for patients. The precise percentage can be calculated using Annex 1 of Monitor's report, 125/211, 59%. Either way a majority should not be written up as "some parts") **Feedback** During NICE's consultation on the guideline scope we asked this to be changed. At the time we felt more accurate information in the final guideline scope might help ensure the Committee took a more inclusive approach to guideline development and did not miss nor overlook key developments in the NHS adult hearing service in England.	**you agree that AQP is available in some parts but not all of England, as we have stated in the guideline. The committee believes that it is difficult to be too precise in quantifying this as the situation changes over time and different figures apply depending on if one is interested in the proportion of the general population, the proportion of people with hearing loss, the proportion of CCG areas, or the proportion of land area. In the context of this statement we were trying to convey that there are a variety of providers and there are different systems operating in different areas. We believe that sufficient information was included here in what is intended to be a very brief introduction to the whole area of hearing loss.**

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				NICE's feedback at that time suggested this would make no difference[xxix]. On analysing the Full version (including Committee notes) and what appears to be significant confusion about how adult hearing services are actually commissioned in England, we think NICE should now update its statement to make it factually accurate and to avoid other stakeholders repeating omissions in this draft guideline.	
National Community Hearing Association	Full	053	12-14	**Important points about process and referral recommendations.** **Current text reads:** *"There are several clinical guidelines for GPs and audiologists outlining the circumstances in which they should consider referral for more specialist medical care – for example the British Academy of Audiologists' Guidance for Audiologists and for Primary Care which reflect a broad clinical consensus."* **Feedback** This British Academy of Audiology (BAA) guideline was not found during the documented literature review (Appendices). This guideline was published in November 2016 and therefore was not submitted to NICE during the consultation on the guideline scope. NICE has suggested it found the referral document in question by visiting the BAA website at some time between the formal documented processes during which NICE normally collates research/documentation. It is not all clear why ▪ NICE did not review the BAA and British Society of Hearing Aid Audiologist referral criteria that is referred to in the final guideline scope (page 12	**Thank you for your comment.** **The committee has considered the BSHAA guidance on professional practice along with the BAA referral guidance and has referenced both of these in the Linking evidence to recommendations in the urgent and routine referral chapter.**

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				Appendices) ▪ NICE did not review NHS England's referral criteria – which is based on a broader consensus and one that does not refer to local complex audiology pathways – given the Committee references the document in question several times (see pages 68-69 of NHS England's commissioning framework[xxx]) ▪ Does not appear to have discussed in any meaningful way why there are differences between criteria and what impact this might have on NHS resources etc. We provide comprehensive feedback on referral criteria elsewhere and hope our concerns can be addressed via the normal NICE consultation process.	
National Community Hearing Association	Full	075	No line numbers provided	**Recommendation 9 should be reviewed. Reasons and feedback given below.** Although we fully appreciate that this is a difficult decision for the Committee, in our view reviewing this is in the best interests of patients (in the broadest sense) and NHS. **Currently reads** *"Consider MRI of the internal auditory meati for adults with sensorineural hearing loss and no localising signs if there is an asymmetry of 20 dB or more* ***at any single frequency*** *between 0.5 kHz and 4.0 kHz on pure tone audiometry"* (Page 75 Full version) Our emphasis. **Feedback** We appreciate that Recommendation 9 is a secondary criterion and it is a weaker "consider"	**Thank you for your comment. The committee has reappraised the evidence in the light of comments and has decided to recommend a difference of 15dB at 2 adjacent frequencies (at 0.5, 1, 2, 4 and 8 kHz) to reflect current practice in ENT clinics. An explanation of the thresholds used is given in the linking evidence to recommendations section of the guideline.** **The committee recognises that current practice varies across the country, and that a difference of 20 dB at 2 frequencies is used in some areas, but believes that the definition now adopted represents most common current practice. As such, the committee does not believe that these criteria will lead to a significant increase in referrals for the country as a whole, and that standardisation of criteria will be beneficial and may reduce**

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				recommendation for MRI compared to Recommendation 8. However, based on evidence presented in the Full version and Appendices, Recommendation 9 needs to be reviewed. Text in the guideline suggests that the actual Department of Health (DH) guidance was reviewed: ▪ *"Therefore, it was agreed that the Department of Health criteria of ≥20 dB asymmetry of sensorineural (bone conduction) hearing thresholds at any single frequency between 0.5–4 kHz may be the most appropriate protocol for referral for imaging"* (Page 76 Full version) The DH guideline in question however is not clearly referenced. The Committee appears to have relied on other papers (secondary sources) that reference the DH guidance. We have reviewed the three secondary sources in question and they do not correctly reference the DH guidance. We have therefore contacted the authors of those papers. One has responded to date and confirmed they no longer have a copy of the DH guideline. That author also kindly explained that if their paper was read in detail, then Recommendation 9 appears to have picked "'the least cost-saving' protocol" and that it might "not work so well", directing us to their sensitivity and specificity rates. It is difficult however for us to provide constructive feedback on this section because ▪ we have been unable to track down what appears to be the primary source on which the Committee has based Recommendation 9. This	**overreferral in some places.** **However, due to the limited evidence regarding the most suitable criteria to use and uncertainty on the effect that this might have on referral numbers, the committee has recommended only that clinicians and commissioners 'consider' using these criteria as there is insufficient evidence to support a stronger recommendation.**

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				is problematic because it is not clear for example if that DH guidance was withdrawn, whether it was ever implemented in practice, or what form it originally took etc. ▪ because this NICE consultation has occurred over the holiday season it has been difficult for us to commission any research and this is not our area of expertise. We are therefore forced to provide feedback without first being able to review the evidence in detail because of the way in which NICE has referenced a key source. However we think the following points are important and hope helpful to the National Guideline Centre, NICE and the Committee. 1. It seems very unlikely that the cited DH guidance was ever implemented across England. It is also unlikely it forms part of routine practice today. This is because today, otherwise asymptomatic adults, are only referred to ENT or audiovestibular medicine if they have "*Unilateral or asymmetrical sensorineural hearing loss, defined as a difference between the left and right bone conduction thresholds of 20 dB or greater* ***at two or more of the following frequencies****: 500, 1000, 2000 or 4000 Hz, to ear nose and throat or audiovestibular medicine."*[xxxi] Our emphasis. i.e. there appears to be a significant discrepancy between the agreed definition of clinically asymmetric hearing loss (that is routinely referred to ENT or audiovestibular medicine today) and the level of asymmetry that Recommendation 9	

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				suggests should be considered for an MRI. This leads us to believe there might have been an omission during Committee discussions. [Please note: we also received feedback that because Recommendation 9 uses a single frequency this will increase the rate of false positive referrals compared to existing practice. However we have not had the resource (during this short consultation period) to review the literature and find the data required to analyse whether this is likely to be the case – e.g. given it is also possible that a loss at a single frequency might be less common, the opposite might also be true. Hence we are not in a position to validate the feedback provided] **We therefore ask the Committee to estimate what proportion of adults that that currently have a asymmetric hearing loss at a single frequency (Recommendation 9) are not referred to ENT or audiovestibular medicine because they do not have a loss at two or more frequencies (existing referral criteria for onward referral for a medical opinion)[xxxii]. It would then be helpful for the Committee to discuss this and ask whether the level of evidence reviewed – given the alternative options available – justifies criteria used in Recommendation 9.** 2. Based on Forest Plots on page 388 of Appendix K2, it is not clear why NICE is suggesting a single frequency at this threshold. There appears to be no strong case for selecting	

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				this specific criterion for considering an MRI in the specified adult population (Recommendation 9). It is possible, in our view, that Recommendation 9 has been influenced by the risk profile of those analysing the evidence without any quantification of the impact (opportunity cost, in the broadest sense). For example, if this has happened • the NHS is at risk of increasing referrals for MRI without actually knowing the marginal cost per additional case detected. This can result in the NHS spending significant resources to detect an additional case (i.e. a case not already detected by Recommendation 8) and this in turn can mean that overall the NHS does more harm than good • in a clinical setting this can mean that adults at greater risk of harm (e.g. poorer prognosis due to delayed diagnosis via an MRI) might have to wait for diagnostic tests because those at less risk of harm (e.g. a prognosis that is less dependent on an MRI at that stage of their disease) are booked in for a MRI • etc It is because of the potential adverse impact on all patients (those the Committee is focussed on and those it might not have considered) that we think **it would be helpful if the cost per additional case detected by using Recommendation 9 could be estimated by NICE.** For example, a Health Technology Assessment, which appears to have undertaken	

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				a more comprehensive analysis of the evidence states, • *"The National Study of Hearing showed that 2.9% of the population has an asymmetry greater or equal to 15 dB across 0.5–4.0 kHz. For the high frequencies, 4, 6 and 8 kHz, this prevalence increases to 10.4%. When the better ear has hearing thresholds better than 25 dB, the prevalence values are 5.2% and 10.9% respectively. Thus, the burden of patients in whom the exclusion of an acoustic neuroma is indicated is significant upon individual departments of otolaryngology and upon the health economy",* • *"Many patients with acoustic neuroma experience hearing impairment, tinnitus and imbalance. There are a number of less common symptoms including facial numbness, headaches and otalgia. In some cases there are markedly unusual patterns of symptoms at presentation" [all of these subgroups would be referred for an MRI based on Recommendation 8 or a different route, not Recommendation 9], "and some asymptomatic patients have an acoustic neuroma diagnosed whilst undergoing radiological investigation for unrelated symptoms" [this subgroup would not be detected by Recommendation 9].* • *"Even among those exhibiting symptoms of asymmetrical hearing impairment or unilateral tinnitus who have been referred for investigation [only some in this subgroup might be referred for MRI based on Recommendation 9], as few as 1% might*	

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				have acoustic neuromas. Thus, the large number of patients 'eligible' for investigation generates waiting list issues in many NHS MR imaging units, and the low incidence coupled with a high relative cost of GdT1W MR imaging (see Chapter 3) have contributed to reservation regarding its use as a first-line (albeit definitive)"[xxxiii] 3. We have not had the opportunity to ask a statistician to review this section of the NICE guideline and **we would be grateful if a statistician at the National Guideline Centre could review recommendation 9.** For example • the prevalence of a vestibular schwannoma or other retrocochlear mass (e.g. neural tumour) is estimated to be 0.0002%[xxxiv] • Recommendation 8 is likely to confirm many of the, already rare, cases that present. • It appears the Committee feels other cases might be missed and therefore detected by using Recommendation 9. • As noted above the marginal cost per additional case diagnosed due to Recommendation 9 requires some analysis, in the main to ensure this Recommendation does not do more harm than good at a population level. Although we have not been able to complete our review of the evidence on this topic before the 12 January deadline we hope the information provided above is helpful.	
National Community	Full	078	15-17	**The section on subgroups and supporting**	**Thank you for your comment. We have now**

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Hearing Association				**evidence (Final version section 7, pages 78-81) needs to be reviewed. Reasons and feedback given below.** If it is modified then the relevant section in the Short version also needs to be updated. **Current text reads:** *"A recent Action on Hearing Loss report has highlighted the association between dementia and hearing loss reporting a 2-fold increased incidence of dementia in those with a mild hearing loss and a nearly 5-fold increase in those with severe hearing loss."* **Feedback** This text is incorrect. We initially thought this could be addressed by correcting the reference. However on reviewing the Appendices and Section 7 we think that the National Guideline Group needs to check this in more detail. As in other sections of the guideline, it appears the Committee has not always had the opportunity to review the grey literature it cites or NICE Appendices in detail. In this particular example: ▪ Action on Hearing Loss is a charity. It did not publish a report on the association between dementia and hearing loss. The text above is therefore factually inaccurate. ▪ The report is actually called the "Action Plan on Hearing Loss" and was published by NHS England and the Department of Health in 2015. Unfortunately correcting the reference does not	**amended the references in this section and have referred to the original paper by Lin et al 2011.Lin et al was excluded from the clinical evidence review in the subgroups chapter because it did not address our clinical question and did not provide the data the committee needed for decision making (see table 16 in section 7.2). However, this does not preclude the committee from using it as a reference for statistics quoted in other sections of the guideline.**

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				resolve the issue because it is not the primary source. ▪ The Action Plan on Hearing Loss depends on specific papers by Lin et al. to explain the association between dementia and hearing loss. ▪ The same papers by Lin et al. are excluded based on methodological grounds (Appendices). It is unclear why excluded studies, indirectly via a secondary source, are still included in the Full guideline. It is also difficult to asses whether the cited statistical limitations of these papers (p. 432 Appendices) were due to the review questions and search protocol or general methodological issues. The level of detail provided by NICE makes it impossible to assess what, if any, impact this might have on Recommendation 10 and 11. ▪ Given the Lin et al. data on the association between hearing loss and dementia has clearly influenced the Committee's recommendations on subgroups (Section 7), we think it is important to review why the Lin et al. studies in question were originally excluded and what, if any impact, this might have on have on Recommendation 10 and 11. ▪ At the very least the association between dementia and hearing loss should be attributed to work by Lin et al. However, **depending on what the National Guideline Centre finds, it might be necessary to review** • **recommendations 10 and 11 (and possibly 12), and** • **research recommendation 1 and 2 (page 79 Full version).** **Further information:**	

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				▪ The excluded papers in question are all by Lin et al., references 331 to 334 (Appendices). The reason for exclusion is given on page 432 (Appendices). The complete references for papers 331 to 334 can be found on page 527 (Appendices). ▪ The association between dementia and hearing loss is cited in section 3.15 (page 10) of the Action Plan on Hearing Loss[xxxv]. The references are the same as those NICE excluded as part of its research for the section on subgroups.	
National Community Hearing Association	Full	078	15-17	**Important that the Committee is aware of related NICE documents that cover the chosen subgroup population**. We appreciate that the Committee explains why it chose to focus on the subgroups it has and not people in care settings. In a UK setting however the selected subgroups are more likely to be overrepresented in care home populations (for reasons the Committee discusses on pages 78-82 and 192-193 Full version). It is therefore important, in our view, for the Committee to be made aware of NICE quality standard *"Mental wellbeing of older people in care homes"* https://www.nice.org.uk/guidance/qs50/chapter/Quality-statement-4-Recognition-of-sensory-impairment. **This NICE standard recommends hearing tests for people in care homes**. **The Committee might wish reference this NICE standard and suggest that when it is updated it also recommends measuring number of hearing tests (not just the number of sight tests).** Other NICE guidelines also cover the importance of	**Thank you for your comment. The committee is aware that hearing has not had the attention it deserves in this group and hope to make a difference with our guidelines.**

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				hearing tests in at risk groups – a list can be found here http://the-ncha.com/resources/nice-hearing/.	
National Community Hearing Association	Full	081	There are no line numbers.	**Review a statement and clarify it so that patients are not later, albeit inadvertently, disadvantaged by it.** **Current text reads:** *"It is important that hearing assessment is carried out by a trained audiologist in an appropriately sound-treated room" (no line numbers on page 81)* **Feedback** We understand why the Committee has noted this. We also appreciated most people will not read this far. However we do not think the Committee has sufficiently debated this in the context of section 7, subgroups. Often people will benefit from domiciliary care and in those settings it is not possible to use a "sound treated room". Instead background noise conditions are checked before any hearing assessment is performed. Where conditions allow a hearing test to take place in home care settings, and the benefits of doing so outweigh the risk to the patient, then this should be allowed. Otherwise many people who are eligible for domiciliary care, and by definition face significant challenges in attending a provider's premise, would need to be transported to a clinical setting to have a hearing test in a sound-treated room. We ask the Committee to make it clear that in certain circumstances this ideal clinical setting might not be possible and an audiologist will have to use their	**Thank you for your comment. We agree that it is for the audiologist to use their clinical judgement on the suitability of the environment in which to carry out an assessment, and have adjusted the wording to state an appropriately sound attenuated room.**

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				professional judgement as to whether to continue with a test or refer a patient into a setting with sound-treated rooms or booths.	
National Community Hearing Association	Full	127	There are no line numbers.	**This statement on earwax management needs to be reviewed. This might require recommendations and/or research recommendations to be changed. Feedback and suggestions below.** **Current text reads:** ▪ *"The evaluation showed that GP-administered irrigation was not cost effective compared to self-irrigation due to very little additional benefit to quality of life from increased effectiveness. However, the committee noted that self-irrigation is not commonly recommended in the UK, and this would raise concerns regarding adverse events from misuse"(no line numbers on page 127)* **Feedback** Based on the level of detail provided, and the concept of cost effectiveness, this suggests that self-irrigation is effective and GPs add very little additional benefit from a NHS perspective. **It is not clear what level of analysis or further thought the Committee gave this**. Based on the documented text, which is all we can review, it appears insufficient attention was given to this evidence and this could miss the opportunity to free up GP, nurse, audiology and ENT appointments and therefore miss benefits for patients, the NHS and taxpayer.	**Thank you for your comment. The committee looked at both the clinical and health economic evidence and discussed the balance between benefits and harms for using home wax removal compared to removal in a clinic.** **The health economic evidence was based on a single study which advised that it should not be used as the basis for policy making. The clinical evidence was of low or very low quality.** **The committee noted that self-irrigation is not commonly recommended in the UK. There are concerns regarding the safety of self-irrigation, and recommending this approach would conflict with the separate recommendation to advise people not to insert objects into their ears. The committee noted that the 'exploratory' study showed that GP-administered irrigation was not cost effective compared to self-irrigation due to very little additional benefit to quality of life from increased effectiveness. However, the committee noted that only 1 clinical study was identified reporting adverse events for self-irrigation. The committee agreed that self-irrigation is a potential method that needs to be considered, but decided that at this stage there is too little evidence regarding its safety for the committee to be**

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				We agree with the Committee that adults should not be referred to secondary care for basic earwax management, and that more complicated earwax management services can also be provided in primary and community based settings if staff are trained and the equipment is available (Section 10). It is surprising however that, although the Committee makes a reasoned argument about the inappropriate use of secondary care capacity and resources (Section 10), NICE does not appear to value the opportunity costs associated with GP and nurse et al time. For example ▪ it is very likely that primary and community care, and in particular GP surgeries, already manage the vast bulk of earwax cases ▪ if the NICE guideline is correct and 2.3 million people each year require an intervention for earwax (page 15 Short version) then controlling for an English population and reviewing English NHS reference cost data, we estimate that about 1.6 million of these interventions already occur outside secondary care[xxxvi] ▪ taking a very conservative assumption, that half of these adults see a GP at least once about their earwax and that a GP visit costs £36 (Annex N), then this would cost the NHS about £29 million per year ▪ yet **notes in the Full guideline appear to suggest that, based on a significant assumption, self-irrigation might be less safe in the UK and therefore the Committee does not go on to mention it in the clinical or**	**confident that such a significant change from current practice would be safe. The committee considered making a recommendation for further research. Although such research would be welcomed, the committee decided that the other questions identified in this guideline were currently higher priorities.**

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				research recommendations. **This, based on the level of information provided in the Full version, appears to be a major failing** ▪ it is not clear whether the assessment of risks associated with self-irrigation justify this approach, especially given the estimated cost of £29 million per year is likely to be a very conservative estimate and as the population ages – because the incidence of impacted wax is correlated with age – demand and costs associated with wax management will increase. It is also not clear why NICE thinks the UK population is different to other populations – e.g. just because something is not yet recommended in the UK does not mean one can assume that recommending it will result in more "adverse events from misuse" (Full version). It is also possible for example that with time the benefits of introducing self management might outweigh the risks and costs (especially when factoring in that people who cannot currently get GP appointments also have adverse events due to delayed diagnosis of cancer etc, so GPs and others all managing earwax is not without risks and costs). It is not clear from the NICE guideline whether the evidence here was objectively appraised or whether the Committee's own risk profile resulted in a premature conclusion. Given there is always a risk associated with the management of earwax, in our view, an evidence based body like NICE should consider the opportunity (marginal) cost implications associated with marginal risk of different treatment options – e.g.	

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				the marginal risk/cost/benefit of seeing a GP versus self management. Also because GP or nurse appointments used for wax management cannot be used for people who are at risk of more serious illnesses, self-management possibilities for earwax should not be dismissed so quickly (especially given capacity issues in primary care). It is therefore possible that in this case the risk associated with self-management of earwax might have been subjectively overestimated and could actually increase both cost and risk for the NHS overall. It is important to note for completeness, and not because we are suggesting this applies to any Committee member, that conflicts of interest can also be one reason that self-management options are not widely implemented in health services. For example wax management is, for many providers, an uncomplicated task that is associated with marginal revenue. Therefore in our view the Committee could have considered asking why "*self-irrigation is not commonly recommended in the UK",* rather than only appearing to focus on the risk if it was introduced and as a result appearing to consign the very possibility to obscurity. The approach here also risks contradicting discussions the Committee has elsewhere, for example *"[The Committee] stressed the need for training so that the person with hearing loss is empowered and not patronised" (page 183 Full version).* **Recommendations**	

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				1. The Committee should review this evidence on this particular point again. If there is evidence that self-irrigation is safe, possible and available then the Committee should consider the benefits of recommending it as an option and highlighting any concerns. Stating risks and how these differ from other methods of wax management, and what can be done to minimise such risks – e.g. objectively explaining what it is that makes this an uncertain procedure to recommend in 2018. 2. The Committee, at the very least, introduces self-irrigation as an area for further research. Arguably this would be more meaningful than the existing research recommendation: *"What is the clinical and cost effectiveness of microsuction compared with irrigation to remove wax?"* as this and other questions have been addressed to some extent in the past – e.g. see Clegg et al (pages 335-336, 437, 478-479 Appendices and the primary source itself). The methodological challenges associated with answering such research questions are well documented and not repeated here. On balance then we think it would be useful for the Committee to suggest an alternative, or additional, research question. For example *"What is the clinical and cost effectiveness of self-irrigation to remove wax?" or* *"What is the clinical and cost effectiveness, and*	

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				marginal risk, of self-irrigation compared to normal clinical practice?"	
National Community Hearing Association	Full	132	3-7	**This definition of sudden sensorineural hearing loss should appear elsewhere in the guideline (e.g. Recommendation 1 should have this additional diagnostic detail for audiologists). The Committee should also clarify the definition of rapid hearing loss (used in Recommendation 1) for the same reasons. Feedback below.** **Current text reads:** *"Sudden sensorineural hearing loss (SSNHL) is an ENT emergency and is defined as a loss of hearing of 30 dB HL or more, over at least 3 contiguous frequencies, that develops within 3 days. Most cases are unilateral and the commonest age group affected are adults in their 40s and 50s. In 90% of cases no underlying cause is identified and it is considered idiopathic. Idiopathic SSNHL affects approximately 5–20 per 100,000 people per year with an equal gender distribution."* **Feedback** We agree, but it is not clear why this is on page 132 and not part of Recommendation 1? If Recommendation 1, regarding referral criteria, was written for use in a real-world setting then we would expect to have more detailed criteria for audiologists – who have access to diagnostics – and overarching points for GPs. For example, the only place sudden hearing loss is defined, in terms of its diagnostic criteria, is on page 132 of the Full version guideline. Whereas recommendation one (page 12 Full version) and in the Short version of the guideline lack this	**Thank you for your comment. The committee chose not to include definitions and hearing levels in this recommendation. The aim is for people to be referred into urgent services immediately, not after they have waited to see an audiologist and had their hearing tested. The essence of management for these patients is speed. If the patient presents to an audiologist then we feel confident that they have their own criteria from BAA and from BSHAA to guide them and will act appropriately. However, GPs, who are more likely to see these people acutely, need guidance to refer without waiting to get threshold estimation.** **Thank you for your comment about the layout of the short version but its function is to provide a quick reference and we are limited in what goes into this document. We would encourage interested audiologists to read the full guideline if they have queries.**

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				level of detail. We ask the Committee to reconsider the layout of the recommendations in the Short version of the guideline and to add additional detail for audiologists in order to ensure they can refine referrals and reduce the risk of false positives and negative referrals (see Comment 5).	
National Community Hearing Association	Full	175	12-13	**We would like to better understand what the Committee actually means in order to understand its reasoning and to rule out any biases. If this is a mistake then it should be corrected.** The Committee appears to have chosen to highlight the following **Current text reads** ▪ *"It was important for patients to know that an audiologist's recommendations were not influenced by financial gain (private sector)"* ▪ *A similar situation arises in the Appendices "Considerable publicity has been given recently to the link between hearing loss and dementia. The mixed evidence is already being used commercially in the UK and overseas to drive sales of hearing aids, as if it were fact" (page 486 Appendix Q2).* **Change to** ▪ *"It was important for patients to know that an audiologist's recommendations were not influenced by financial gain (whether they work in the public, charity or private sector)"* ▪ *"Considerable publicity has been given recently to the link between hearing loss and dementia.*	**Thank you for your comment. The first bullet point was a report of what was stated in a reviewed paper and is not reflective of opinion within the committee. It has been changed as suggested.** **The second bullet point is based on the consensus of the committee who wished to highlight that results from evidence are mixed, but are being used prematurely by some companies to promote hearing aids. This research recommendation encourages further research to provide clarity in this area for everyone. We are aware of patient groups also drawing attention to the association between dementia and hearing loss, but they are currently asking for more information or research.** **The committee carefully weighed up all available evidence before making recommendations.**

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				The mixed evidence is already being used by patient groups, private sector organisations and others in the UK and overseas for campaign purposes and to drive sales of hearing aids, as if it were fact" (page 486 Appendix Q2). **Feedback** It is unclear whether these are quotes from the literature or Committee opinion (e.g. driven by value judgements or limited experience of perverse incentives that also exist in the charity and public sector). We know of no published literature that shows the above scenarios are unique to the private sector, so assume it might be the latter. If these statements are not directly from the literature then the Committee in our view should be asked whether they believe in them or whether they meant to also add other sectors to the statements. For example the Committee could ask whether audiologists working in the NHS might have conflict of interest when recommending particular hearing aids or other services? We see no benefit in overlooking the fact that all humans, regardless of setting, might have undeclared conflicts of interest. In all settings, and especially health care, this needs to be managed. It is because of unmanaged conflicts of interest in the NHS for example that NHS England has recently updated its national guidance on declaring and managing interest. Regarding the second statement. We agree it is wrong to misuse evidence in order to drive sales of medical devices (hearing aids etc) or medicine for	

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				that matter. However we think that misuse of such evidence is wrong in all circumstances. One of the most significant challenges we have for example is informing providers (private, public and social enterprises etc) not to read too much into campaign literature produced by non-profit entities. For example charities and non-profit membership organisations in the UK have overstated the evidence linking hearing loss, hearing aids and dementia in order to reduce the risk of NHS Commissioners decommissioning NHS adult hearing services. There was no reason to do this because many other, and more credible, evidence-based arguments existed. A similar issue has arisen with hearing screening, with non-profit organisations lobbying the UK National Screening Committee (UKNSC) to introduce a national screening programme for adult hearing loss citing spurious claims and ignoring the UKNSC's analysis of evidence gaps. It would therefore be helpful if lobbyist would avoid misinforming key stakeholders as this itself might reduce some of the issues the Committee has rightly pointed out and alluded to as being wrong. Put simply conflicts of interest and a lack of interest in, or misuse of, evidence is not limited to the private sector. If the Committee believes otherwise then that is most disconcerting. We sincerely hope that wherever in the guideline value judgements appear to have been mixed with analysis of evidence and facts that this did not adversely impact any recommendations.	
National Community	Full	183	There are	**Discussions that have informed**	**Thank you for your comment.**

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Hearing Association			no line numbers.	**Recommendations 23 and 24 (pages 15 and 181 Full version, and 10 Short version) are in part based on Committee discussions. Certain statements therefore need to be reviewed. Feedback below.** **Current text reads:** ▪ *"…**disability being a protected characteristic under the Equality Act 2010. Thus such provision is required is required regardless of costs** and so the recommendations regarding training and the clinical environment are not primarily economic questions" (our emphasis) (Reference page 183 Full version)* To the best of our knowledge this is not what the Equality Act 2010 suggests – i.e. costs are factored into decisions all the time, especially in public sector priority setting processes. Although we do not think this statement has had a material impact on Recommendations 23 and 24, we do think it is important to check, and possibly, correct this statement – e.g. if the Committee feels the Equality Act 2010 requires provision regardless of costs then other sections of the guideline would also need to be reviewed before publication. **Current text reads:** ▪ *"…**the committee agreed** that **staff training is likely to be cost saving or cost effective at a threshold of £20,000 per QALY** gain in the medium to long term" (Reference page 183 Full version)* We see no value in making up information to justify a	**This section has been reworded to remove direct reference to the Equality Act and clarify that the decision was not taken solely on equality grounds.** **NICE uses a cost-effectiveness threshold of from £20,000 per QALY gained. Therefore, the task of the guideline committee in each review is to determine to the best of its ability whether any action recommended would be cost-effective at this threshold. In some cases there will be data from published or original health economic studies giving particular figures for the incremental cost-effectiveness ratio (ICER); in other cases there will be no data so the exact ICER is unknown. In those cases it is the task of the committee to balance what is known or**

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				recommendation. The Committee has no way of knowing whether these recommendations would be cost saving or cost effective at a threshold of £20,000 **per QALY** in the medium to long term. Adding precision or detail to what is a judgement call is unhelpful and risks undermining data that is generated through detailed analysis or obtained from the peer reviewed literature. This should be deleted. In our view the Committee can simply state "Recommendations made are likely to be deliverable for the majority of providers in accordance with their duties under the Equality Act 2010".	**expected about clinical effectiveness and costs and make their best judgment about whether it would or could be cost effective by NICE's criterion - that is, whether the mostly likely ICER would be below or above £20,000 per QALY gained. By saying that an intervention "is likely to be cost saving or cost effective at a threshold of £20,00 per QALY gained" [sic], the committee is not saying it knows what the ICER would be, and is not saying that it is (or is close to) £20,000 per QALY gained. It is only saying that in the choice between costing more than £20,000 per QALY or less than £20,000 per QALY (including the option of saving money overall), the committee believes it will cost less than that. In this case the committee thinks it is likely to be comfortably below this, or indeed cost saving, which is why the committee is sufficiently confident of this statement to use the term "likely". This is not making up information, it is making a reasoned judgment. The committee is not adding any precision to this - there is no claim as to what the actual ICER would be. The figure of £20,000 is merely repeated (as in many other chapters) to remind the reader that this is the threshold relevant to this decision. This text has been retained.** **The committee was aware of the AIS but felt that it did not go far enough for those with hearing difficulties and that more emphasis was needed particularly with regard to the environment and ensuring hearing devices were accessible and used.**

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				In addition to the above, we have the following feedback: ▪ We appreciate that the detail provided in section 12.2.4 (pages 181-184) is helpful for those that want to better understand the topic "information and support (or advice)" and that NICE, to aid dissemination, needs to highlight key points in its recommendations. What is not clear, from the evidence synthesis, is why the Committee chose to highlight the points it did in Recommendation 24. For example, at a very practical level, although the recommendations might be based on the literature, we do not see what value the recommendations add above and beyond the NHS Accessible Information Standard (AIS). Also in making no explicit reference to the needs of people that use British Sign Language (BSL) or the Deaf community, the section might actually be less helpful than the NHS AIS. This group often reports feeling excluded and a small note acknowledging that they might have different preferences and expectations might have been helpful. It is also	**We did not make explicit reference to the needs of the Deaf population and their use of BSL because the remit of our guideline was limited to those with acquired hearing loss in adulthood, and the use of BSL as a first language in this population is very rare and is already covered by the AIS. However, we have added some recommendations pertinent to those with severe to profound losses.**

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				important to note that adults with severe to profound hearing loss might feel they have been missed out of this guideline (we provide feedback on this point elsewhere). Although we see how all adults with hearing loss are included, within and as part of the general recommendations, some might think otherwise. NICE might wish to review this as part of its Equality Impact Assessment and address this before publication.	
National Community Hearing Association	Full	195	25-27	**Clarification required. Feedback and suggestions below.** **Current text reads:** *Review question: What is the clinical and cost effectiveness of hearing aids for mild to moderate hearing loss in adults who have been prescribed at least 1 hearing aid?* *Review question: What is the clinical and cost effectiveness of fitting 1 hearing aid compared with fitting 2 hearing aids for people when both ears have an aidable hearing loss?* **Feedback** **1. Severe to profound hearing loss** We understand why the research question focussed on mild to moderate hearing loss – e.g. NHS Commissioners have asked questions about this and attempted to ration access to hearing aids on this basis. We welcome that a recent Cochrane review and this NICE guideline has further reduced the uncertainty regarding the effectiveness of hearing aids for mild to moderate hearing loss[xxxvii]. The focus on this group	**Thank you for your comments. The committee was limited in the number of questions we could research and focussed on those areas where there was variation in practice, such as amplification for mild to moderate hearing loss. We have added recommendations for referral to cochlear implant and have made reference to the more severe hearing losses.** **The scope of these guidelines did not include the Deaf community. The remit for this guideline was acquired hearing loss in adults, and the Deaf community requiring BSL for communication is composed of those with congenital or early-onset deafness.**

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				of patients however has been prompted in large part by unscrupulous, and arguably unethical, commissioning standards. For example ▪ certain NHS Commissioners posited that hearing aids were not effective for mild to moderate hearing loss (which happened to make up the vast majority of hearing aids provided on the NHS and local costs) but were effective for severe to profound hearing loss (which made up a very small proportion of hearing aids provided by the NHS and less costs) • when in fact the evidence for provision of hearing aids for mild to moderate hearing loss was more robust than the level of evidence for hearing aids for people with severe to profound hearing loss. It was just easier for Commissioners to frame attempts to ration based on the world 'mild' rather than their being 'too many old people with hearing loss that are coming forward for support and hearing aids'. This odd "incentive" has resulted in the sector and research community, and now the NICE Committee, focussing on the population with mild to moderate hearing loss. Unfortunately in the process, by definition of inclusion and exclusion criteria, the needs of people with severe to profound hearing loss risk being somewhat overlooked. It would be helpful if the Committee can take pragmatic steps to address this. ***Suggestions*** There is a poor referral rate for Cochlear implants in England. Survey data also suggests there is a poor	

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				level of awareness amongst audiologist regarding the eligibility criteria for Cochlear implants and other implantable devices on the NHS. We appreciate page 22 of the Full version refers to NICE technology appraisals on implantable devices, but think it would be very helpful if **the Committee could add the following text to the section on hearing aids in the Full and Short version.** ▪ *"Although many adults with severe to profound hearing loss will continue to benefit from hearing aids, some adults might benefit from and be eligible for Cochlear implants. Eligibility criteria for Cochlear implants can be found in NICE technology appraisal guidance 166 (2009)"* We also ask the Committee to consider making it clear that members of the Deaf community might have different preferences regarding the management of hearing loss and these should be respected. **2. Two hearing aids or one** We strongly support Recommendations 28 and 29 to provide two hearing aids; and these should remain as is. However, there are some underlying assumptions in Annex N, O and research questions (framing and analysis) (Appendices) that in our view might benefit from further discussion and clarity. We understand why the Committee felt it was important to analyse the evidence for two aids vs. one – e.g. again certain NHS Commissioners	

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				considered rationing the number of hearing aids provided per person. This was not based on analysis of evidence, but was akin to the fact that the right and left hearing aid are not connected by a piece of plastic – e.g. hearing aids are viewed very differently to vision correction and Commissioners thus saw an opportunity to 'reduce costs'. Again the sector and researchers attempted to argue against a non-evidence based narrative with evidence and reasoning. In this case the NICE appears to have tried to develop a research protocol to determine the marginal benefit for providing two hearing aids instead of one. The Committee, not surprisingly, found limited evidence of high quality trials that attempted to assess the effectiveness of one versus two hearing aids in people with bilateral hearing loss – it is also not clear whether such trials, given existing evidence on the effectiveness of hearing aids, would be ethical. That said, the Committee rightly acknowledges gaps in the literature on this specific research question. The issue is that large groups of NHS Commissioners might misread the outcome of this review and misapply it. For example they might believe that one hearing aid is more cost-effective than two or that there is limited evidence that two hearing aids are better than one because of how the guideline has been written up. **In fact what the NICE guideline (inclusive of Appendices) shows is that there is a high level of**	**Thank you for your support of these recommendations. Your understanding of the guideline is correct, the model in Appendix N looked at the fitting of 2 hearing aids, and this was highly cost effective.** **We have added clarification to Appendix O to emphasise that this includes a deliberately overestimated maximum value of the difference in cost between fitting 1 and 2 hearing aids as a maximum value, and this should not be taken as an estimation of a saving that could be achieved by fitting only 1 aid.**

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				confidence that fitting two hearing aids for people with bilateral hearing loss is cost-effective, but limited evidence to support the fitting of one hearing aid when people have a hearing loss in both ears. Put simply, the Committee – e.g. based on the utility weights assigned in Annex N – assumed both ears were corrected. The utility weight was derived from the literature and also based on fitting two hearing aids. The underlying research on the effectiveness of hearing aids is also based on adults fitted with two aids if they have a loss in both ears etc. Therefore the baseline modelling and research conclusions all share data and evidence based on a system where people with hearing loss in both ears are fitted with two hearing aids. What the research questions and economic models do not show is the outcome when one hearing aid is fitted but a patient needs two. In such cases the utility weight (gain) of 0.06 assigned in the economic model (Annex N) would arguably reduce significantly and, given the model is very sensitive to the utility weight, that fitting one hearing aid when a person needs two would be less cost-effective even when controlling for the actual difference in marginal cost in these two scenarios. This could be made clearer. Otherwise there is a risk Annex 0 will be confusing to read for many NHS Commissioners and they, along with other statements about the marginal benefit of a second aid, might wrongly conclude one hearing aid might suffice when people have a hearing loss in both ears.	

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National Community Hearing Association	Full	211	23	**Table 91 represents double counting of cost. This should be addressed – see comments on Annex N and O below.**	**Thank you for your comment; however, we do not agree that there is any double counting in this analysis (other than for a very small proportion of replacement batteries).** **The cost of a mould or thin tube and dome relates to the initial cost of the original mould or thin tube and dome issued when the (second) hearing aid is first fitted. This is not included in the separate price of the hearing aid itself. Costs for replacement or repairs to the mould or thin tube and dome are included in the aftercare costs and so have not been added in separately. Whilst some replacement batteries may be issued during the course of an aftercare appointment, the vast majority are issued to hearing aid users routinely outside of any appointment. No cost has been added for dispensing these batteries, only the cost price of a year's supply of batteries has been added for each year of use.**
National Community Hearing Association	Full	228	Lines not numbered	**Inconsistent wording used. Correction required. Premise for the recommendation should also be reviewed.** **Current text in the Full version reads:** *"What is the clinical and cost effectiveness of monitoring and follow-up for adults with hearing loss post-intervention compared with usual care?* **Current text in the Short version reads:** *"What is the clinical and cost effectiveness of monitoring and follow-up for adults with hearing loss post-intervention compared with no follow-up? Why*	**Thank you for highlighting this. This was an inaccuracy in the short version and has now been changed to 'usual care' in line with the full version. We felt that usual care would encompass different strategies and is more representative of what happens in practice.** **a. The guideline includes follow-up, monitoring and aftercare. There is some degree of overlap but we have tried to review these in separate chapters. Monitoring and follow up are included in chapter 17. This chapter looks at 'when' and 'how' to follow up people with hearing loss. Aftercare is**

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				this is important? The systematic review for the NICE guideline on hearing loss found a lack of evidence to establish the benefits of monitoring and follow-up, how they should be delivered and across what time periods. Robust evidence is needed to establish the clinical and cost effectiveness of monitoring and follow-up, and to understand how and when they might best be used in clinical practice. This will inform future guidelines and policy." (Short Version, page 17) **Feedback** The NICE section on follow-up (Appendices, Full and Short version) includes some very odd assumptions. Although we address this elsewhere, **here we would like to ensure the Committee reviews its research recommendations** 1. Questions in the Full and Short versions are – from a methodological perspective – very different questions. This needs to be addressed, see highlighted text above. 2. We do not object to the search strategy (Appendix G), or the fact that there is a gap in the published evidence base here. It is just not clear a. Whether the process sufficiently separated out aftercare and follow-up (which are different processes in terms of NHS service provision in England). For example the Committee makes no recommendation that people should have access to regular aftercare – e.g. ensuring their aids function, they have batteries and so on – and on examining the documentation it appears	**included in chapter 18. This is more specific to people who are using hearing aids and we reviewed all interventions that would improve hearing aid usage.That includes provision of batteries, peer support and other self-management strategies. Recommendation 1.7.2 is specifically about aftercare for people with hearing aids including repairs, maintenance and sound quality.** **b. Funding research is beyond the remit of this guideline.** **c. We have added the following text to recommendation1.7.1: 'with the option to attend this appointment by telephone or electronic communication if the person prefers.'**

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				this might have been lost within "monitoring and follow up". In effect the Committee says very little on the activity that is responsible for almost 50% of report activity in NHS audiology b. Who would fund research into follow-up care for people using hearing aids? For example, medical devices, in order to provide a benefit, require ongoing care. The modelling assumptions in Annex N and the literature review in Section 15 (Full version) would incorporate a level of ongoing care and it is difficult to imagine what kind of trial the Committee is imagining would help add value to the body of research or what uncertainty it is they are trying to address. c. Given the degree of uncertainty in the evidence and the research question above, is not clear on what basis the Committee recommended one of the most significant changes to the NHS adult hearing service since 2007 – i.e. suggesting everybody should have a face to face follow up. In summary it is not clear what the Committee thinks new research would find, especially given the nature of age-related hearing loss (not unpredictable decline) and basic mechanical nature of hearing aids (medical devices) and its own modelling assumptions (utility weights assigned in Annex N) and the research underpinning these. It would therefore be helpful if the Committee can double-check both its research recommendations and the consensus rationale for them on this topic.	

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National Community Hearing Association	Full	255	There are no line numbers. This relates to the cited text	**Certain assumptions made in this section should be referred to health economists at the National Guideline Centre and the NICE resource impact team. Feedback below.** **Current text reads** *"The committee noted that the NHS reference cost for a face-to-face audiology appointment is £53, whilst the NHS tariff cost for a hearing aid assessment and fitting in 2016 was £268 for 1 hearing aid, or £370 for a pair of hearing aids, and that this tariff included the cost of 1 follow-up appointment [note, NHS England has withdrawn this tariff since the committee first discussed this question]. (page 255, lines not numbered)* **Feedback** This statement contains factual inaccuracies. The NHS tariff structure and commissioning of adult hearing services has changed significantly in recent years. Therefore the usefulness of reference cost data and the prices derived via yardstick competition that are described above, and assumptions based on a pathway designed in 2009 are at best very limited. The underlying assumptions about prices could have a material impact on any analysis by the NICE impact resource team and we therefore offer a summary of issues in our feedback on Annex N and O below. **Current text reads** *"The nature of the issues covered in these appointments will not give rise to any additional costs given the appointments will be taking place and will be of fixed cost"* (page 256) **Feedback**	**Thank you for your comment. We understand that you have disagreements with some of the methodologies involved in calculating NHS reference costs; however, in this passage we were just stating what the NHS reference costs are. We have checked each of these figures and they were all accurately quoted (the face-to-face follow up cost has subsequently decreased from £53 to £52 using updated 2016-17 NHS reference costs and has been correspondingly updated). The usefulness of these data is a separate question. In this instance they were used only as a comparison against the costs in the Finnish health economic study being discussed, noting that English costs appear to be lower than Finnish costs.** **The quoted text from p. 256 unhelpfully gives the impression that we were not interested in the length of follow-up appointments. We have corrected this text to clarify that if appointments become longer due to the requirements of this recommendation (which is likely), then this will lead to increased costs. We apologise for any confusion given in relation to the cost perspective as a result.**

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				Throughout the guideline the Committee appears to shift its cost perspective. It is not always clear whether this has had a material impact, but where this is clear we have provided more detailed feedback. It would however be both helpful and important for the Committee to seek support on costs, where necessary, during the final phase of guideline development.	
National Community Hearing Association	Full	267	There are no line numbers.	**We are concerned that a bias has been introduced into the guideline. The best way to address any real-world impact of this particular issue is to change the following text to an already agreed definition by the sector and NHS England.** **Current text reads** *"Audiology. A healthcare science encompassing hearing, tinnitus and balance. Audiology services provide assessment, identification, intervention and rehabilitation services for children and adults with suspected or confirmed hearing, tinnitus and balance disorders."* **Change to an abridged version of NHS England's definition** *Audiology is a healthcare science encompassing hearing, tinnitus and balance and is predominantly provided by NHS healthcare science staff and hearing aid dispensers in conjunction with many partners. In the UK, it has developed with combined functions as a diagnostic and treatment discipline. In general, use of the term audiology refers to audiology departments and hearing care providers and "audiologist" refers to audiologists, clinical scientists and Hearing Aid Dispensers (HADs)".*	**Thank you for your comment. We have tried to introduce clarity and simplicity to this guideline document by considering hearing loss as a sign and not a diagnosis and by only using diagnosis for the fundamental underlying cause. We have looked at the definition you are referring to and think that this may complicate matters by referring to diagnosis. Therefore, we would prefer to keep the original wording of the definition. This definition does not specify any location or providers of audiology services and is therefore broad enough to cover all providers without emphasising or omitting any. It makes no mention of secondary care services.**

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				(Reference, Appendix 3, page 55 in NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups) **<u>Explanation</u>** **1. Bias** Throughout the guideline there is a secondary care perspective on the provision of adult hearing services. Referral guidelines have, as we have noted elsewhere, been selectively used. The definition of audiology is also now outdated and does not reflect NHS England's agreed definition. These collectively mean that the guideline appears to be biased toward a specific setting and professional group, and yet this is clearly not what NICE intended. For example it is impossible to imagine that "acute trust centric" terminology that appears in various sections of the guideline would be present if the Committee membership was more representative of the NHS workforce providing adult hearing care today in England. The most pragmatic and sensible way to address this shortcoming is to change the definition of audiology in the glossary to a more neutral and more widely agreed NHS England and sector definition. This would mean all other references to audiology departments etc. throughout the guideline could remain as is. We therefore provide an abridged version NHS	

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				England's definition of audiology above – the definition was agreed by the entire sector, NHS England and cleared Gateway and forms a key part of national guidance (NICE can find the full version of the definition on page 55 of the framework[xxxviii]). **2. Inconsistent with the final guideline scope** Current text is not consistent with the agreed terms of reference in the final guideline scope, for example it states • *"Providers now include high street chains as well as local audiology departments. The guideline will be relevant to all providers of adult services in England" (page 14 Appendix A: Scope)* Changing the definition of audiology will ensure the final guideline is more consistent with this key term of reference in the final guideline scope. Changing the definition of audiology will also address references during discussions to "audiology departments" etc, which at times suggested that certain Committee members were thinking very much about how they work in their region rather than how NHS adult hearing services are delivered in about 60% of England.	
National Community Hearing Association	Full	267	There are no line numbers.	**We have had complaints about this issue in the past. If possible please review.** **Current text reads** *"Sound levels are measured in dB = decibels. There are several scales of decibels and the one used for measuring hearing using a pure tone audiogram is dB HL (decibel hearing level). Where dB is used*	**Thank you for your comment. It is perhaps not clear unless you have read many of these papers that most do not qualify the dB scale when referring to hearing levels. We are not referring to a difference and the definition has been changed to make this clearer. The guidelines are taking a reasonable assumption on the basis that dB SPL or dB A**

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				alone, as in reviewed papers, it is understood to refer to dB HL." **Feedback** Independent audiologists have complained to us in the past that this reasoning is incorrect. That dB HL refers to a reference level, whereas dB is used to denote a difference and it is not correct to suggest "where dB is used alone, as in reviewed papers, it is understood to refer to dB HL". Although we are in many ways indifferent to this, given past complaints, we would appreciate it if this can be amended.	**is rarely used in clinical adult audiology. It is poor practice for research papers not to specify the type of dB.**
National Community Hearing Association	Full	267	There are no line numbers.	**Please consider using the same bandings that NHS England <u>already uses</u> and that will be used in a forthcoming national Joint Strategic Needs Assessment (JSNA) guide for hearing loss** (coproduced by NHS England, the LGA and Association of Directors of Public Health et al.). **This will ensure consistency in the English NHS. It will also avoid using what are now out of date categories.** **Current text reads** *"Hearing loss, as defined by the World Health Organization (2008), is a hearing threshold level greater than 25 dB HL averaged across 0.5, 1, 2, and 4 kHz. The British Society of Audiology (2011) describes the levels of hearing loss using a pure tone average of 0.25, 0.5, 1, 2, and 4 kHz as: 20–40 dB HL: Mild hearing loss, 41–70 dB HL: Moderate hearing loss, 71–95 dB HL: Severe hearing loss, In excess of 95 dB HL: Profound hearing loss"* **Change to**	**Thank you for your comment. The bandings come from the reviews; they are in the glossary to provide explanation for the systematic reviews, we are not recommending them. The committee has looked at the Commissioning Framework and found that there was ambiguity in how bands of hearing loss are defined. The average is not specified but there is a suggestion that it is across all frequencies; Stevens et al base their definition on a four freq average 0.5,1,2,4kHz. Furthermore, there is no rationale that could be seen in Stevens et al to explain their definitions other than an Expert Group was convened to discuss. Having spoken to one of the lead authors on the Commissioning Framework, it seems that the GBD definitions were added to provide a measure of the effects of hearing loss rather than to define the different levels. There doesn't seem to be any mention of mild, moderate or severe. Therefore, the committee does not believe that the definitions in the**

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				Global Burden of Disease Group (GBD) expert definition of mild to profound hearing loss. **It can be found in table 1 of Stevens et al. 2011**, Global and regional hearing impairment prevalence: an analysis of 42 studies in 29 countries European Journal of Public Health, Vol. 23, No. 1, 146–152 https://academic.oup.com/eurpub/article/23/1/146/460112. **Explanation** We have had complaints about this in the past, with claims that ▪ World Health Organisation (WHO) definition is not evidenced based and nobody can validate how it was derived. We have asked the WHO about this and it accepts there is little evidence to support the current classification system. It is likely to have been created many years ago by consensus. The WHO is in the process of reviewing this. ▪ BSA definition is, apparently, only a slightly different version of the WHO criteria. We are not aware of any evidence base or rationale to support the categories here either. ▪ Global Burden of Disease Group (GBD) expert group definition is the most transparent and up to date descriptive model. NHS England already uses an abridged version of the GBD criteria[xxxix]. A forthcoming national JSNA guide (coproduce by NHS England, the LGA and Association of Directors of Public Health) will also use the NHS England template. Therefore to ensure greater consistency in the	**guideline need to be changed.**

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				English NHS we would ask the Committee to use the full GBD criteria, which can be found in table 1 of Stevens et al. 2011, Global and regional hearing impairment prevalence: an analysis of 42 studies in 29 countries European Journal of Public Health, Vol. 23, No. 1, 146–152 https://academic.oup.com/eurpub/article/23/1/146/460112. This is in our view would also better reflect the Committee's recommendations to move away from an outdated threshold only based approach to describing hearing loss and its impact (page 204 Full version). The Committee notes claims that the *"BSA criteria [fits] best with current understanding and practice in the UK"* (page 204). This might be confusing what the research community uses with what is used in actual clinical practice. If any Committee member has evidence to support using the BSA criteria over the criteria noted in the referenced GBD study we would be happy to review this. However to the best of our knowledge there is no evidence base or up to date rationale to support the use of BSA criteria. Although we acknowledge the Committee includes at least one BSA member, and possibly more, we do not think this alone justifies using the BSA definition of mild to profound hearing loss. The NCHA is also a BSA member and we would prefer that NICE use the GBD criteria for the reasons given above.	
National Community Hearing Association	Full	268	There are no line numbers.	**Use a more clinically meaningful/accurate definition of hyperacusis and one that is already used by the NHS.** ***Current text reads***	**Thank you for your comment. We have amended the recommendation and added a definition to the glossary.**

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				"*Hyperacusis. Intolerance to everyday sounds.*" ***Change to*** *"Hyperacusis. Finding loud noises extremely uncomfortable, or certain noises particularly annoying, or a fear of certain noises, or experiencing pain when hearing ordinary sounds. It can range from being a minor nuisance to having a major impact on quality of life[xl]."* And potentially add, if possible, "*Hyperacusis in this guideline only covers cases where an adult has hearing loss and hyperacusis."* **Feedback** The evidence reviewed in the guideline did not cover hyperacusis without hearing loss. In its current form hyperacusis is also poorly defined. Also, because of how it is currently framed, presented and defined it can easily be misread and lead to inappropriate referrals (we provide feedback to this effect elsewhere and recommend changes). We are also concerned that the existing definition could facilitate up-coding and gaming of referral pathways at a cost to the NHS and taxpayer. We suggest change above to reduce these risks elsewhere in our feedback.	
National Community Hearing Association	Full	General	General	**Referral pathways – missed opportunities and concerns. Feedback and recommendations below.** We strongly support the Committee removing arbitrary and non-evidenced based age barriers –	**Thank you for your comment. This guideline did not consider research questions regarding service organisation (other than for earwax removal), and so the committee is not able to make recommendations on these matters. However, the committee is aware**

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				e.g. 50, 55 and 60 etc. – from NHS Direct Access Audiology. This is long overdue and will start to address inequalities in access between private and NHS patients. However we do have some concerns about the referral criteria and how these miss opportunities to improve care and reduce costs in line with NHS England Mandate and objectives. Given the low level of evidence on which the Committee has made its existing recommendations, we feel it is vitally important the Committee revisits its recommendations linked to referral criteria. Although we acknowledge that detailed Committee notes recognise that not every eventuality can be covered (Full version), we do feel that more can be and should be done to improve referral criteria. We set out our concerns and recommendations below. **We are concerned about why the Committee:** ▪ has not taken the opportunity to make clear – based on risks, evidence and economic grounds – that GPs do not need to be involved in the pathway for the vast majority of adults with hearing difficulties; and this despite NHS England's commissioning framework which the Committee cites several times, showing NHS Commissioners in England have started to remove the GP from the adult hearing pathway to improve access and reduce costs. It is a given that any adult with hearing difficulties with the ability to pay has always been able to access care directly from an audiologist in	**that direct access audiology services operate in some parts of the country and has not made any recommendations precluding or discouraging direct access. The committee does not consider and has not recommended that a GP needs to be involved in every case. The organisation of the care pathway remains a matter for local determination.** **Decisions about referral to secondary care always have to be based on the history of the patient and whether there has been change. This is a decision for those with full medical records to refer to – usually a GP.** **The term 'complex audiology pathway' has been adjusted to 'specialist audiology service for diagnostic investigation, using a local pathway'..**

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				England[xli]. However if the same adult does not have the ability to pay they are typically obliged to visit their GP first. Given that virtually no-one seeks advice for hearing problems without there actually being one and that adults typically delay referral for up to 10 years, this NHS system is, and always has been, one that uses the GP as an economic gatekeeper without ever analysing the evidence for or actual costs of doing so. It is therefore extremely disappointing to see an evidence based body like NICE continuing to support a costly unevaluated system which will make many of NICE's own recommendations more difficult to implement. For example the Committee notes on several occasions that adults who report hearing difficulties to their GP are often not referred (e.g. Full version page 18, 93); and this now needs to change with GPs referring sooner rather than later (e.g. Full version page 92 and 94) and that there is a strong evidence and economic case for doing so (Annex N). The Committee also, rightly, notes that many people might not report their hearing difficulties in the first instance (e.g. Full version page 94). Yet the Committee has continued to support a system that relies on the GP to initiate referral to audiology. **We urge the Committee to review the evidence and risk base for their recommendations, and the economic case for requiring a GP referral.** For example • taking GP costs as £36 (cited in Table 93,	

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				Annex N, page 485) and making a conservative assumption that 400,000 GP appointments could be saved per year by not requiring adults with hearing difficulties to require a GP appointment before accessing NHS hearing care, taking this unnecessary step out of the pathway **could save £14.4 million per annum in direct GP costs** and significantly more in terms of opportunity costs associated with wasted GP visits for what are largely administrative exercises to arrange a referral to Direct Access Audiology • alternatively, it is also possible to refer to the model used in Annex N to sense check the role of the GP. Assessing the prevalence and risk of disease of the ear in an adult population without medical contraindications (signs/symptoms), makes it very difficult to justify the need for a medical work up by a GP prior to a hearing assessment[xlii]. After this exercise it is possible to conceptualise the marginal cost-effectiveness of a GP in this pathway. The utility weight assigned in the model is attributed to providing diagnosis and the primary intervention (hearing assessment and/or hearing aids) for the vast majority of adults that present with hearing difficulties. The Committee can assign a fraction (that it sees fit) of that utility weight to the GP role and assess the marginal cost versus (effect) benefit, then estimate what the incremental cost effectiveness ratio (ICER) is likely to be. This is likely to show an ICER approaching an infinite sum in a basic model, and likely to perform only marginally better in a more complex model – i.e. the use of GP time is	

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				not likely to be cost effective nor significantly reduce risks[xliii]. Even if the Committee does not feel comfortable contextualising risk and benefits in the same way as other evidence-based bodies have done[xliv] - e.g. because of a lack of resource, expertise or risk aversion – **it should, at the very least, make clear that** • **the requirement for a GP referral to access NHS hearing care is historical and not supported by strong clinical or economic evidence** • **some NHS regions are <u>now</u> offering open access audiology and** • **that a GP referral is not required.[xlv]** [Note: although NICE guidelines do not cover private provision, it is important to note that today an adult can walk into a private audiology practice anywhere in the UK and have their hearing tested without a GP referral. Put simply, the need for a GP referral is only required for NHS adult hearing services. This GP visit costs the NHS £36 (Annex N) and – given the prevalence of diseases of the ear etc. – this GP visit seldom involves a medical assessment due to reported hearing difficulties. These GP visits therefore come at a significant opportunity cost for the NHS and patients – e.g. GP visits used, in effect, to process a Direct Access Audiology referral letter cannot be offered to patients that might be in urgent need of a GP assessment]	

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				▪ has not made it clearer than adults with hearing difficulties can be fitted with hearing aids and referred on for medical opinion where appropriate – e.g. in the same way there might not be any clinical benefit in delaying prescribing a magnifying device to a low vision patient, often people will benefit from having a hearing assessment and/or hearing aids at the same time as, or after, being referred for a second medical opinion. We think this is a missed opportunity to clarify that the provision of hearing aids does not have to be delayed solely on the basis a referral to ENT is required for example. **We ask the Committee to clarify this point and include it in its recommendations on hearing aids** ▪ has not made it clearer (in the Short version and recommendations in the Full version) that although the signs and symptoms listed should be referred on for medical opinion, in many cases people will not be found to have a medical condition. For example given the relative low prevalence/incidence of ear disease many referrals to ENT and audiovestibular medicine are unlikely to require any treatment – i.e. they will often be reassurance, differential diagnosis or false positive referrals, for example most people referred for clinically significant asymmetric hearing loss will also be discharged back to the GP and/or audiology. **We ask the Committee to make clear that ENT and audiovestibular medicine and other specialities should also refer back to audiology if an adult is likely to benefit from hearing aids, and that there is <u>no</u> need for the vast majority of adults who need**	

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				to be fitted with hearing aids to be coded as being on "local complex audiology pathways". This is currently a significant issue in the NHS, with certain audiology services claiming that if GPs refer via ENT and the person has age-related hearing loss – e.g. was a false positive referral – then they still fit these adults with hearing aids in their "complex audiology" clinics. These clinics often receive a higher level of reimbursement from the NHS and also do not have the clear service specifications and standards in place, which the self-described "non-complex" services do. If the Committee would like examples of this we can forward these separately in confidence. The Committee should also review section 8.4.2 on page 36 of NHS England's commissioning framework, a document cited by the Committee several times – i.e. to which it has access and can use. This section of the framework was written in response to concerns about coding patients away from better value for money pathways, often on the basis of spurious claims about clinical risks and 'evidence'. It states in the final paragraph of the section • *"Complex services should include a clear basis on which users are returned into the non-specialist care pathway and can benefit fully from the choices available"*[xlvi]. (Please note in this context, based on criteria in Appendix 3 and Appendix 8 of the framework, complex is read as "medical led"	

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				and "non-specialist" as "non-medical audiology"). ▪ has not taken the opportunity to reduce the risk of repeat referrals. **We would ask the Committee to add a qualification line to the final bullet point in recommendation 7 to minimise the risk of repeat referrals for longstanding abnormalities which have already been assessed in the past**	
National Community Hearing Association	Full	General	General	**It is very important that the Committee is aware of the significant difference between the NHS Standard Contract and NHS England's model service specification. Based on this it might need to review certain assumptions it has made. Feedback and advice provided below.** In several sections of the Full guideline (page 97, 215, 229 and 255) the Committee incorrectly refers to the NHS Standard Contract. This is an important issue because it suggests the Committee might not understand a key document it has reviewed. For example on page 97 it states: *"The committee agreed that an example of what comprises an audiological assessment is provided in the assessment guidance set out in the NHS standard contract for adult hearing services. The committee agreed that the components of the assessment listed in that document should be included as part of the initial assessment and reflect good practice, but noted that there is wide variation in the comprehensiveness of assessments undertaken in current practice and in the application of the NHS*	**Thank you for your comment. The committee is aware of the difference between the documents and apologises for the use of the wrong name in some points in the full guideline. These references have been checked and corrected.**

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				contracts across the UK" The Committee is actually referring to a model service specification, **not** the NHS Standard Contract. The model service specification is included in NHS England's 2016 *Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups* – a document the Committee cites on several occasions. That model service specification is a template that NHS England hopes will be incorporated into the NHS Standard Contract when NHS Commissioners procure an adult hearing service. The issue is that every single NHS adult hearing service in England (not the UK) is commissioned using the NHS Standard Contract. However, many NHS Standard Contracts do not have a service specification for adult hearing services. Therefore the variation the Committee refers to is often driven, in the main, by the fact not all NHS Standard Contract's have an adult hearing service specification. In confusing the Standard Contract and model specification, every time the Committee makes an assumption about the Standard Contract it is overlooking that many regions in England commission adult hearing services without any reference to what the service should provide and without any contractual standards for quality or explanation of who should be fitted with two aids or receive a follow-up. **This also means that every time the Committee makes this incorrect**	

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				reference its inferences are weak as a result. It is very important that the Committee does not continue to omit or ignore key developments in the NHS (England) adult hearing service since 2012, or otherwise selectively refer to the grey literature. The **following facts are important to note and factor into the final phase of guideline development**: ▪ Prior to 2012 very few, if any, NHS adult hearing services in England had a service specification. Instead each service was commissioned and paid to provide adult hearing services based on local norms (and typically based on a tariff structure published in 2009). Making it impossible for the NHS to know what it was paying for or what exactly patients were getting – e.g. whether they were fitted with one or two hearing aids, or ever offered a follow-up appointment[xlvii,xlviii]. ▪ With the introduction of Any Qualified Provider (AQP) in 2012, an adult hearing service specification was published. This was the first full service specification for adult hearing services[xlix,l]. ▪ In 2015 the NHS regulator Monitor (now NHS Improvement) independently reviewed the NHS adult hearing service in England and published a very detailed report – a report many Committee members would be aware of, and that was submitted as evidence during the guideline scope consultation, but has not been discussed at all. ▪ Monitor reviewed AQP (which it refers to as "choice" throughout its report)[li]. It found **that NHS regions that introduced AQP had improved transparency, standards and value**	

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				for money. Monitor's report shows this was largely due to the fact that all AQP NHS Standard Contracts have a service specification whereas many other NHS Standard Contracts do not[lii]. ▪ The Department of Health and NHS England Action Plan on Hearing Loss committed to producing a commissioning framework in response to Monitor's findings[liii]. ▪ **This is why section 8.2 (page 28) of NHS England's commissioning framework explains in detail why a service specification is important and why NHS England refined the 2012 AQP service specification**[liv]. ▪ **This is also why** the Committee has been able to review the model service specification and why **understanding the difference between the model service specification and NHS Standard Contract is so important in the context of this NICE guideline and its Recommendations.** The Committee refers to NHS England's commissioning framework on multiple occasions - i.e. this is not new information that is being introduced into the NICE process. However it is not clear whether the actual document was ever reviewed in any meaningful detail. Reviewing the document would show that current unwarranted variation across the NHS adult hearing service is in large part due to many services not having a clear service specification in place. **This is also why it is so important not to use the term "local complex audiology" in NICE guidelines**. In a real-world setting non-evidence	

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				based "local complex audiology pathways", in the vast majority of cases, remove adults with hearing loss from an NHS Standard Contract with a detailed adult hearing service specification on to a NHS Standard contract without a detailed adult hearing service specification. This is why we are concerned certain gaps in the guideline – which appear to stem from a lack of commissioning experience at a Committee level – risk making services less accountable and worsening standards of care for many adults with hearing loss. This is also why we are opposed to the introduction of non-evidence based pathways and text such as "complex audiology" by NICE. The introduction of this wording, in its current form and context, only serves to benefit providers at a cost to patients, the NHS and taxpayer (more detail on this issue is provided below).	
National Community Hearing Association	Equality impact assessment	3	No line numbers provided by NICE (Section 3.3)	We agree with comments in section 3.3. However, we think it would be helpful to document that to date several NHS Clinical Commissioning Group (CCGs) have attempted to ration access to NHS hearing aids based on age (typically suggesting an age of 50 and older – e.g. Enfield CCG, South Norfolk CCG and others) and other criteria. Age is a protected characteristic in the Equality Act 2010 and therefore this particular issue, in light of the guidance and recommendations to offer more people hearing aids rather than ration, does need to be addressed. At the very least, either in the Equality Impact	**Thank you for your comment.** **The guideline states provision of hearing aids should be based on need and that provision of hearing aids should not be delayed. The equality impact assessment refers to the relevant chapters.**

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				Assessment or the actual guideline itself, NICE should make clear that there is no evidence at all to support rationing access to NHS hearing aid provision based on age. We have suggested a form of words in our feedback and if this is accepted then the Equality Impact Assessment might document this.	
National Community Hearing Association	Equality Impact Assessment	3	No line numbers provided by NICE (Section 3.4)	We do not agree that the answer to section 3.4 is "No". The Committee recommends a face-to-face follow-up for all adults fitted with a hearing aid. This overlooks some issues that might arise by applying a one size fits all recommendation based on flawed reasoning and a lack of evidence. Although we tackle the detail in our general response above, we think the following points are important for the Equality Impact Assessment ▪ If the recommendation for a face-to-face follow-up for every adult is implemented then many NHS providers are likely to have significant capacity issues. This is likely to result in everybody being offered a face-to-face follow-up, resulting in adults that do not want or need one (e.g. longstanding hearing aid users that have been refitted and others that can and are happy to use the phone and other remote care options) in clinics (reducing capacity) which cannot then be used to offer multiple follow-up visits to adults that need more support (e.g. those with the greatest needs and who might need several follow-up visits to benefit from the intervention).	**Thank you for your comment. The committee has reconsidered the recommendation and has amended this to facilitate a more flexible approach to delivery of follow-up services including by telephone or remote devices. The equality impact assessment has been amended to reflect the change made.**

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				▪ Technology is also improving, making remote care more possible. This means those who are not able to easily attend a face-to-face appointment are likely to be disadvantaged if a universal one size fits all face-to-face follow-up recommendation is implemented by local NHS Commissioners based on this Committee's opinion. ▪ Where remote follow-up options exist and patients are happy and able to use them, then forcing them to have a face-to-face follow-up increases cost incurred by patients – e.g. hospital parking and additional support required to attend a clinic etc. Given the average NHS hearing aid user is 74 or older and some might need additional support with transport this is an important consideration. The recommendation for a universal face-to-face follow-up therefore could result in greater costs for some individuals - e.g. those on low incomes might actually be disadvantaged by the Committee's recommendation in certain circumstances. To offset these risks we have recommended an alternative form of words in our response. If the Committee choses to stick with its recommendation then the Equality Impact Assessment should warn that the NHS has to significantly increase its capacity to ensure that people that need the most care and follow-up support are able to access it as more appointments will be given to people who might otherwise accept and benefit from remote follow-ups.	
National Community Hearing Association	Equality Impact	3	No line numbers	**The Impact Assessment does not address question 3.6. This should be reviewed.**	**Thank you for your comment. The committee recognises some people may**

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	Assessment		provided by NICE (Section 3.6)	NHS England, Monitor (now NHS Improvement), the Department of Health and the sector's main patient groups have all promoted the goal of improving access to adult hearing services[lv]. This NICE Committee has been very firm on the benefits of providing ear wax management in primary and community based settings, but has not explained the advantages of improving access to adult hearing services (the main population that this guideline will cover). This is important because the average age of a NHS hearing aid user is 74 or older. Hearing loss is a long-term condition with ongoing care required for life – e.g. on average a patient will visit their provider twice per year. Attending centralised hospital based service to access non-medical hearing care has been something patient groups like Action on Hearing Loss (formerly the RNID) have argued against since 1988. It is for example clearly problematic to expect people to attend hospital settings to repair hearing aids, yet NHS hospitals in England report 1.1 million aftercare episodes each year. The frequency of travel to hospital settings to access NHS hearing care not only makes services less accessible for patients, it also increases costs they incur. Moreover the vast majority of hospital audiologists when surveyed agreed providing care closer to home is major benefit for patients in terms of access and ongoing care.[lvi]	**have difficulty accessing services due to mobility difficulties or availability of transport; however, this applies to many people accessing NHS services and is not restricted to those with hearing loss. The committee has cross-referred to the Patient Experience guideline, which makes generic recommendations for tailoring healthcare services according to the needs of the patient. The committee considered these to be applicable to those with hearing loss. The committee is aware that removing earwax is currently provided within primary and community services, but the delivery of other hearing services is determined locally and outside of the scope of this guideline.**

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				We are therefore very surprised that the Committee is the first group of experts, that we know of, to review the NHS adult hearing service in England and not even mention the importance of making services more accessible and providing care closer to where patients live. This is not due to a lack of evidence. There is no strong evidence to support the Committee's recommendation on providing earwax management in primary and community based settings. However there is a broad consensus on making adult hearing services accessible in primary and community based settings so people do not have to travel to acute hospitals to access non-medical care[lvii]. Furthermore, people with the ability to pay can already access care closer to home. They do not have to visit their GP for a referral or have to travel further to access adult hearing services. People who pay privately therefore benefit from much better access, the inequality in access is created by the ability to pay. In the NHS the barriers to access are created by system design which imposes a barrier to access in terms of cost (time, economic and other) associated with travelling further than necessary to access non-medical adult hearing services. The Committee has in our view therefore overlooked this important opportunity to remove or alleviate, or difficulties with, access to services and therefore missed the opportunity to advance equality. We hope that NICE will ensure the Committee reconsiders the evidence and its reasoning and takes account of NICE's obligation to advance equality.	

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National Community Hearing Association	Equality Impact Assessment	General	General	The guideline has little to say on severe to profound hearing loss and the needs of people who are part of the Deaf community. We have provided feedback to minimise the risk that these groups of adults with hearing loss feel excluded by the NICE guideline. Please note that we understand these groups are, by definition of the scope, included. It is because they are not mentioned separately however that they might feel their needs have not been considered.	**Thank you for your comment.** **The committee considers that other than hearing aids the recommendations made within the guideline are relevant to this population, and this is why they have not been commented on within the equality impact assessment.**
National Community Hearing Association	Appendices (B)	15-37	General	We note that certain biases in the NICE draft guideline might have emerged ▪ by chance ▪ because NICE has used a template to draft the guideline, forgotten feedback and subsequent changes it made to the draft guideline scope, and/or not checked text in the final guideline scope ▪ due to Committee membership ▪ other reasons ▪ or a combination of the above. We have reviewed Appendix B and noted the previous declarations of interest. On analysing guideline documentation however, we think it is important for NICE to check again with the Committee whether they have been or are members of sector specific organisations. We appreciate how being a member of an organisation – be it a trade organisation, professional organisation or a different descriptor that a sector organisation uses to describe itself – might seem trivial and therefore innocently not be reported. It	**Thank you for your comment. The committee has declared interests according to the NICE conflicts of interest policy that was in place at the time this guideline was developed. Committee members are required to declare if they hold an office within a professional organisation but this would not preclude them from participating in committee discussions. Membership of an organisation alone, without holding any office, is not a declarable interest. All declarations of interest have been published so that this information is transparent and available to the public. The guideline has been published in draft form and subject to consultation so that stakeholders can feed back with suggestions about how any specific recommendations can be improved. These comments have all been considered by the committee in finalising the guideline.** **The term "complex audiology" has been adjusted to 'specialist audiology service for diagnostic investigation, using a local pathway'.**

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				might also not make a significant difference to the final guideline if by accident past memberships were not declared. It is however, in our view, important to double check in order to reduce the risk of any challenges at a later date. If there are new declarations of membership, we would ask NICE to consider whether certain members of the Committee need to be excluded for final discussions on referral criteria, the use of the term "complex audiology", the definition of audiology and providing adult hearing services in primary and community based settings.	
National Community Hearing Association	Appendices	465	30	**Please ensure health economists at the National Guideline Centre and the NICE impact resource team are aware that NHS Commissioners also commission five year pathways. This could have a significant impact on any further analysis.** The Committee opts to use a three year time frame per hearing aid pathway. This is what current norms dictate and therefore we fully understand the reasoning. However, we would like to ensure economists at NICE and those working for the NICE resource impact team are aware that some audiology providers are offering adults and Commissioners five year pathways. They do this by ensuring there is effective and accessible aftercare provision and hearing aids last longer as a result. Changing the cycle time to five years results in a significant savings for the NHS and taxpayer. We therefore ask the NICE resource impact team to inform providers and Commissioners that a five year pathway exists and can deliver significant savings for the NHS over time. However for this to be effective	**Thank you for your comment. This has been passed on to the NICE resource impact team.** **The committee is aware that some areas use a 3 year recall frequency, some areas use a 5 year period, and other areas or providers do not automatically follow up patients at all, only waiting for them to self-report. For this reason the committee has added an additional recommendation that providers consider implementing automatic recall, but without specifying a specific frequency due to the lack of evidence on this.** **The model chose 3 years as the most commonly used and in line with some payment systems (and being the most expensive option), but the committee has not recommended this interval.** **In addition, the model cautiously assumed that all hearing aids would be replaced every 3 years, which the committee would not**

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				ongoing follow-up care and aftercare must be provided. We would be happy to provide additional detail, including on costs, if that would be helpful.	**recommend. Even if reassessment is every 3 years, hearing aids should only be replaced when needed.**
National Community Hearing Association	Appendices	Appendices N&O (Economic)	General	**Please forward this section to health economists at the National Guideline Centre and to the NICE resource impact team (or other entity commissioned to perform a budget/cost impact assessment or any further economic analysis).** **This section has the following two goals:** 1. the health economists and Committee ▪ have a formal record of our feedback on Annex N and O ▪ can address any concerns raised 2. the NICE resource impact team (in its budget impact assessment) ▪ is aware of fundamental issues with the cost inputs and other assumptions in Annex N and O ▪ does not extrapolate costs used in Annex N and O, as these will grossly overestimate costs from a commissioner, and ultimately NHS/taxpayer, perspective ▪ is aware of assumptions made about face-to-face follow up, aftercare and other key variables which do not stand ▪ can ensure that potential biases – e.g. selective use of and reference to grey literature – do not have an adverse impact on patients, the NHS and taxpayer ▪ understands why the non-mandated tariff for adult hearing services has been removed by NHS Improvement and NHS England, why reference cost data no longer reflect true NHS cost for adult hearing care in England, and why	**Thank you for your comments. This section has been considered by the NGC health economist and forwarded to the NICE resource impact team for their consideration.**

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				these critical issues need to be factored into the final NICE guideline and any budget impact assessment. **First we provide feedback on the economic analysis in Annex N and O. Then we provide feedback for the NICE resource impact team.** **1. <u>Economic modelling in Annex N and O</u>** **<u>Agree</u>** ▪ Overall, we welcome and support this analysis by health economists at the National Guideline Centre (NGC). ▪ We agree that prior to this there were no health economic studies supporting the provision of digital hearing aids by the NHS in England (Appendix N, lines 9-10 page 450). ▪ We agree that existing health economic studies on this subject were only ever partially applicable to a UK setting and had potentially serious limitations (Appendix I.11). ▪ We fully support not using EQ5D for utility weights in this particular case, and agree with the reasons provided (lines 22-244, pages 456-457 Annex N) and find the reasoning to be consistent with a comprehensive HTA published in 2014[lviii]. ▪ Given many NHS Commissioners have attempted to ration access to NHS hearing aids we understand why the Committee was very conservative with key inputs. For example, we understand why costs were overestimated. ▪ Although we disagree with certain modelling assumptions, our feedback would not change the conclusions or recommendations. For example our feedback would only further improve what is	**Thank you for your agreement.**

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				already a very favourable incremental cost effectiveness ratio (ICER). ▪ We therefore agree with the recommendations made – i.e. that providing hearing aids is cost-effective. Where we disagree, and where this different perspective is likely to have an adverse impact and therefore needs to be addressed or is important to simply put on record, is detailed below. **Disagree** ▪ Although we agree with how the flow of patients has been modelled in Annex N there are significant contradictions with referral criteria text in the Full and Short version. The economic model and text in the guideline cannot both be correct. In this context the text in the economic model is OK. Text in the guideline needs to be redrafted (we explain how in detail above). However if text in the guideline is not changed then that creates some significant issues with assumptions in Annex N and thus the recommendations – i.e. the Committee cannot have it both ways. For example, the guideline recommends referring adults with "hearing loss that is asymmetrical" (Short version, line 20 page 4; line 34 page 12 Full Version) to ENT, audiovestibular medicine service or "audiology using a local complex pathway". This is not correct nor evidence-based. The term "local complex audiology pathway" in this context is both inappropriate and not supported by evidence and we have therefore	**The pathway modelled in the economic analysis does not necessarily match pathways recommended by, or consistent with recommendations made by the committee in the guideline. The modelling was conducted in advance of the recommendations being made by the committee, to inform those recommendations. In addition, the model is a simplification, showing one possible pathway (chosen as this is a common route and the most expensive likely pathway), whilst the committee is aware of a variety of pathways currently in use in England.** **The references to asymmetric hearing loss are addressed in response to other comments. This is not intended to refer to any asymmetry, only to significant asymmetry.** **The term "local complex audiology pathway" has been adjusted to 'specialist audiology service for diagnostic investigation, using a local pathway', as addressed in response to other comments.**

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				asked for it to be removed (see above). Leaving it in the guideline in its current format significantly changes the assumptions in Annex N. For example the utility weight used would need to be changed (lowered). This is because of how NHS services are commissioned, which we explain above in detail, and the capacity constraints that would arise would make it very unlikely that a 0.06 utility weight could be justified (e.g. because it is based on quality care being provided). Given the model is particularly sensitive to utility weights, and the costs associated with this alternative form of words are very different, a different model should be created if the Committee is not willing to change existing non-evidence based referral text. The second point is that the vast majority of adults with age-related hearing loss (those modelled in Annex N) are likely to have a worse ear, and by definition "hearing loss that is asymmetrical". The modelled pathway is therefore very different to the referral pathway that emerges when following text in the main body of the guideline. This, significant ambiguity, needs to be addressed. The Committee might be tempted to address this by ○ simply redefining "hearing loss that is asymmetrical" to something which clarifies a GP should refer a clinically significant level of asymmetric hearing loss Whilst this would be an improvement on existing	**The committee has noted in response to other comments that direct access audiology is currently an option in some areas, and may become so in other areas. The committee did not consider the question of how local services should be organised with respect to accessing audiology, but made no recommendations to limit direct access.**

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				text, it would fail to address the issue. For example it would still lead to unnecessary referrals because most referring GPs have no way of measuring clinically significant asymmetric hearing loss. There is no evidence based reason nor anything in the NICE guideline documentation (Appendices or Full version) that prevents all adults that have hearing difficulties, without other symptoms that warrant a medical referral, first being referred to direct access audiology. Audiology can then assess any level of asymmetry to see if it is clinically significant, and refer on if appropriate. In a real-world setting this is what the model in Annex N does. It is therefore both more realistic and evidence based than current referral text in the actual guideline. We have therefore explained how Recommendation 6 and 13 can be amended to improve the referral criteria (see above) and those changes would leave the economic model in Annex N as it is. ▪ We understand that the Committee might not have known about the variables that make up the NHS reference cost line "aftercare". However by adding cost data from Wales there is double counting of costs in the model. We ask that duplicate costs (batteries, moulds and tubes) be removed from the model in order to avoid the risk that any stakeholders misusing or misunderstanding such data.	**We do not agree that there is any double counting in the model, other than for a very small proportion of replacement batteries. The cost of moulds or thin tube and domes relates to the initial cost of the original moulds or thin tubes and domes issued when the hearing aid(s) are first fitted. These are not included in the separate price of the hearing aids themselves. Costs for replacement or repairs to moulds or thin tubes and domes would be included in the aftercare costs and so have not been added in separately. Whilst some replacement batteries may be issued during the course of an aftercare appointment, the vast majority are issued to hearing aid users routinely outside of any appointment. No cost has been added for dispensing these batteries, only the cost price of a year's supply of batteries has been added for each year of use. We have clarified that the costs for thin tubes and domes was sourced from the NHS Supply Chain catalogue. The costs of moulds is based on the average cost of all moulds (and mould extras) ordered in a 6-month period by 1 audiology clinic (which happened to be in Wales, which is not relevant to the costs).** **The cost of hearing aid assessments has been changed to CA37A (Outpatient appointments, Audiology). Thank you for**

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				Although we understand that removing these costs will have little to no practical impact on the ICER, and thus the actual recommendations linked to this, for the reasons given we still think that duplicate costs cited in Table 93 pages 465-466 (Annex N) and Table 106 page 477 (Annex O) should be removed.	**pointing this out.** **Costs used by the committee use NHS reference cost data where possible, in line with NICE policy, but err on the side of over- rather than underestimating costs that are less certain (such as the number of aftercare appointments per year, and the costs in Appendix O). This is to cautiously make the ICERs tend to be slightly too high rather than too low. We have informed the NICE resource impact team of this so that they can ensure that they do not overestimate costs.** **We have added clarification that the implied total pathway cost for the model in Appendix N and the maximum difference in costs between 1 and 2 hearing aids in Appendix O should not be taken as normative but are deliberately conservative.**
				▪ Reference cost data are available for assessments, the code is CA37A. Costs generated via the Committee in general appear to overestimate costs. We agree that for the purposes of the cost effectiveness analysis this has not had a significant impact on the ICER, and therefore submit this feedback for the record only. However we are concerned that pathway costs have been significantly overestimated overall and hence we also submit our feedback	**We agree that a GP may not be needed in areas where there is direct access to audiology, or recall for reassessment is done automatically by the service provider. In these areas the overall costs would therefore be lower and the ICER slightly lower. We modelled a pathway including GPs as that is both currently more common and involves higher costs, to be cautious. The inclusion of GPs in the model does not imply that a GP appointment may always be necessary.**

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				below to the NICE impact assessment team. ▪ The number of aftercare visits per patient are over estimated and so are the associated costs (in both Annex O and N). Again this is not likely to change the conclusions/recommendations that result from the ICER but could have a significant impact on any future work undertaken by the NICE resource impact team (e.g. in any budget impact assessment) or any local NHS Commissioners that use the data to estimate local cost of implementing the NICE guideline. We therefore submit this feedback for the record. ▪ Given costs in the main model (Annex N) have been overestimated, Annex O could be misunderstood/misread – e.g. a NHS Commissioner scanning the section might incorrectly read that the marginal cost of an additional aid is £171. This is clearly not what has been stated or intended. However, given the complexity of this text for a lay audience, it would be helpful if the NICE Committee would explicitly state this is overestimates marginal costs in order to assess the robustness of any subsequent recommendation and these costs should therefore not be used to set or derive tariffs. ▪ Although we understand why the Committee included a GP in the pathway we think they have missed an opportunity to improve patient care and make better use of scarce NHS resources (as explained above). NHS Commissioners in England are increasingly looking to remove the GP from adult hearing care	**We considered the impact on cost effectiveness of a reduction in the number of GP appointments (for different reasons) in a sensitivity analysis in the model (N.2.6.4, N.3.2.2). Budget impact is an issue that is considered by the NICE resource impact team.** **The committee did not make any recommendations on whether people with hearing difficulties should need to see their GP or could access audiology services directly, as this was not a research question prioritised for research in this guideline, in line with the guideline's scope, which was subject to consultation with stakeholders. This is currently an issue determined locally.**

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				pathways. For one example see NHS England's Commissioning Framework, page 42, which shows Coventry and Rugby CCG has done this[lix]. The cost-effectiveness of adult hearing care for the population modelled in Annex N is therefore likely to improve when the GP is removed, it is also likely to address a significant issue the Committee reports elsewhere in the guideline – e.g. that GPs often do not refer patients that report hearing difficulties and/or standards of referral are variable. Hence, in our view, this was a missed opportunity. For example, making a conservative assumption that 400,000 GP appointments could be saved per year by not requiring adults to require a GP appointment before accessing NHS hearing care, at £36 per GP visit (Table 93, Annex N, page 495) this could save £14.4million per year and free up many scarce NHS GP appointments. This is even more problematic when one realises that the only reason adults with hearing difficulties (and no other symptoms) are required to see GP is because the GP acts as an economic gatekeeper. Based on the assumption, never tested, that this reduces costs for the NHS and is cost effective. This is not evidence based and simply an historical anomaly. For example since the NHS was founded every adult in the UK, with the ability to pay, has been able to access private hearing care and hearing aids directly without having to see a GP first. In sum there is no evidence to support incurring the	**The utility benefit is related to the benefits to ability to hear and communicate of using hearing aids. To use hearing aids a patient must first access audiology services. In some areas it is necessary to see a GP to access these services, in others it is not.** **The appropriate setting for removing earwax was a research question prioritised for inclusion in this guideline; consequently an evidence review was conducted for that question and a recommendation was made. The issue of direct access to audiology was not prioritised at the scoping stage following consultation on the proposed research questions, and so no evidence review was conducted. The committee was therefore not in a position to make a recommendation on this question. This guideline included 20 review questions. There are many other questions related to hearing loss that the committee could have investigated given more time. This guideline is not intended to answer all questions relating to hearing loss.** **The committee has not made any recommendations to discourage direct access to audiology services where that is available.**

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				costs associated with GP visits in order to get a referral to see an audiologist. We have asked the Committee to reconsider whether there is a clinical evidence basis or economic case for involving the GP in the vast majority of adult hearing loss pathways. We have also suggested that the Committee might find it is useful to state what proportion of the 0.06 utility weight in the population modelled in Annex N can be attributed to the GP. This should help to sense check the ICER associated with a GP's contribution to this NHS service. We appreciate that health economists will quickly spot that in this particular area of health care – because of the low prevalence of disease and risk etc. – the ICER for the GP is likely to approach infinity. The reason for GPs in the pathway is because it is assumed they act as an economic gatekeeper or manage earwax, this however can also be tackled without the need for a GP appointment. In this regard the existing system presents a staggering waste of scarce NHS resources at a significant opportunity cost to patients, the NHS and taxpayer. ▪ The Committee makes strong recommendations regarding the clinical setting for wax management but avoids any recommendation for adult hearing care. We provide feedback on this problematic logic elsewhere (see above). This variable approach to recommendations is inconsistent and disconcerting; and also has implications from a health economics perspective	**Making recommendations on the location of earwax services but not of other services was in line with the published scope of the guideline which was subject to public consultation and which the committee (other than the Chair) had no involvement in producing. The location of other services was not prioritised within the list of questions for investigation in this guideline as other questions were seen as higher priorities. Service configurations and pathways can be and are determined locally. The committee include current and former GPs and lay members as well as people working in secondary care and research.** **As the question of alternative utility weights has not been addressed by this guideline we would not want to comment without**

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				and therefore for Annex N. The vast majority of the profession accepts that there are major benefits for patients when adult hearing aid services are delivered in community settings and closer to home. Including improved access for patients, encouraged hearing aid use and maintenance and better continuity of care[lx]. All of these benefits are more likely to result in a utility gain that is 0.06 (or even greater based on Annex N and Committee recommendations). Conversely, the further people have to travel the less likely it is the utility gain is going to be 0.06 – i.e. offering adult hearing care closer to home is likely to reduce the uncertainty associated with the ICER. The Committee has also completely overlooked Monitor's (now NHS Improvement) report on NHS adult hearing services. The extensive and national review showed that the introduction of community provision improves, transparency, access, value for money and standards and can help the NHS meet increasing demand in a sustainable way[lxi]. This means making adult hearing care easier to access also reduces marginal costs for the NHS – i.e. the ICER is likely to be more favourable. This and other issues raise questions about why the Committee was able to make such firm recommendations on wax management but avoided making recommendations on offering adult hearing care closer to home and out of secondary care too.	**considering the issue fully.** **The information in section 2 has been shared with the NICE resource impact team.** **The committee has not misunderstood how services are commissioned. The economic analysis models one potential way of providing services and assesses the cost effectiveness of that pathway. The results of this were taken to inform the recommendations the committee later made. The pathway used in the model is not itself a recommendation of how services should be organised.**

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				The scale of activity (and therefore costs) do not explain this either. The Committee for example is focussed on reducing 350,000 annual ENT visits used to clear the ear canal in adults[lxii]. Yet has wholly ignored adult hearing services, for which there is a general consensus that more of the 2 million patient contacts reported by hospitals each year[lxiii] can and should be delivered in primary and community settings. We have asked the Committee to ask why, from both an economic and evidence based perspective, it made firm recommendations linked to the management of earwax but avoided discussing community provision of adult hearing services. It is not clear if this was a simple oversight or because the Committee membership includes audiologists working in or with secondary care providers. **It might be a useful exercise therefore for the Committee to explain whether they believe the utility weights they assigned in Annex N would be lower, the same or higher when services are provided in primary and community based settings (i.e. not secondary care). This might show the Committee does know that more accessible services for this long-term condition are also likely to be more cost-effective.** **2. <u>Information for the NICE resource impact team</u>** Due the already very favourable incremental cost effectiveness ratio (ICER) in Annex N, our feedback	

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				above is unlikely to change the Committee's recommendations with respect to the provision of hearing aids – e.g. changing model inputs that we have raised concerns about would only improve what is already a very favourable ICER. We also agree that hearing aids are cost-effective. However we are concerned that some of the assumptions used in Annex N and O will have a significant impact on any resource (budget) impact assessment – whether used by NICE or a local NHS Commissioner. This is because the Committee has misunderstood how services are commissioned in 60% of England, has overlooked key economic evidence from the NHS regulator (Monitor, now NHS Improvement) and has not understood why reference cost data and the non-mandated NHS tariff for this particular service no longer can be relied upon to derive costs from a NHS perspective. In this section we briefly explain the issues and what needs to be factored in to any resource impact assessment. We would be happy to share further data and detail if that would be helpful. **2.1 Underlying assumptions about reference costs and NHS tariffs, and why these no longer hold for the NHS adult hearing service in England.** ▪ Originally reference cost data were collected for the adult hearing service and only hospital trusts delivered NHS adult hearing care. Those reference cost data were analysed and a non-	**The text in this section has been clarified. However, the committee stands by its decision that a follow-up appointment should be as rigorous, containing the same elements, and thus take the same length of time, whether conducted by phone or in person. It also strongly asserts that all follow-up appointments should be conducted**

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				mandated tariff derived by the process of yardstick competition. ▪ The first non-mandated tariff for the service was published in Department of Health guidance for the financial year 2009/10[lxiv]. ▪ In 2012 the NHS introduced more competition and choice for adult hearing services. This led to the creation of a tariff that was modelled in concept on the initial non-mandated tariff – in the main to set a starting price for what would be an AQP procurement process[lxv]. ▪ From that point on the process no longer relied on yardstick competition to derive NHS prices for multiple reasons including o aftercare and follow-up costs were now fixed. Providers were incentivised to offer aftercare and follow-up care by having to meet KPIs, rather than generating what were previously in effect fee-for –service (activity) payments o Charity, social enterprise and independent sector providers are not all required to submit reference cost data and therefore reference cost data gradually stopped reflecting average NHS prices (from a commissioner perspective) ▪ In 2015 the NHS regulator (Monitor, now NHS Improvement) reviewed the implementation of AQP and published a national report. It found that about 60% of NHS regions in England had introduced choice reforms (i.e. AQP) and noted o "*choice [i.e. AQP] has made services more transparent"* and that *"the introduction of choice has strengthened the opportunity for [CCGs] to achieve*	**by equivalently qualified staff. These judgements were based on consensus of expert experience. They imply that the cost of different methods of communication should be almost identical when conducted properly.** **The committee has amended the recommendation to allow for the possibility of alternative methods of communication, but only if that is the patient's preference. The committee agrees that this will lead to an increase in upfront costs, although this is mainly because providers are not currently meeting the already recommended best practice of offering a follow-up appointment to all people fitted with hearing aids, and there may be later savings from fewer unplanned follow-up appointments. This is considered in the NICE resource impact assessment.** **These points are addressed above.**

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				better value for money. In areas with choice, commissioners have often put in place more robust or higher service specifications that raise expectations of providers. In some cases, commissioners have also established locally determined prices that are 20−25% lower than the national non-mandated tariff"[lxvi] ▪ This made the method of deriving prices via yardstick competition (and thus relying on reference cost data) redundant – i.e. the NHS was clearly getting better value for money than when using a process of yardstick competition based on reported costs, and therefore confidence in cost reporting is also very low. ▪ In 2017 the non-mandated tariff for NHS adult hearing services was withdrawn. ▪ Today NHS Improvement directs commissioners to NHS England's commissioning framework to derive prices. The savings can be found by reviewing page 35,36, 70 and 71 of the framework[lxvii] ▪ Put simply, using reference cost data, a decommissioned non-mandated tariff (because the process of yardstick competition to derive it is redundant), or an outdated pathway to perform a budget impact assessment **would result in overestimating costs by tens of millions of pounds per annual cohort** started on a three year pathway. ▪ It is therefore vital that the NICE resource impact team does not depend on cost inputs, pathway assumptions and other assumptions made in Annex N or O in any budget impact assessment it performs.	**The committee agrees that 2 appointments a year (decreased from 3 in the draft version) is likely to be an overestimate, but in the absence of reliable data the committee chose to be cautious in selecting this value for the modelling. The NHS reference costs for aftercare visits may not be perfect, but there are not better national data available.**

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				2.2 Other assumptions that have been made ▪ **The Committee recommends face-to-face follow-up.** The Committee notes: *"The cost to the NHS of a follow-up appointment is dependent on the length of time the audiologist spends conducting he appointment. Hence, whether an appointed is conducted by phone or face-to-face (at an audiology clinic) does not affect the cost of the appointment if both are the same length. Therefore there is no economic reason not to favour face-to-face appointments"* (page 230 Full version, lines not numbered). This is a poor assumption. For example this overlooks the fact additional capacity is required to service face-to-face follow up vs remote follow-up and that costs are not solely a function of professional time. The Committee also makes this recommendation based on a low quality evidence. Although we feel the Committee will be required to revert back to current best practice, if this recommendation remains this will add significant costs to any resource impact assessment performed by NICE. However to understand how this will significantly increase costs, the history of the NHS tariff, development of pathways and capacity has to be understood. We would be happy to explain this in greater detail if that would be helpful/required - i.e. if the recommendation in question is not changed.	

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				• **Double counting costs** The Committee double counts costs and over estimates other costs, which is likely to overestimate actual costs (from a commissioner perspective) by millions of pounds per year. The Committee does this in several different ways, for example o Costs are double counted in table 93 pages 465-466 (Annex N) and table 106 page 477 (Annex O). The Committee decided to use English reference cost data for aftercare, but then introduced duplication by including cost data from Wales. If NICE refers to the NHS reference cost data book it will find that additional items (batteries, moulds and thin tubes) are included as part of other cost lines. These marginal costs might seem trivial, but given the guideline states there are an estimated 2 million hearing aid users, and cost per patient are annual costs, this over estimation could be in the region of £33 million per year[lxviii]. This can be attributed to double counting o the Committee overestimates aftercare costs per patient on an average pathway. The net effect is to overestimate NHS expenditure (when taking a Commissioner perspective) by millions of pounds per year. This is because the tariff structure is fundamentality different to what it used to be and what the Committee appears to think it is today (there are also other inputs which overestimate costs – e.g. number of average aftercare visits)	

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				We fully support the Committee's recommendations to improve access to and the uptake of hearing aids. However if any budget impact assessment uses the costs that have been used in the cost effectiveness analysis, then an analyst might wrongly conclude that the NHS cannot afford to provide these services. The NHS regulator Monitor (now part of NHS Improvement) has shown prices are up to 25% lower when community provision is introduced, while patient standards are maintained if not improved[lxix,lxx]. Nine million adults in England have a hearing loss and therefore marginal differences in cost/price assumptions can have a significant impact on the assumed cost of providing care. Put simply however, the NHS can save millions of pounds per year in the adult hearing service but analyst often miss this because of the complex history of this service and how cost collection methods and price setting "strategies" in the NHS work. We are therefore keen to ensure that any NICE resource impact assessment addresses these issues and does not repeat errors that local NHS Commissioners have made when analysing costs/prices for adult hearing care.	
National Deaf Children's Society.	Full	013	25-35	Could an additional subgroup be added? Consider referring adults who were born deaf or presented with acquired hearing loss before the age of 18, for a hearing assessment when they transfer from child to adult services (if they haven't already attended adult services), and when the individual complains of any new history recommended in this guidance.	**Thank you for your comment. The committee is aware of the issues with this group but they were not included in the question and we are therefore unable to comment on referral for this population.**

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				We know that transition is a vulnerable time for young people and that deaf young people frequently drop out of hearing care, or are excluded during time away in higher education away from home etc. They are a group who frequently discontinue use of hearing aids at the end of school or while in college and may require re-referral into the system when they enter employment and new challenging listening environments. We also know that deaf young people have a high proportion of additional/complex/learning needs and are likely to require some ongoing support to access services, rather than being left to request referral when needed. References: From the pond into the sea; Children's transition to adult health services (CQC, 2014) Transitions to Adulthood Knowledge Hub (Public Health England, 2016) Quality Standards: Transition from paediatric to adult audiology services (NDCS, 2011)	
National Deaf Children's Society.	Full	021	39	We are interested in the reasoning as to why adults with onset of hearing loss before 18 but who did not present earlier are included, whilst those who presented with hearing loss before the age of 18 have been excluded. Could this be explained in the introduction, or alternatively addressed using comments below please?	**Thank you for your question. We are unable to encompass the whole of a subject as big as hearing loss and the focus of this guideline is those presenting with hearing loss as adults as this is the larger population.**
National Deaf Children's Society.	Full	078	12	Link to NHS England takes you to DSMIG guidance	**Thank you for your comment. We have amended the links.**
National Deaf Children's	Full	General	General	We are concerned that these guidelines could mean	**Thank you for your comments. This group of**

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Society.				that young people (who originally presented with hearing loss before the age of 18) now presenting with a sudden change in their hearing levels would not be referred with the same urgency as an individual with a new hearing loss. A young person who happens to have a hearing loss would be equally at risk of developing conditions known to require urgent referral and treatment. The vast majority of the guidance would be equally applicable to an adult who has worn hearing aids since a child, including: • Urgent and routine referral • MRI • Communication needs • Management of earwax • Sudden sensorineural hearing loss (SSNHL) in addition to their existing hearing loss • Information and advice • Assistive listening devices • Hearing aids (including upgrading of equipment with time) • Hearing aid microphones and noise reduction algorithms • Monitoring and follow up (incl knowledge of how to access the service) • Interventions to support the use of hearing aids (particularly those young people who may have been poorer wearers when younger but who now demonstrate increased need)	**people was not included in the scope of this guideline and therefore the guideline makes no recommendations on their assessment or management and would not be consulted by professionals caring for this population. The committee has made changes to include deterioration which may cater for some cases.**
National Deaf Children's Society.	Full	General	General	If the group of those who presented with hearing loss before the age of 18 are to be excluded then we	**Thank you for your comment.** **The title of the guideline is not set by the**

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				suggest changing the name of the guidance to "Hearing Loss in Adults; Acquired hearing loss in adults: assessment and management" to make it clearer. Otherwise you have to read to page 21 before it is clear that the above group are excluded.	**developers but is provided to us by NICE.**
NHS Oxfordshire Clinical Commissioning Group	Short	03	5 to 7	Draft recommendation 1.1.1 (which we cannot see on page 12 of the full guideline) states "Refer all adults, regardless of their age, who present for the first time with hearing difficulties….." The full guideline acknowledges that there is no clinical or cost-effectiveness evidence for this but that it is based upon consensus and the GDG's concern that severe conditions will be missed. OCCG recognises the potential dangers of delay but is very concerned that this statement as it stands will lead to additional unnecessary referrals to a service, which in Oxfordshire, is already working to capacity. OCCG believes this is the case elsewhere too. Overloading existing services is not likely to lead to an improvement in diagnosing patients with severe conditions. The full guideline does clarify this statement in two way; • By suggesting that the BAA guidance for onward referral by audiologists can be used • By stating - It is expected that the GP will first exclude impacted wax, otitis externa/media or middle ear effusion (serous or mucoid fluid behind an intact ear drum on one side) related to upper respiratory tract infections such as a cold, sinisitus or influenza as the cause of the hearing complaint and treat appropriately. It should be noted that wax removal may be an urgent requirement in order to exclude this as the cause of	**Thank you for your comment.** **Recommendation 1.1.1 is included in the full guideline as recommendation 12 on page 13. The recommendations have been reordered for the short guideline to give a more logical order. In the full guideline they are ordered according to the evidence review to which they relate.** **We have amended the recommendation to clarify within this recommendation that impacted wax and acute infections such as otitis externa should be excluded prior to referral.** **However, it should be noted that this particular recommendation was not based on consensus. It was based on strong cost-effectiveness evidence from original economic modelling, as well as 1 very low quality clinical study. This is discussed in section 8.2.4 of the full guideline.** **The committee expects this recommendation to lead to an increase in necessary but not unnecessary referrals to audiology services for hearing assessments. The resource implications of this are discussed in the resource impact assessment accompanying this guideline.**

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				hearing loss and avoid delay in treatment of underlying pathology. It would be an improvement in the short guideline (which is what the vast majority of people will use) if 1.1.1 could be amended to "Refer all adults, regardless of their age, who present for the first time with hearing difficulties after exclusion of impacted wax, otitis externa/media or middle ear effusion (serous or mucoid fluid behind an intact ear drum on one side) related to upper respiratory tract infections such as a cold, sinisitus or influenza as the cause of the hearing complaint" OCCG can see no clinical reason why these patients, first seen in primary care, need referral to audiology before these have been treated. We note that in the full guideline this recommendation appears further down but we agree that it makes sense to have non-urgent referrals first in the guideline but it needs to be altered as suggested above.	
NHS Oxfordshire Clinical Commissioning Group	Short	05	14 and 15	This is a general note. People with a diagnosis of autism who do not have cognitive impairment or a learning disability have not been mentioned. This population may have very specific hearing problems – not necessarily hearing loss – a number have hypersensitive hearing and they might be seen as being outside the scope of this guidance but they should be mentioned in the guidance.	**Thank you for your comment. Unfortunately this group is outside of the scope of this guideline and therefore we are unable to comment on them.**
NHS Oxfordshire Clinical Commissioning Group	Short	05	22-24	From national prevalence Oxfordshire has approx. 10.300 people aged 18 to 64 with a learning disability or impairment, many of these are not yet diagnosed formally but the aim is for all people to eventually have a relevant diagnosis. The predicted number of people over 65 is approx. 2500. We note that the GDG discussion says The committee considered that for those with	**Thank you for your comments. This recommendation is discussed in section 7.2.4 of the full guideline. The committee agreed that proactive testing is necessary for people who are less likely to be able to self-report signs of hearing loss. Based on the incidence of hearing loss in these groups, it was found that 2-yearly testing of adults with**

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				learning disabilities and those with dementia and mild cognitive impairment repeating the referral to audiology every 2 years would be good practice because of the high risk of developing hearing loss in these groups. It was agreed that there was no harm associated with repeated referrals and that the clinical benefits of early identification and management of hearing loss in these patients far outweigh the additional time involved in their assessment. Whilst OCCG recognises the laudable aims that patients who may be unable to articulate their hearing loss should be assessed the potential numbers will be totally unsustainable. Again, this would appear to be an aspiration of a perfect world potentially driving out the good and the priority cases.	**learning difficulties would be cost effective for the NHS. This means that such testing would be an appropriate use of NHS funds, and would be a better use for the population health as a whole than spending on interventions with a lower cost effectiveness. Hence it is appropriate for systems to be put in place to ensure that all people with learning difficulties can have their hearing assessed regularly.** **However, this recommendation is for clinicians and commissioners to 'consider' providing this service, and so its implementation is ultimately dependent on local decisions.**
NHS Oxfordshire Clinical Commissioning Group	Short	06	14-19	We note the GDG said; The committee noted that no evidence was found comparing the clinical or cost effectiveness of irrigation with other mechanical methods, such as microsuction or physical removal with a probe. Microsuction is the method usually employed by ENT services because it is quick and efficient and allows the clinician a good view of the ear canal. It is the method of choice if irrigation has failed or if the person has external or middle ear pathology. The technique, however, is gaining in popularity and is available in some ear care clinics. The committee wished to highlight that microsuction may be considered where available, and where appropriately trained	**Thank you for your comment.** **The recommendation suggests the use of microsuction or other methods of earwax removal such as a manual probe may be considered, and was not intended to imply that microsuction should be used in all circumstances.** **We have however modified these recommendations to clarify the fact that both irrigation and microsuction are appropriate depending on what is already available locally.** **Additional discussion in the full guideline makes clear that the purchase of additional microsuction machines is not recommended by the committee.**

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				staff can use this technique . However our opinion is that the way the recommendation 1.2.4 is written it implies this is the method of choice in all circumstances. This will be challenging to implement without additional cost to commissioners, and is likely to take ear syringing away from primary care and cause all patients to be referred for microsuction with additional burdens on local services.	
NHS Oxfordshire Clinical Commissioning Group	Short	08	11 and 12	OCCG generally welcomes the effort in section 1.5 to ensure that patients should be properly advised, educated and counselled before receiving hearing aids. OCCG does not have figures but has received reports from GPs and others that a number of patients have been fitted with hearing aids (at considerable expense) who do not continue to use them. We note the GDG stated; The committee acknowledged that there is variation across the UK in whether people with mild to moderate hearing losses receive hearing aid(s) and consider that the decision to fit should be based on need rather than on hearing thresholds. Furthermore, as amplification has been shown to have benefit and is cost effective, hearing aids should be offered at the first opportunity if the individual is likely to benefit. The committee expressed concern that not providing hearing aids, and the care needed to use them effectively, to a person with an aidable hearing loss, raises serious questions of inequality of access. Hearing aids can make a difference to the	**Thank you for your comment.** **The person's readiness and motivation for wearing aids would be determined as part of the audiological assessment, and the range of management options discussed before offering the person hearing aids. We therefore do not think it necessary to change this recommendation as you suggest. The recommendation has been amended to specify hearing aids should be offered based on the person's ability to communicate and hear including awareness of sounds and environment.** **The committee has noted that frequently reported reasons for patients not continuing with use of their hearing aids relate to insufficient explanation of hearing aid use and lack of opportunities to fix problems with hearing aids. We believe that the additional recommendations in this guideline relating to the content of fitting appointments and mandatory follow-up appointments, as well as signposting of the availability of aftercare, should reduce the number of people choosing not to continue using their hearing**

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				ability of a person with hearing loss to communicate effectively and can thus reduce the impact of their impairment. Their impairment is permanent and even a mild hearing loss can have a significant effect on day-to-day functioning. We would like the recommendation 1.5.1 to read; Offer hearing aids to adults whose hearing loss affects their ability to communicate and who have agreed to use them following the strategies in 1.5.3 to 1.5.7. Additionally there should be a recommendation "Do not offer hearing aids on the basis of hearing thresholds alone in adults whose ability to communicate is not affected or who have not shown an interest in using them."	**aids.** **However, the committee understands that, for a variety of reasons, not all people fitted with hearing aids will be able or choose to continue using them. The economic modelling conducted for this guideline assumed high rates of drop-out from hearing aid use and found hearing aid fitting to still be highly cost effective even under such circumstances.**
NHS Oxfordshire Clinical Commissioning Group	Short	General	-	OCCG applaud the intentions behind this guideline and recognise the difficulty which the GDG have had in making recommendations when so little relevant evidence of benefits, harms and cost-effectiveness exists. However we are concerned at the number of recommendations which are likely to have a very considerable impact upon services have been made on the basis of GDG consensus and opinion. This guideline, which on first read appears full of good intentions and good sense, has the potential to so overwhelm local services that the patients most at need will suffer. There has been an insufficient attempt to identify those patient groups who should be a priority. The GDG needs to be aware that very few people will read the full guideline which is more explicit about where recommendations are evidence based. Most clinicians, commissioners and members of the public will read the short guideline and believe that recommendations all come with the expected	**Thank you for your comment.** **The recommendations have been developed in accordance with the same policies as for all NICE guidelines, which are outlined in Developing NICE guidelines: the manual and in chapter 4 of the full guideline. The quantity and quality of evidence is discussed in each chapter of the guideline, together with an explanation for why the evidence was appropriate to make each individual recommendation in the guideline. The short version of the guideline is designed to provide a quick reference of all the recommendations without the explanation behind each recommendation.** **The committee agree that in some areas published evidence was weak or absent. In these cases the committee either did not**

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				high level of evidence consideration we now expect from NICE. We believe that you should be absolutely open in the introduction or early in the guidance that this is an area where the evidence base is poor.	**make a recommendation, or made a recommendation for further research, or made a recommendation based on expert consensus. Weaker 'consider' recommendations were made when the evidence was insufficient to make a stronger recommendation. No strong recommendations can be or were made on the basis of expert consensus alone if they were expected to have a substantial impact on resources.** **Some recommendations in this guideline are expected to have a substantial resource impact (please see the resource impact report for further details), but these were all supported by strong economic evidence, including that from the original cost-effectiveness analysis conducted for this guideline which found that provision of hearing aids was highly cost effective, and much more cost effective than many other services provided by the NHS.** **The recommendations that are likely to increase costs at a national level are all consistent with current best practice recommended by NHS England and are already operated by providers in some areas in England. The committee does not agree that they will overwhelm services. They should however ensure that people whose health needs have not been met in the past should in future have their needs met.**
NIHR - Nottingham Biomedical Research	Full	012	038	**We consider the exclusive focus on unilateral tinnitus to be inappropriate and are concerned**	**Thank you for your comment. We have amended the criteria to include some cases**

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Centre				**about the omission of bilateral tinnitus.** A medical/pathological cause is as much of a concern with bilateral tinnitus as it is with unilateral tinnitus.	**of bilateral tinnitus with hearing loss. The guidelines on tinnitus are in development and it would be inappropriate to cover tinnitus in any detail in this document.**
NIHR - Nottingham Biomedical Research Centre	Full	015	018	**We are concerned about the wording of the committee's recommendation to 'consider' steroids in cases of idiopathic sudden sensorineural hearing loss (SSNHL).** We are concerned that the choice of the word 'consider' rather than 'offer' or 'give' appears to imply that this treatment is not always required or appropriate, but the guidance does not provide information to support decision making around when to consider steroids. We are also concerned that the word 'consider' does not appear to align with the time-sensitive nature of this form of treatment for these cases.	**Thank you for your comment. The committee found that the evidence underpinning steroid administration in idiopathic sudden sensorineural hearing loss was not sufficiently robust to make a more definite recommendation. Neither did we have sufficient evidence to contradict current practice which is to consider steroids. This is explained in the full version. Our conclusion is the same as the Cochrane review on the same subject. We therefore believe that it is the decision of the medical team whether to treat with steroids or not and what drug or route to use. The recommendation about immediate referral is in order to investigate the cause urgently and then to decide what is in the patient's best interest. That step should occur as soon as possible so that if steroids are indicated they can be given urgently.**
NIHR - Nottingham Biomedical Research Centre	Full	017	011	**We are concerned about the use of 'if needed' in the recommendation to 'provide information on communication, social care or rehabilitation support services if needed'.** It is not clear from this aspect of recommendation 37 how 'need' is determined. We are concerned that the recommendation as written will be open to broad interpretation and potentially reduce its effectiveness at influencing practice.	**Thank you for your comment. What information is needed would be determined as part of discussion during the follow-up appointment and would vary amongst individuals. NICE will provide links on their website to recognised organisations providing information for people with hearing loss. It is expected that hearing services will provide reliable information and that this is organised locally.**

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				We are also concerned that further guidance has not been provided on the sources and/or types of information that should be provided.	
NIHR - Nottingham Biomedical Research Centre	Full	017	025	**We are concerned about the lack of guidance on the content of information that should be provided according to recommendation 38.** Given that information offered to patients can be highly variable in terms of content, relevance and quality, we are concerned that guidance has not been given around what are the relevant sources of information that should be provided. Such guidance would help ensure a consistency of approach in the implementation of the recommendation.	**Thank you for your comment. The content of information that should be provided to people with hearing loss was not included in the scope of the guideline and therefore the committee could not make recommendations on this topic. However, it is anticipated that hearing services will provide reliable information and that should be organised locally.**
NIHR - Nottingham Biomedical Research Centre	Full	017	036	**We are concerned that there is no specific research recommendation to assess the effectiveness of steroids for idiopathic sudden sensorineural hearing loss (SSNHL).** The research recommendation that is made ("What is the most effective first-line treatment for idiopathic sudden sensorineural hearing loss?") and the associated PICO (Appendices, Q4, p488) appears to encompass both the comparison of steroids to placebo, regardless of their route of administration, and also the comparison between different routes of administration. These are distinct research questions and the methodological limitations of the existing evidence calls into question the feasibility of answering both within a single research study. It would be preferable if the committee issued two separate recommendations, one to assess whether steroids are effective compared to placebo and one	**Thank you for your comment. We have amended this to focus on the routes of administration of steroids. It now reads as follow: 'What is the most effective route of administration of steroids as first-line treatment for idiopathic sudden sensorineural hearing loss?'** **The committee has recommended that steroids could be considered for treatment and therefore has prioritised a recommendation for research on routes of administration.**

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				to determine the most effective route of administration. This form of specification would translate more directly to the form of questions commissioned by funding bodies such as the NIHR.	
NIHR - Nottingham Biomedical Research Centre	Full	024	03	**We are concerned about the definition of the term 'rapidly growing vestibular schwannoma'.** The draft guideline variously refers to 'rapidly growing' and 'rapidy expanding' vestibular schwannoma in explaining the need for urgent referral in various clinical scenarios. However, these terms are not defined and could therefore be open to broad interpretation. The lack of evidence identified by the review for this question also means that it is not possible to relate the recommendations to a specific definition, or to determine at what rate of expansion urgent referral is justified. Inconsistent interpretation risks inconsistent care for patients.	**Thank you for your comment. The essence of this question is identifying presentations that indicate the need for immediate or urgent referral for investigation or treatment. One of the pathologies that will need immediate or urgent investigation and treatment is a vestibular schwannoma that has increased in size rapidly. Whether this is due to a bleed within the tumour, necrosis and consequent oedema, vascular occlusion or indeed whether the tumour has grown very quickly is irrelevant. Vestibular schwannomas can present acutely and sudden growth or expansion is a valid reason. The presentation is of sudden or rapidly progressive hearing loss and that is the essence of this research question.**
NIHR - Nottingham Biomedical Research Centre	Full	059	09	**We suggest that Otosclerosis be included as one of the examples given for the Reference standard.**	**Thank you for your suggestion. Unfortunately, we can't change this at this stage. The diagnoses included in the list were only examples and we would not have excluded any studies that included otosclerosis as a reference standard.**
NIHR - Nottingham Biomedical Research Centre	Full	095	03	**We are concerned that there is no formal definition of the term 'communication needs'.** Communication needs is a broad term and its use in recommendation 14 may therefore be open to interpretation. It is important that the term is not used interchangeably with 'activity limitations' as activity limitations are broader than just communication	**Thank you for your comment. The term is discussed in the introduction to the communication needs chapter and has been added to the glossary. This specifies a difficulty with hearing and communication including activity limitations and participation restrictions as a consequence of hearing difficulties. In addition, the term**

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				difficulties; e.g. can include attention difficulties.	**encompasses the psychological distress and reduction in quality of life that hearing difficulties can cause.**
NIHR - Nottingham Biomedical Research Centre	Full	097	General	**We are concerned about the use of the term 'communication needs'.** The use of 'communication needs' in this section appears to imply equivalency with activity limitations and participation restrictions or quality of life. Those constructs are broader than communication needs, though communication is an important part of these constructs in the context of hearing loss, and can include other difficulties such as with maintaining one's independence or with detecting environmental sounds or possibly emotional difficulties. A formal definition of communication needs would address this concern.	**Thank you for your comment. The term is discussed in the introduction to the communication needs chapter and has been added to the glossary.**
NIHR - Nottingham Biomedical Research Centre	Full	097	General	**We are concerned that the Glasgow Hearing Aid Benefit Profile or the Client-Orientated Scale of Improvement are named as 'validated self-report instruments' in recommendation 14.** The GHAPB and the COSI may be commonly used in the UK but their use does not signify that they are valid instruments to measure restrictions on activity. We are not aware of evidence that they have been validated appropriately; e.g. construct validity analyses including factor analysis or item response theory/Rasch analysis. Their inclusion in the recommendation and their presentation as validated measures implies that the committee has appraised evidence of their validity, which does not appear to be the case. We request that the committee consider removing the mention of specific instruments but retain the phrase 'assessed using a validated self-report instrument'.	**Thank you for your comment. The committee agrees that the 'validation' conducted when these instruments were first designed would not meet the standards to be considered 'validated' today. We have amended the recommendation to remove the word "validated". These tools were however subject to some comparison and testing, and the committee is not aware of any better or more thoroughly tested instruments. The committee believes that it is helpful in this context to provide examples, and so has decided to retain mention of these instruments as examples.**

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NIHR - Nottingham Biomedical Research Centre	Full	099	027	**We are concerned that tinnitus was not considered as a potential adverse effect in the review of the most clinically and cost-effective method of removing earwax.**	**Thank you for your comment. Unfortunately it is not possible to include all adverse events in a review and those specified in the protocol are the ones the committee decided had highest priority.**
NIHR - Nottingham Biomedical Research Centre	Full	181	09	**We are concerned at the lack of a recommendation for further research on the informational needs of, and provision of information to, those individuals who are yet to seek help about their hearing.** The review of evidence for information and advice giving in supporting individuals, family members and professionals in managing hearing loss included a mix of qualitative data from patients/relatives of those already fitted with hearing aids and those who had not yet sought help. Quantitative data is also available on the effects of information provision in those who have already been fitted with a hearing aid. A recent Cochrane review (Barker et al. 2016. Interventions to improve hearing aid use in adult auditory rehabilitation. *Cochrane Database Syst Rev.* Issue 8) found that use of combined self-management support/delivery system interventions can result in increased hearing aid adherence alongside reducing the long-term hearing handicap, amongst other psychological benefits (see Ferguson et al. 2016. A randomised controlled trial to evaluate the benefits of a multimedia educational program for first-time hearing aid users. Ear and Hearing. 37(2):123-36). However, we are not aware of similar evidence for the effects of information provision in those yet to seek help about their hearing.	**Thank you for your comment. We agree that this is an important area for research. Unfortunately we could only submit a limited number of research proposals and other topics were prioritised.**

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				We would therefore request that the committee include a specific recommendation for further research to both determine the informational needs of patients and their family/carers prior to formal hearing assessment, how that information should be provided, and by whom.	
NIHR - Nottingham Biomedical Research Centre	Full	188	027	**We believe there is a typographical error in that the intervention should be listed as 'Assistive listening devices' and that 'FM / RF radio frequency modulators' should be one of the examples provided as a bullet point below.**	**Thank you for highlighting this. It has been corrected.**
NIHR - Nottingham Biomedical Research Centre	Full	188	General	**It is unclear why 'loop systems' and 'telecoils' are distinguished as different types of ALDs.** These terms would appear to be synonymous and should perhaps be placed on the same line as alternative terms for the same class of device.	**Thank you for highlighting this. These are the same. We have corrected it in the document.**
NIHR - Nottingham Biomedical Research Centre	Full	189	General	**We are concerned about the omission of a behavioural measure of speech intelligibility in noise as an outcome.** ALDs are defined on page 188 as functioning 'by improving the signal to noise ratio, thus enhancing speech'. Speech intelligibility in noise is therefore a clinically-relevant outcome for this review question of determining their effectiveness.	**Thank you for your comment. Although it is not specifically stated in the protocol, we would not have excluded papers if they had reported this outcome. We were aware of the paucity of evidence in this area and therefore had planned to include any papers that reported any relevant outcomes. This was stated in the protocol under the bullet point: 'any other outcome/validated questionnaires'.**
NIHR - Nottingham Biomedical Research Centre	Full	193	General	**We are concerned that not all patients would be appropriately informed of ALDs in order to meet their individual hearing/communication needs if information provision was limited to follow-up appointments.** The committee noted that follow-up appointments may be a suitable time to cover ALDs. However, not	**Thank you for your comment. We agree with your point and have adjusted the wording.**

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				all audiology services offer follow-up appointments. Therefore, we are concerned that this statement may lead to the aspect of recommendation 15 relating to ALDs that specifies information should be provided 'after assessment' being interpreted as meaning 'at follow-up appointments'.	
NIHR - Nottingham Biomedical Research Centre	Full	223	General	**We are concerned about the definition of the research recommendation to determine 'the correct outcome measure to use when investigating the clinical and cost-effectiveness' of directional microphones and noise reduction** The term 'correct' has no well-defined meaning in the context of evaluations of clinical effectiveness and cost-effectiveness. It is not self-evident that the outcome measure of most importance to patients is the same as that of most importance to clinicians when assessing effectiveness. It is also not self-evident that the most appropriate outcome measure for assessing clinical effectiveness would also be appropriate when assessing cost-effectiveness. There are established methodologies for determining what are appropriate outcomes to measure in evaluation trials (e.g. the COMET initiative) and to determine the most suitable measures to assess those outcomes (e.g. COSMIN initiative). It is not clear whether the committee is recommending research to determine the most appropriate outcomes, outcome measures, or both.	**Thank you for your comment. We have changed the word 'correct' to 'suitable'.**
NIHR - Nottingham Biomedical Research Centre	Full	223	General	**We are concerned about the relevance of the research recommendation to determine 'the correct outcome measure to use when investigating the clinical and cost-effectiveness' of directional microphones and noise reduction** Given that the review identified no evidence for the	**Thank you for your comment. We have changed the word 'correct' to 'suitable'.**

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				clinical effectiveness and cost-effectiveness of directional microphones and noise reduction, it is unclear why the research recommendation relates to one aspect of clinical trial methodology (i.e. identifying the outcome measure to use) rather than being a broader recommendation to evaluate the clinical and cost-effectiveness of these technologies.	
NIHR - Nottingham Biomedical Research Centre	Full	General	General	**We are concerned that the draft guidance does not cover the audiological management of people with single-sided deafness by audiology services.** The final scope specifically identified people with 'single-sided deafness' as a group that the guidance would cover and a group that would be given "special consideration" (Final scope, section 1.1). While the draft guidance does not refer to this group directly, it does make recommendations about the referral of adults with idiopathic sudden unilateral hearing loss to ear, nose, and throat services where there are concerns related to the diagnosis of the SSNHL. However, it does not acknowledge or make any recommendations for the audiological management of the broader subgroup of people with single-sided deafness, which not only includes those with sudden losses where urgent concerns about diagnosis have been addressed through referral but also those where the onset was not sudden; e.g. congenital SSD. By their definition, this subgroup has a unilateral hearing loss of such a degree as to make aiding via conventional hearing aids at best of limited benefit and at worst clinically inappropriate. Therefore, their audiological management is not	**Thank you for your comment. The wording has been amended. The guidelines have covered early medical treatment for sudden hearing loss and investigation of acquired unilateral hearing losses. Our remit does not cover congenital hearing loss. In response to concerns we have amended the guidelines to include amplification in single-sided deafness. We were limited in the amount of research we were able to do and could not explore management of this group further.**

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				covered by the existing recommendations in the draft guidance despite being within scope. Specific recommendations are required to cover their audiological management that should consider issues such as offering contralateral routing of signal (CROS) hearing aids and the need for onward referral to specialised services for bone-conduction hearing devices when appropriate.	
NIHR - Nottingham Biomedical Research Centre	Full	General	General	**We are concerned that the draft guidance does not include any recommendation on the referral of patients to specialised ear services.** The guidance does not provide recommendations for the management of patients who cannot derive sufficient benefit from hearing aids and who are potentially eligible for hearing implants such as bone-conduction, cochlear, middle ear, and auditory brainstem implants. While the final scope does indicate that the guidance will not cover the surgical management of hearing loss directly, the scope did include the question "Which causes of hearing difficulty can be identified and treated by audiology services?" under the "Initial assessment (first presentation) and triage" key area. Patients who are eligible for hearing implants and who required onward referral to specialised ear services are by definition those who cannot be treated by audiology services, and their identification therefore falls within scope for the same reasons that referral of sudden sensorineural hearing loss cases do.	**Thank you for your comment. We have amended the recommendations to include discussion of onward referral for implantable devices or surgical management within the audiological assessment.**
Novus Health Ltd	FULL	016	36	This recommendation is currently not deliverable	**Thank you for your comment. NICE is unable**

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				under an AQP pathway as there is no non-device led pathway available to patients. Introducing a Hearing Therapy tariff may successfully address this issue	**to comment on tarifs.**
Novus Health Ltd	FULL	075	6.2.4.1	It is not clear from this what impact this recommendation would have on referral criteria. I would be concerned that this narrow a criterion would lead to excessive requests for MRI, particularly where clinical history may present a reasonable explanation i.e. service in armed forces, professional driver, clay pigeon shooting etc	**Thank you for your comment. The committee has looked further at the evidence and has changed the recommendations to reflect current practice in ENT. An explanation of the thresholds used are given in the Linking evidence to recommendations section of the guideline.**
Novus Health Ltd	FULL	097	9.2.45	Tympanometry is not a required part of Direct Access assessment unless middle ear involvement is suspected through other assessment such as otoscopy or PTA. Suggest wording is changed to include (where recorded)	**Thank you for your comment. The committee has revised the recommendation to specify tympanometry assessment should be carried out if indicated.**
Novus Health Ltd	FULL	130	10.3.46	Given the volume of these issues in Direct Access clinics and the significant delay and cost in resolving them it is my opinion that Audiology departments (and AQP services) ideally should have the training and equipment to resolve minor wax issues on the day of the appointment and that a national tariff be set for this. More persistent wax occlusion may require onward referral to a specialist centre	**Thank you for your comment. We agree with your suggestion and hope that the guidelines will facilitate development of more flexible ear care facilities.**
Novus Health Ltd	FULL	147	11.2.41	Sadly not infrequently patients are seen in direct access clinics who describe an untreated sudden loss occurring some weeks or months previously. I would encourage that further guidance be given to GP's re the need for urgent treatment and/or referral for these patients to minimise resulting morbidity	**Thank you for your comment. Guidance on referral for sudden loss is given within the urgent and routine referral section of the guideline.**
Novus Health Ltd	FULL	187	13.2.41	Having been involved in the development of such tools I am aware that with the best of intentions they can lead to recommendations of outcomes that are not supported by the local health economy. I would think that a truly validated tool would need to be extremely truncated in scope to offer a viable	**Thank you for highlighting this. We believe this would be a matter for local implementation.**

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				outcome in all regions	
Novus Health Ltd	FULL	212	15.3.46	This recommendation whilst sensible on its surface is contractually complicated within an AQP mode. The tariff for the given pathway is applied at the date of fitting. This could be resolved by national guidelines offering a 2nd aid post-fitting tariff	**Thank you for your comment. It is outside the remit of the committee to dictate tariffs or funding strategies. This is something to discuss with local commissioners.**
Novus Health Ltd	FULL	228	17.3.46	Having experience working in a department that offered automatic face to face follow up and now in a service that sends an offer letter and COSI questionnaire at 8 weeks I would be concerned hear that the DNA rate for the former and the financial consequences have not been adequately considered here	**Thank you for your comment. The committee has considered difficulties in attendance, amongst other factors, and has amended the recommendation to allow telephone or electronic communication as an alternative to a face-to-face appointment for patients who would prefer that.** **The committee is aware that providing follow-up appointments to all hearing aid users will increase current costs; this is considered in the resource impact assessment published alongside this guideline. However, the committee agrees that follow-up appointments are a vital component of hearing aid provision, and not offering these for all patients risks wasting money on hearing aids that cannot be used by people who have not been enabled to use them.**
Royal Berkshire NHS Foundation Trust	Short	04	9-12	We are concerned that this recommendation may imply that only the Southeast Asian population is at risk of sinister post-nasal space pathology, that only they warrant further ENT referral, and only in the presence of unilateral middle ear effusion. Certain population groups have higher risk (Southeast Asian, but also in African populations, and some occupational exposure, (Adami et al (2002); Souhami and Tobias (2005); Lucente and Har-El (2004), Ho et al (2008)).	**Thank you for your comment. We have only mentioned the Chinese and those of south-east Asian family origin because we have evidence that the PPV is >0.3% - in other words that the pick up rate of carcinoma from a referral for an isolated middle ear effusion in the absence of an upper respiratory tract infection (URTI) is within the limits that dictate we can suggest an urgent referral. All other ethnic origins with an unexplained middle ear effusion are dealt with in 1.1.7. So**

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				But persistent middle ear effusion, without a precipitating factor (e.g. history of upper respiratory tract infection, rhinitis or sinusitis), is atypical outside of the paediatric population (1:100,000; Adami et al (2002)). In Caucasian adults with hearing loss secondary to effusion, a rate of post-nasal space carcinoma of 4.7% has been reported (Glynn et al (2006); of patients with post-nasal space carcinoma, 45 – 50% will present with middle ear effusion with symptoms reported 9 months prior to diagnosis (Balm et al (1997); Woollons and Morton (1994); Sham et al (1992)). Middle ear effusion in all adults should be taken as 'a warning sign for early recognition of the cancer', such that the presence of OME (Otitis Media with Effusion) in all adults represents a 'high index of suspicion for nasopharyngeal cancer', (Glynn et al (2006)). Unilateral middle ear effusion is a particular index of suspicion, but the selection of unilateral as a criteria seems arbitrary as the in the presence of a bilateral effusion without identifiable cause, a post-nasal space lesion cannot be excluded Glynn F, Keogh IJ, Ali TA, Timon CI, and Donnelly M (2006) Routine nasopharyngeal biopsy in adults presenting with isolated serous otitis media: is it justified? J Laryngol Otol. 2006 Jun;120(6):439-41. Huang D. and Lo K-W. 'Aetiological Factors and Pathogenesis' in Van Hasselt A. and Gibb A. (1999) Nasopharyngeal Carcinoma - 2nd Ed (Chinese University: Hong Kong)). Middle ear effusion is atypical outside of the paediatric population Adami H-O, Hunter D and Trichopoulos (2002) Textbook of Cancer Epidemiology (Oxford University: Oxford) p129	**every adult with a middle ear effusion which is not the consequence of an URTI, or persists after one, should be referred. We have also added some text to the 'Recommendations and link to evidence' section to further highlight some of the patient groups you mentioned.**

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				Ho KY, Lee KW, Chai CY, Kuo WR, Wang HM and Chien CY (2008) Early recognition of nasopharyngeal cancer in adults with only otitis media with effusion. J Otolaryngol Head Neck Surg. 2008 Jun; 37(3):362-5. Lucente F and Har-El G (2004) Essentials of Otolaryngology – 5th Ed (Lipcott, Williams and Wilkins: Philadelphia) Souhami R and Tobias J (2005) Cancer and Its Management – 5th Ed (Blackwell: Massachusettes) Balm AJ, Plaat BE, Hart AA, Hilgers FJ and Keus RB (1997) Nasopharyngeal carcinoma: epidemiology and treatment outcome Ned Tijdschr Geneeskd 1997 Nov 29;141(48):2346-50. Woollons AC and Morton RP (1994) When does middle ear effusion signify nasopharyngeal cancer? N Z Med J 1994 Dec 14;107(991):507-9. Sham JS, Wei WI, Lau SK, Yau CC and Choy D (1992) Serous otitis media. An opportunity for early recognition of nasopharyngeal carcinoma. Arch Otolaryngol Head Neck Surg. 1992 Aug;118(8):794	
Royal Berkshire NHS Foundation Trust	Short	04	16-26	Identification of complex patients: It is felt that this section requires clear and complete definition of a complex patient. This should make reference to the BAA (British Academy of Audiology) 'Guidance on Identifying Non-Routine Hearing Loss', which is currently under revision. This BAA document helps clinicians and other professionals working with hearing loss to understand which patient sub-groups may require further support and non-routine pathways. With lack of referencing to the BAA document, there is a concern that some of the groups discussed in the BAA document have not been listed in section 1.1.7. There is no obvious evidence for the exclusion of	**Thank you for your comments. The committee has amended the recommendations to take account of the groups that are also outlined in the BAA guidance, including hyperacusis, tinnitus, vertigo, and fluctuating hearing loss not associated with upper respiratory tract infection.** **We have not specifically covered all pathologies listed in this comment but believe that the majority will be identified. In particular, we have not made reference to ANSD, which usually presents in children (the adults are usually diagnosed with**

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				some non-routine patient groups: Profound Troublesome tinnitus Precipitous hearing loss Significant mixed or conductive hearing loss (surgical options maybe available to these patients, however if this is covered in an ENT (Ear Nose and Throat) referral, then post-ENT, should the mixed loss persist then a route into the complex pathway will allow these patients the options they require, bone conduction hearing aid /BAHA (Bone Anchored Hearing Aid) or support for a more complicated BTE (Behind the Ear) fit) Acoustic Neuroma ANSD (Auditory Neuropathy Spectrum Disorder) APD (Auditory Processing Disorder) Non-organic hearing loss Poor speech discrimination above that of the audiogram/ dead regions Multiple complex follow up appointments Dual sensory impairment Age (see below) There is evidence that these patients require additional considerations and intervention, often with non-routine technology and support pathways. It is hoped and expected that this evidence is further discussed and strengthened in the pending revision of the BAA guidance. The concern is that by not referencing the BAA 'non-routine' document or including these groups in those listed in 1.1.7, we will be shutting the door on the resources and pathways these patients require. Patients will not have access to the correct information and options available, to make informed	**auditory neuropathy) and APD. Non-organic hearing loss is outside our remit and we believe the dual sensory impairment fits with our recommendations. These guidelines do not substitute for clinical judgement and cannot cover all clinical issues. Audiologists should use their experience, training and other available guidance in areas not covered by these guidelines.** **We have not covered adults who had hearing loss managed in childhood as these individuals are excluded from the guideline scope.**

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				choices about their care. Similarly, there is concern that by not clarifying non-routine patients in the NICE guideline, pathways will become less efficient with greater need for backward and onward referral to primary and secondary care – with respective added cost and reduction in quality of care and patient outcomes. Criterion of Age: We are concerned that this exclusion of this criterion from the recommendations on complex audiology assessment pathways may imply the inclusion of early-onset hearing loss in the young adult population within routine hearing assessment provision, to the exclusion of the identification of underlying significant medical pathology: The criteria for Direct Referral to Audiology Services, for the assessment of hearing loss, were originally established as a 'screening tool…effectively identifying those patients in whom underlying pathology may be the cause for their hearing loss, and for whom investigation is warranted' (Eley and FitzGerald 2010). Data, in as much as it exists, suggest that around 15% patients referred for Audiology assessment will require onward referral to exclude significant underlying medical pathology (Fox and Sharp 1994: Eley and FitzGerald 2010) Data from multiple several studies and sources (ISO 7059-1984: Lawton 1998: Lawton 2016) indicate that hearing impairment in people under 40 is statistically atypical and should be considered abnormal; and unusual in under 50 year olds. Given the atypicality of hearing loss in the under 40s,	

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				it is felt the guidance should reflect non-routine nature of early onset and congenital hearing loss and the extra support that is often required and this cohort should be considered for referral to local complex audiological pathways, ENT or audio-vestibular services, to exclude the need for further evaluation, investigation or management. In addition to this, in the case of established childhood permanent loss, we would request the committee note the NDCS (National Deaf Children's Society) document on 'Commissioning Audiology Services for Young Adults -2012' outlines why young adults, who have grown up, with congenital or acquired hearing loss continue to require complex audiological care. References: Eley and FitzGerald (2010) Direct general practitioner referrals to audiology for the provision of hearing aids: a single centre review Quality in Primary Care 2010;18:201–6 Fox and Sharp (1994) Direct hearing aid referral: the effect upon outpatient waiting times in a district general hospital Journal of the Royal Society of Medicine Volume 87 April INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (1984) Acoustics – threshold of hearing by air conduction as a function of age and sex for ontologically normal persons. ISO 7029-1984. Lawton B (1998) Typical Hearing Thresholds: a Baseline for the Assessment of Noise-Induced Hearing Loss ISVR Technical Report No. 272 (ISVR, Univ of Southampton, SOTON) Lawton B (2016) A Baseline for the Assessment of	

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				Noise-Induced Hearing Loss: Contrasting thresholds-by-age for otologically normal persons and typical persons ISVR Technical Report No. 272 (ISVR, Univ of Southampton, SOTON) NCDS (2012) Commissioning Audiology Services for Young Adults	
Royal Berkshire NHS Foundation Trust	Short	05	14-18	Patients with cognitive impairment and with mild learning difficulties can be seen in routine services. However, we feel there should be clear clarification, of the criteria by which any patients with more severe difficulties (moderate and above) should be referred to a complex service. These patients can have specific needs and, to obtain good outcomes they will need to be seen by services who can offer appropriate assessment and support.	**Thank you for your comment.** **The committee discussed adaptations that may be needed when conducting a hearing assessment in these populations, and have stated in the 'Recommendations and link to evidence' section of the full guideline that referral to a specialist service may be necessary. The committee consider it is for the health professional to refer to the appropriate service based on the needs of the individual. This is something which may be standardised by development of a local pathway.**
Royal Berkshire NHS Foundation Trust	Short	09	10-12	We are pleased to see the recommendation that all patients should be offered a follow up. However, we do feel that the recommendation should look beyond the traditional face-to-face appointment and capture the wider choice of follow up formats that patients are now choosing, such as phone and postal follow up. We also feel it should further recognise how novel telehealth and remote technologies (e.g. using mobile phone apps and cloud-based communications) will bring innovation to the management of patient pathways and amplification, without requiring the physical presence of the patient. Based on these novel technologies and pathway innovations the choice of format will vary per patient group and individual need, (e.g. new hearing aid wearers versus those well established, level of technological	**Thank you for your comment. We have amended the recommendation to account for alternative methods of interaction if that is the person's preference. Aftercare is also now mentioned explicitly in recommendation 1.7.2.**

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				competence, comorbidities etc), going forward. Further, there is a lack of mention of Aftercare ('repairs'). One could argue that Aftercare is of equal or higher importance than an early prescribed follow up in terms of addressing problems, routine maintenance and encouraging hearing aid wear. Aftercare is essential for compliance, good outcomes and therefore cost-efficiency.	
Royal Berkshire NHS Foundation Trust	Full	075-76	1	Recommendation 8: Offer MRI (Magnetic Resonance Imaging) for hearing loss with localising symptoms irrespective of threshold. We would be concerned that the wording of the Recommendation 8, as it stands, implies the mandated scanning of all lateralising symptoms, irrespective of hearing threshold and clinical context, limiting clinical discretion and requiring MRI irrespective of resource implications and distress to the patient: In the context of the recognised heterogeneity of the published protocols, this recommendation allows for little clinical discretion and may have a significant burden on health resources, without significant improvement in clinical yield. The identification of vestibular schwannoma, in the presence of isolated unilateral tinnitus (without asymmetrical hearing loss or other red flag signs), is rare: e.g. Lustig et al (1998) suggested a rate of <0.7%, (of all patients with isolated unilateral tinnitus). The committee recognises the existence of little data	**Thank you for your comment. The wording of recommendation 8 allows for the professional to consider if symptoms are suggestive of a vestibular schwannoma and not to be held back by having to stick to hearing thresholds as a limiting factor. This allows for clinical discretion. Without being able to access the Fox presentation you cite we are unable to comment on it but need to point out that this recommendation is for people with hearing loss and tinnitus, not just isolated unilateral tinnitus.** **With regard to Obholzer 2004 the committee have not considered a recommendation on isolated unilateral tinnitus as that is outside the remit of the guideline. NICE is currently developing a separate guideline on tinnitus.** **The committee has revised recommendation 9 to change the referral criteria. We believe that these are now in line with current practice and so should not lead to an increased workload or resources required for MRI, which was never the intention of the recommendation.**

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				or economic evidence for the benefits of specific protocols. In a large scale service evaluation locally (Fox 2017), based on Lustig et al (1998), the inclusion of isolated unilateral tinnitus in an MRI screening protocol was expected to have a yield of 0.002% (of total scans ordered; approx. 1 – 2 patients/year): of 985 scans, over a 1 year period, 233 were for isolated unilateral tinnitus with a clinical yield of 0%. This yield should be seen in the context of a commensurate 38% increase in clinical workload, within department (excluding Radiology) and came at an estimated additional financial cost of 10.4 weeks of a Band 7 WTE (Whole Time Equivalent) and 233 x tariff for MRI IAM (Internal Auditory Meatus). In addition, given the evidence for higher rates of anxiousness in this group, there is a question of the levels of distress caused balanced against the likelihood of a positive MRI finding. We welcome the work of the Committee in standardising care, where provision may be variable or lacking in some areas of the country, and we welcome the guidance for departments, where the evidence for protocols are varied and copious, making the selection of an appropriate protocol challenging given the size of the literature base. We note the Committee recognises the recommendation is 'not based on the evidence' but we also note this is a strong recommendation. Clearly while lateralising symptoms, such as a change in facial sensation, represent a significant index for clinical concern, Obholzer et al 2004 raised the valid question regarding the inclusion of isolated unilateral tinnitus in clinical protocols, and given the trade-off between resources and patient impact versus clinical	**The committee recognises that current practice varies across the country, and that a difference of 20 dB at 2 frequencies is used in some areas, but believes that the definition now adopted represents most common current practice. As such, the committee does not believe that these criteria will lead to a significant increase in referrals for the country as a whole, and that standardisation of criteria will be beneficial and may reduce overreferral in some places.** **However, due to the limited evidence regarding the most suitable criteria to use and uncertainty on the effect that this might have on referral numbers, the committee has recommended only that clinicians and commissioners 'consider' using these criteria as there is insufficient evidence to support a stronger recommendation.**

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				yield, we request the Committee revisit the strength of this recommendation, as it relates to this symptom presentation, to allow for more discretionary inclusion. Recommendation 9: We would be concerned that the wording of Recommendation 9, as it stands, may imply the adoption of the DoH (Department of Health) protocol, at the exclusion of others. Many studies in the literature also identify the balance to be struck, in the selection of MRI screening protocols for the identification of VS (Vestibular Schwannoma), between clinical yield and resource burden/patient distress on one hand versus resource demand on the other (e.g. – Wong and Capper 2012). We recognise the use of conditional language by the Committee: (Draft Guidance (Full Version) page 75).: 'Consider MRI …if there is an asymmetry of 20 dB or more at any single frequency between 0.5 kHz and 4.0 kHz on pure tone audiometry' (Draft Guidance (Full Version) page 76) 'it was agreed that the Department of Health criteria of ≥20 dB asymmetry of sensorineural…at any single frequency between 0.5–4 kHz may be the most appropriate protocol for referral for imaging' We note the Committee accepts the heterogeneity of adopted protocols, based on the need to balance resource management/waiting times/patient anxiety versus best clinical yield: i.e. the 'trade-off between using a test…while also not causing over-referral to imaging services, with the associated financial costs, patient waiting times and the inevitable risk of incidental findings that could cause unnecessary	

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				anxiety and follow-up for patients', (Draft Guidance (Full Version) pg 76). There is limited economic evidence to support the adoption of specific criteria but the Committee states that the criteria suggested in the Draft Document (Full Test) are 'unlikely to increase referrals more than a small amount in other areas'. As noted above, we welcome the work of the Committee in standardising care, where provision may be variable or lacking in some areas of the country, and we welcome the guidance. Extensive service evaluation and audit data locally (in an Audiology Led MRI pathway, based broadly on 2 frequency sensorineural asymmetry of ≤ 20 dB HL from 0.25 – 8 kHz and/or significant lateralising symptoms) demonstrates positive yield rates for vestibular schwannoma similar to ranges reported in the literature (as an index for appropriate referral rates), (Fox 2017); retrospective review of 73 cases of identified vestibular schwannoma suggested that an alteration of protocol criteria from two frequencies from one frequency would improve clinical yield from 94.5 to 98.6% only (improvement of 4.1% or 3 identified cases in 7 years) but at a conservative additional cost of a 3 – 4 fold increase in referrals (with the resource implications as discussed above) (from a current referral rate of 700 – 800 scans/annum). Locally our department represents a 'one-stop' shop, requiring only one patient attendance for assessment, but this is likely to represent a doubling of resource implications, where referral onto ENT from Audiology is required, as is common in many departments. We would ask the Committee to consider these resource implications and allow for greater discretion,	

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				in the selection of other evidence-based protocols, with respect to the prescribed criteria and the balance between the indication for testing and management of the patient pathway and related resources. Our Trust has had experience of implementing this approach, from the point of view of an integrated Complex Audiology Pathway (MDT (Multidisciplinary Team) team review structures), and a longstanding Audiology-led MRI pathway and would be willing to submit its experiences to the NICE shared learning database. Wong and Capper (2012) Incidence of vestibular schwannoma and incidental findings on the magnetic resonance imaging and computed tomography scans of patients from a direct referral audiology clinic The Journal of Laryngology & Otology (2012), 126, 658–662. Fox (2017) MRI Referral and the Diagnostic Role of the Audiologist in the Adult Audiology Pathway (Presentation to the 13th Conference of the British Academy of Audiology, Bournemouth) Obholzer at al (2004) Magnetic resonance imaging screening for vestibular schwannoma: analysis of published protocols Journal of Laryngology and Otolaryngology May;118(5):329-32	
Royal College of General Practitioners (RCGP)	Short	03	5	This guideline read oddly. The very first recommendation (and some others including 1.1.2, 1.1.5 &1.1.7) are worded 'Refer … unless some other condition does not prevail'. To an experienced GP this runs counter to the way one thinks and works. The usual approach is to refer because of the possibility of something positive causing the problem,	**Thank you for your comment.** **Some recommendations use 'unless' to avoid contradicting or overlapping with separate recommendations in the guideline. The committee has made a series of recommendations to cover different groups of people and different symptoms, and we**

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				not by a process of excluding matters that are either self-limiting or can be treated in primary care. As the committee members surely know general practitioners spend a lot of their working lives in a state of uncertainty. The guideline appears to support the general approach that uncertainty should be dealt with not, as usually happens, by using time, follow-up and safety netting, but by referral. The instruction to 'refer … unless' could, if fully adhered to, result in a substantial increase in referrals. This would, of course be justifiable if it were felt that there are large numbers of people presenting to their GPs and not being referred or diagnosed appropriately but I am not aware of any such evidence. The full guideline asserts delays, but again without adducing any evidence to support the claim. The second oddity is the absence of any diagnostic categories. Some GPs would find it odd to write a referral using the words 'This patient is being referred urgently because of sudden hearing loss not explained by external or middle hearing loss. The GP does not know what the diagnosis might be but this is in accordance with NICE advice' [para 1.1.2]. It turns GPs into automata, and there are concerns that consultant colleagues would not feel that GP, were not fulfilling their own professional duties.	**have taken care to ensure these are mutually exclusive to avoid confusion. For example, the prime aim of recommendation 1.1.1 is to cover the action that should be taken for people with the most common forms of long-term gradual hearing loss such as age-related hearing loss (that is, they should be referred for a hearing assessment). However, we have stated that earwax should first be excluded as this is a short-term issue that can be resolved in primary or community care; and that sudden hearing loss is a different and more urgent issue and is dealt with in separate recommendations. If desired, this could be alternatively and more positively stated as that clinicians should refer all those with suspected long-term gradual hearing loss for a hearing assessment. It has been worded differently in the recommendations for greater clarity about who is, and who is not part of this group, and to ensure that consideration of alternative explanations of hearing loss are made before the person is referred for an assessment.** **The reason that all remaining adults with gradual hearing loss should be referred is so that they can have a full hearing assessment conducted by an audiology service. For this condition, as for many others, it is not possible or appropriate for a GP to conduct a full assessment, but this is best done by specialists. It will therefore be the specialist who makes the diagnosis.**

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					There is evidence that not all people reporting hearing loss have in the past been referred for an assessment, as shown by Davis 2007 and Benova 2014 and discussed in the NHS England commissioning framework for hearing loss. There is evidence of delays (both of people reporting their hearing loss and of being referred) in Davis 2007 and Dubno 2017. These sources are referenced in the full guideline. **As a result we do expect there to be an increase in referrals for hearing assessments. The impact of this is discussed in the resource impact assessment accompanying this guideline.**
Royal College of General Practitioners (RCGP)	Short	04	5	Recommendations 1.1.1 and 1.5.1 The evidence underlying the recommendation to refer all adults with hearing loss to audiological services and that they be provided with hearing aids if they have communication difficulties is of very low quality. The major study referenced (Davis 2007) reported that only 43% of participants were still using hearing aids at follow-up suggesting that the majority did not find the device beneficial. Hearing aids do not give back normal hearing. To recommend all those with communication difficulties without some assessment of the degree of functional impairment/quality of life/psychological distress risks significant waste in view of the high non-adherence rates.	**Thank you for your comment. These recommendations are discussed in detail in sections 8.2.4 and 15.2.4 of the full guideline. They draw heavily on original health economic modelling conducted for this guideline. The committee has high confidence in the applicability and reliability of the cost-effectiveness results of this modelling, which showed early adoption of hearing aids to be highly cost- effective compared to not fitting hearing aids.** **The study referred to, which was one part of the Davis 2007 review, assessed follow-up after an average of 12 years, a considerably longer period than most studies. There are many reasons for people to stop using hearing aids. A common reason is that people are not able to use their hearing aids fully or to gain maximum benefit from them.**

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					A follow-up appointment has been shown to both increase ability to use hearing aids and the proportion of people subsequently using their hearing aids. **Whilst 43% is acknowledged by Davis et al. as disappointing, sensitivity analysis for the modelling conducted for this guideline has shown that fitting hearing aids would still be highly cost effective even at that level of adherence. However, the committee believes that when modern hearing aids are used, and a programme of follow-up of patients is added, particularly a comprehensive check at 6-12 weeks, levels of adherence in future would be expected to be higher when compared with the situation in the 1980s and 1990s reflected in the Davis study.**
				Whilst the health economic assessment suggests that the recommendation is below the NICE QALY threshold for non-recommendation of funding in view of the large number of people who will become eligible (appendix N 11 million people with hearing loss in the UK of whom 2 million use aids) there are considerable concerns regarding affordability.	**It is NICE's policy to recommend any treatment with an ICER below the cost-effectiveness threshold where there is strong evidence supporting this finding. If a recommendation is cost effective then it should be provided regardless of the condition it relates to, or how many people are affected by that condition, as that would be a better use of NHS resources than to expend them on interventions with a higher ICER, and to do otherwise would be to discriminate against people on the basis on their disability being common. The resource implications of this guideline are discussed in the resource impact assessment accompanying this guideline.**

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				The health economic assessment used adherence rates higher than in the Davis 2007 study and used hearing loss across all severities. It is therefore not applicable to those with only mild hearing impairment.	**The figure of 11 million people in the UK affected by hearing loss has been changed in the final guideline to 9 million in England (full guideline, p.18). Not all of these people will be suitable for hearing aids. Please see the resource impact report for calculations on number of additional people expected to be treated following this guidance.** **Whilst the base case results in the health economic modelling used higher adherence rates, the sensitivity analysis conducted tested lower rates of adherence and found that hearing aid use was still highly cost effective even at these adherence rates. It was found that adherence rates have very little effect on the overall cost effectiveness of treatment (this is because when a patient stops using hearing aids they stop receiving any benefit from using them, but also stop incurring any further future costs for check-ups and replacement hearing aids in future). The model looked at hearing loss across all severities due to the lack of segmented data. However, there is evidence that the benefit of hearing aids is similar in people with different levels of hearing loss (Whitmer, Howell and Akeroyd, 2014, IJA). Evidence on the benefit of hearing aids was taken from a study of people receiving hearing aids for the first time, who are likely to have had milder hearing loss than on average; it is therefore highly applicable to people with mild hearing impairment. This issue is discussed in detail in section N.2.4.5.2, and sensitivity analysis was conducted which showed that even if the**

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					benefit for a particular group may be only half that of the average, it would still be highly cost effective to treat them. **This recommendation is that people who have already gone to see a healthcare professional (whether GP or another professional) should be referred to audiology, as such this will not increase the number of GP appointments.** **The committee is aware of direct access routes to audiology and has included references to this in the full document. Not all people will need to go to see a GP before attending audiology. However, we are aware of the important role of a GP in identifying and treating medical issues that may avoid the need for audiological input. The route of access was not a review question that the committee conducted research into, and so the committee is not in a position to recommend any one route over another. Pathways should continue to be determined at a local level.**
				The effect of this recommendation on the demand for GP appointments in a stressed primary care system needs to be considered.	
				As this recommendation stands NICE should recommend direct access to audiology as there is no	

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				role for a GP apart from an administrative one. Audiologist can check for wax and identify red flag symptoms.	
Royal College of General Practitioners (RCGP)	Short	04	9	The absence of diagnostic categories was especially odd in 1.1.5. Is the disease that is apparently confined to families of South East Asian origin?	**Thank you for your question. We have only mentioned the Chinese and those of south-east Asian family origin because we have evidence that the PPV is >0.3% - in other words that the pick up rate of carcinoma from a referral for an isolated middle ear effusion in the absence of an upper respiratory tract infection (URTI) is within the limits that dictate we can suggest an urgent referral. All other ethnic origins with an unexplained middle ear effusion are dealt with in 1.1.7. So every adult with a middle ear effusion which is not the consequence of an URTI, or persists after one, should be referred.**
Royal College of General Practitioners (RCGP)	Short	05	16	1.1.9 Pedantic point. '… because hearing loss is a comorbid condition.' Should be '…often is …' or '… may be …'	**Thank you for your comment. We agree and have altered the wording of the recommendation.**
Royal College of General Practitioners (RCGP)	Short	07	25	Recommendation 1.3 short / Recommendation 9 long The clinical algorithm for certain symptoms and the recommendation for MRI scanning is within the competence of GPs. Why is NICE not recommending direct access to MRI scanning for these symptoms as currently occurs in some areas of the UK?	**Thank you for your comment. We have corrected the heading to reflect that MRI could be requested by anyone with competences and permission to do so.**
Royal College of General Practitioners (RCGP)	Short	General	-	Why is there an absence of any advice either to use or avoid tests in the surgery (including, where available audiometry) or phone-based hearing tests to verify reported hearing difficulty. It is quite common for patients to present with symptoms of hearing loss but no objective loss.	**Thank you for your comment. The committee believes that reliable diagnoses can only be made if a full audiological assessment is made. Any simple tests that can be done in the surgery will risk missing patients. Therefore, the recommendations in this guideline are to**

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					refer people to the most suitable pathway for their symptoms to be investigated appropriately. We believe the recommendations are clear that (after excluding earwax or acute infections) GPs or other non-specialists should refer patients on, not conduct tests themselves.
Royal College of General Practitioners (RCGP)	Full	General		Answers to some of these questions are offered in the full guideline. It emerges that no studies were identified to support recommendations regarding positive features, so that they are all based on the committee's consensus. The committee has considered the concern that this could cause a large increase in urgent referrals. P56 of the full guideline includes the text 'the committee agreed that the recommendation for referrals would not necessarily lead to more urgent referrals being made, but instead urgent referrals are more likely to be made earlier, thus possibly reducing harmful delays or unnecessary interim referrals and saving costs', but without any evidence to support this assertion the reality could be quite the opposite. The full guideline also answers the question about the precise risk borne by families of South Asian origin. Again, it feels very odd that this detail is not included in the shorter guideline, as so few GPs will ever consult the full version.	**Thank you for your comments.** **Some recommendations in this guideline were based on committee consensus, however others were based on clinical and health economic evidence. No recommendations expected to require a substantial increase in resources were made only on the basis of expert consensus.** **Regarding urgent referrals, the committee has recommended what it believes should already be current referral practice for urgent and immediate cases. The reasons for referral are long established and the committee has not sought to innovate in this area. There is evidence for these criteria but that evidence is not of the standard required by NICE largely because it is historical. The committee wished to provide guidance for GPs and other health professionals to avoid people being referred too late for successful care. These cases outlined a need to be seen quickly. If there are situations where such people are not presently being referred urgently, then they would be expected to present to the health service again at a later stage and would eventually still receive care and incur costs, but this could result in greater health problems which would**

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					ultimately give rise to greater costs and less benefit. Earlier referral will reduce the cost to the individual, the NHS and society as a whole. **We have no evidence or reason to think that these recommendations are out of line with current best practice or current usual practice, and the responses to this consultation in general support this. We have refined the wording of some recommendations in the final guideline.** **It is not usual practice to define rates of risk within NICE recommendations.**
Royal College of Nursing	Short	010	1.7	Minimum standards expected in waiting rooms in ENT and audiology to allow patients with hearing loss to communicate effectively. For example hearing aid loop systems. Text messaging facilities	**Thank you for your comment. We agree but these need to be minimum standards applied more widely and not just ENT and audiology .**
Royal College of Nursing	Short	015	17-19	Please include links to this evidence.	**Thank you for your comment. This is a description of current practice and reflects what happens in every clinical pathway throughout the country as has been the case for many years.**
Royal College of Nursing	Short	06	5-6	There seems to be an uncertainty around the recommendations for instilling pre-treatment wax softeners; 0-5 days?	**Thank you for your comment. In some circumstances instilling drops and removing the wax on the same visit to the clinic is the best management option and on other occasions it may be easier to ask the patient to come back after using drops for up to 5 days. Specifying up to 5 days allows the practitioner some flexibility depending on clinical need.**
Royal College of Nursing	Short	06	20	This needs to be emphasised – Manual Ear Syringing is outdated but may still be practiced in some areas.	**Thank you for your comment.The committee has made a recommendation that syringing**

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					should not be used and has commented on harms associated with this outdated practice in the recommendations and link to evidence section of the full guideline. Please see the NICE CKS on earwax July 2006. It would be a concern if unsafe practice is being adhered to.
Royal College of Nursing	Short	07	1.3.3	We suggest a sign post to the guidance on oral steroid doses and consideration of intratympanic treatments to this content later in the guidelines	**Thank you for your comment. The full version quotes from papers about the various doses they used but the committee were unable to find good quality evidence to recommend any particular drug, regime or route and so we have not made any recommendation to change practice.**
Royal College of Nursing	Short	07	1.4	We feel there is the need for a section referring to an ENT service and the resources available. Flexible endoscopy of post nasal space.	**Thank you for your comment. Unfortunately the committee is limited as to how many research questions could be investigated within this guideline, and that area was not included in the guideline scope or as a research question.**
Royal College of Nursing	Short	08	1.5	There is the need for a section on bone anchored aids and when to consider involvement of cochlear implant centres.	**Thank you for your comment. We have changed the recommendations to include discussion of onward referral for implantable devices if applicable within the audiology assessment. Criteria for referral was considered to be outside the scope.**
Royal College of Nursing	General	General	General	Otherwise, this is a clear and effective document	**Thank you for your comment.**
Scottish Audiology Heads of Service	Short	010	4	Vague – not sure though how to define this more clearly as it becomes a list of "options" and each may have different methods for assessing outcomes – some may have none / assessment method is more anecdotal than scientific?	**Thank you for your comment. It is difficult to encompass the whole range and so have used examples.**
Scottish Audiology Heads of Service	Short	011	9	Does this differ by country or as it could differ by country and if so this wording may need to be amended to avoid the recommendations being "out of date" as a result of a single country change?	**Thank you for your comment. The guidelines are written for NHS services in England.**

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Scottish Audiology Heads of Service	Short	03	5	Minor point but please define "adult" as this is often a contentious issue when discussing paediatric / adult services.	**Thank you for your comment. A definition of the population for this guideline is included on page 8 of the short version. The population is defined as follows: "The guideline covers adults aged 18 and over who present with hearing loss, including those with onset before the age of 18 but presenting in adulthood."**
Scottish Audiology Heads of Service	Short	04	27	There is scope with Audiology led wax removal services to accommodate some of this within Audiology Vs ENT in addition to supporting Primary Care where Audiology is embedded within Primary Care.	**Thank you for your comment.**
Scottish Audiology Heads of Service	Short	05	16	"Consider" - is this appropriate i.e. how will this be interpreted and should this not require awareness raising etc prior to being part of this otherwise it could be poorly interpreted and seen as "refer all…" with the result being to overwhelm Services?	**Thank you for your comment. A strongly worded recommendation would be 'refer all'. In this instance the term 'consider' is used to reflect the strength of the evidence and should be interpreted to mean referral is considered by the health practitioner based on their clinical assessment and with involvement of the patient and/or their carer as part of shared decision making.**
Scottish Audiology Heads of Service	Short	05	19	Similar to example 3.	**Unfortunately we are not sure what this comment referred to and so are unable to provide a response. Your other comments have been responded to separately in this table.**
Scottish Audiology Heads of Service	Short	05	22	Similar to examples 3 & 4.	**Unfortunately we are not sure what this comment referred to and so are unable to provide a response. Your other comments have been responded to separately in this table.**
Scottish Audiology	Short	05	26	Does this statement require being explicit with regard	**Thank you for your question. Anyone who**

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Heads of Service				to who removes it?	**has the knowledge and skills required to perform the procedure can do this. It is a question of training and ability rather than job title.**
Scottish Audiology Heads of Service	Short	06	26	Who should refer for this purpose?	**Thank you for your comment. We have altered the wording to clarify but, to answer your question, anyone with the competences and permission to do so**
Scottish Audiology Heads of Service	Short	07	1	Concern that referral for MRI based on a single frequency is not correct but it reads to the commentator that this is the case.	**Thank you for your comment. The committee has reappraised the evidence in the light of comments and has decided to recommend a difference of 15dB at 2 adjacent frequencies (0.5, 1, 2, 4, 8 kHz) to reflect current practice in ENT clinics.**
Scottish Audiology Heads of Service	Short	07	1	Similar to example 7.	**Unfortunately we are not sure what this comment referred to and so are unable to provide a response. Your other comments have been responded to separately in this table.**
Scottish Audiology Heads of Service	Short	07	5	Similar to examples 7 & 8.	**Unfortunately we are not sure what this comment referred to and so are unable to provide a response. Your other comments have been responded to separately in this table.**
Scottish Audiology Heads of Service	Short	07	22	If indicated.	**Thank you for your comment. The wording has been amended to specify where indicated.**
Scottish Audiology Heads of Service	Short	08	20	In what level of detail, should this include the types of devices available e.g BTE (open fit, RIE, mould), ITE, ITC, BAHA, etc	**Thank you for your comment. This would be for the audiologist to determine when discussing options with the patient.**
Scottish Audiology Heads of Service	Short	09	11	Is there scope prior to this for other "remote" versions of follow-up e.g. questionnaire, phone, Skype, etc	**Thank you for your comment. It is difficult to evaluate newer technologies but we have changed the wording to cater for other forms of contact if desired by the patient.**

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Scrivens Opticial and hearing care	Short	011	1-9	We are able to 'refer immediately' to Accident & Emergency who could escalate to a specialist service within 24hrs but there are currently no pathways in place for community care to refer immediately to specialist services. There is currently no nationally established pathway for community care to refer urgently to specialist services. It is understood these adults need to be seen urgently and we are happy to prioritise and flag the referrals we issue to primary care (making them aware the referral has a 2 week timescale) until other pathways are provided. We can be flexible about how we issue these referrals and would suggest an electronic system. There is currently no nationally established pathway for community care to issue a routine referral direct to specialist services. We will continue referring to primary care until other pathways are provided.	**Thank you for your comment. We are unable to comment on local referral pathways.**
Scrivens Opticial and hearing care	Short	03	17-21	Unclear as to why the referral wording is different to BAA Guidelines as the NICE Guidelines offer a more complicated guidance which would result in the same type of referral for both categories.	**Thank you for your comment.** **No evidence was found for this review question, and therefore the recommendations were made by expert consensus of the committee. The committee considered the BAA guidelines to inform their discussion when drafting the recommendations. The committee have reconsidered and edited the recommendations in light of stakeholder comments and have sought to provide greater clarification on the criteria for referral for people with sudden hearing loss and those whose hearing loss has worsened rapidly .**
Scrivens Opticial and hearing care	Short	04	2	Unclear as to why referral wording is different to BAA Guidelines. The NICE guidelines introduce a qualifier	**Thank you for your comment.** **No evidence was found for this review**

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				of unilateral hearing loss and altered sensation or facial droop. Unilateral hearing loss is not defined in this document, so open to interpretation.	**question, and therefore the recommendations were made by expert consensus of the committee. The committee considered the BAA guidelines to inform their discussion when drafting the recommendations. The committee have reconsidered and edited the recommendations in light of stakeholder comments.**
Scrivens Optician and hearing care	Short	04	9-12	There is currently no nationally established pathway for community care to refer to specialist services. As community care we are currently regulated to assess, test and prescribe but not to diagnose so would refer these signs to primary care.	**Thank you for your comment. Referral pathways need to be identified locally and will differ from district to district with some audiology services having referral rights.**
Scrivens Optician and hearing care	Short	04	13	There is currently no nationally established pathway for community care to refer to specialist services. In line with BAA Guidelines we would refer unilateral hearing loss or otaglia affecting either ear, which is intrusive and has lasted over 7 days to primary care. We would like to understand the relevance of the over 40 criteria, why would someone under 40 not need to be referred?	**Thank you for your question. It is correct to refer these patients to the GP; however, in these guidelines we are considering referral into secondary care for cases which the GP cannot manage. Care pathways depend on the local services available. We have deleted the restriction to over 40s.**
Scrivens Optician and hearing care	Short	04	23	The BAA description of hyperacusis has detailed qualifiers, while the NICE guidelines version is more open to interpretation, which could lead to unnecessary referrals.	**Thank you for your comment. We have amended our definition in the recommendation and glossary.**
Scrivens Optician and hearing care	Short	04	27-13	There is currently no nationally established pathway for community care to refer to specialist services so we would refer to primary care.	**Thank you for your comment. Referral to specialist services via primary care is correct. The recommendation has been amended to consider referring for those who are able to refer to specialist services.**
Scrivens Optician and hearing care	Short	04	27	Ambiguous information in NICE guidelines. First reference states refer if after initial treatment of	**Thank you for your comment. The recommendations have been amended to**

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				earwax they have partial or complete obstruction. Second reference states if irrigation is unsuccessful after second attempt refer. Does the second reference mean the second attempt on the same day?	**clarify referral should be considered after 2 attempts to remove ear wax have been made.**
Scrivens Opticial and hearing care	Short	05	14-24	We wholeheartedly support increased audiology services for adults with dementia, mild cognitive and learning disabilities. The testing completed by audiology services is subjective. Adults in this group who cannot consistently respond would need to be referred directly to specialist services for objective hearing tests. We would recommend putting clear pathways in place so these potentially vulnerable members of society are referred to the right service first time – Getting it Right First Time (GIRFT).	**Thank you for your comment. The committee discussed adaptations that may be needed when conducting a hearing assessment in these populations, and have stated in the 'Recommendations and link to evidence' section of the full guideline that referral to a specialist service may be necessary. The committee consider it is for the health professional to refer to the appropriate service based on the needs of the individual.**
Scrivens Opticial and hearing care	Short	06	1-19	Ambiguities from guidelines. Is wax removal via irrigation being given precedence over microsuction/suction with a loupe? Is wax removal to be under the remit of primary care or audiology services. It is disappointing that no mechanical methods were identified.	**Thank you for your comment. Irrigation, microsuction and removal under direct vision are all mechanical methods of wax removal. The removal of wax should be undertaken within primary or community care and this is specified in the recommendations.**
Scrivens Opticial and hearing care	Short	07	22	Tympanometry only has a value for assessing adults with a conductive hearing loss so it is unclear why it is listed as part of the standard audiological assessment. It does not appear the Committee found any evidence to support this. In community care we have to refer conductive losses for medical investigation as it is not within our remit to diagnose, only measure the hearing loss. To train and equip our staff to perform tympanometry on the relatively rare occasion required, would be a significant cost increase to us and would not streamline the service. Service users would still have	**Thank you for your comment. The wording has been amended to specify "tympanometry if indicated".**

Organisation name	Document	Page No	Line No	Comments	Developer's response
				to be referred to specialist services, via primary care where the procedure would be repeated. It would also unnecessarily extend the Standard NHS appointment.	
Scrivens Opticial and hearing care	Short	07	28-9	Unclear why this has been itemised separately. It potentially may be making reference to speech in noise testing but that is not part of the standard assessment so clarification may be of benefit to users of the guidelines.	**Thank you for your comment. We've amended the recommendation.**
Scrivens Opticial and hearing care	Short	09	16	Although offering a face-to-face follow-up is part of our business model the majority of adults do not require one. Were we obliged to supply a face-to-face follow up to everyone it would have a significant impact on capacity and costs of the service.We feel that without appropriate evidence to support the Committee's proposal on follow up care such statements are misleading. In line with up and coming telehealth models, our standard approach is a phone call follow-up which verifies if a face-to-face follow up is required. This allows us to achieve the best result while maximising our time and resources as well as that of our service users.	**Thank you for your comment. The committee agreed that face-to-face follow-up is preferable and should be offered in the first instance but has changed the wording of the recommendation to allow other methods of contact if preferred by the patient.**
Scrivens Opticial and hearing care	General	04	20	Asymmetric hearing loss is not defined in this document. In the BAA Guidelines unilateral or asymmetrical sensori-neural hearing loss is defined as a difference between the left and right bone conduction thresholds (masked as appropriate) of 20dB or greater at two or more adjacent frequencies: 500, 1000, 2000, 4000 or 8000 Hz. (Other frequencies may be included at the discretion of the Audiologist). In the absence of recordable bone conduction thresholds, air conduction thresholds should be considered instead.	**Thank you for your comment. The committee did not feel that it was right to introduce absolute measures in this recommendation. The GP should feel able to refer directly for medical investigation if the patient presents with an asymmetry. Audiologists have their own criteria to dictate the point when they recommend referral for investigation.**

Organisation name	Document	Page No	Line No	Comments	Developer's response
Scrivens Opticial and hearing care	General	General	General	There seems to be a general predisposition in the guidelines towards secondary care and how national health audiology integrates with primary care and specialist services. Where community care has been mentioned it has been linked in with primary care which causes ambiguity about where responsibilities lie.	**Thank you for your comment. We have reviewed and amended the wording used to make these boundaries as fluid as they are in practice.**
Scrivens Opticial and hearing care	General	General	General	The lists of recommendations are in different orders on the short and full version of the draft. Having the same order on both would avoid confusion.	**Thank you for your comment. The committee felt that due to the overlap of some of the recommendations and their supporting evidence reviews, it would be more helpful to clinicians if the recommendations in the short version are in a more logical order and more in line with the clinical pathway.**
Scrivens Opticial and hearing care	General	General	General	Audiologists need a single set of guidelines to work to, conflicting information from NICE and British Academy of Audiology (BAA) could cause confusion. Where possible the same language should be used.	**Thank you for your comment. The committee have not copied from BAA but have derived their own conclusions and therefore the language used is different. The BAA provides guidance for audiologists whereas NICE are considering a wider group of health professionals involved in patient management.**
Scrivens Opticial and hearing care	General	General	General	Not confirmed in NICE guidelines that when a referable condition has already been investigated and has not significantly changed whether it needs to be re-referred. The BAA Guidance for Audiologists: Onward Referral of Adults with Hearing Difficulty Directly referred to Audiology Services (BAA Guidelines) state that pre-existing and investigated (medical) conditions should be taken into account if relevant. The BAA Guidelines also state that referral for a medical opinion should not normally delay impression taking or hearing aid provision. Although specific unresolved issues have been mentioned, we	**Thank you for your comment. The committee does not feel it necessary to point out to people that they should not re-refer for the same condition. We feel that it is up to the practitioner to make that decision based on information that is generally held by the GP.**

Organisation name	Document	Page No	Line No	Comments	Developer's response
				would suggest a blanket statement for all referable conditions if they have been investigated previously and have not changed since investigation.	
Scrivens Opticial and hearing care	General	General	General	There is no guidance on the useful life of a hearing instrument or QALY analysis on technology improvements. Hearing aid manufacturers are making regular strides forward. From experience the majority of service users perceive noticeable improvement in quality of sound and benefit listening with new hearing aids after three years.	**Thank you for your comment. This guideline addressed a limited number of research questions. These were prioritised at the scoping stage on the basis of relative importance, current variation in practice and likelihood of identifying evidence. The lifetime of a hearing aid was not prioritised as a question for this guideline.** **The committee did consider the frequency at which people should have their hearing reassessed, with consideration of potential replacement of their hearing aids, and has added a recommendation that an automatic system to routinely reassess people using hearing aids should be considered. However, the committee did not recommend a particular frequency of recall due to lack of evidence. The committee made a recommendation for further research on monitoring of people using hearing aids.**
Scrivens Opticial and hearing care	Full	018	5-6	What are the sources of evidence for the sentence "for hearing loss ranks second in terms of prevalence of impairment and fifth for disease burden"?	**Thank you for your comment. The introduction has been amended and a reference has been provided.**
Scrivens Opticial and hearing care	Full	020	33	"Brings" should be "bring"	**Thank you for your comment. This has been amended.**
Scrivens Opticial and hearing care	Full	031	Chapter 18	"Any questionnaire mot" should be "Any questionnaire not"	**Thank you for your comment. This has been amended.**
Scrivens Opticial and	Full	054	3	"Aging" and "Ageing" are both used in the document,	**Thank you for your comment. This has been**

Organisation name	Document	Page No	Line No	Comments	Developer's response
hearing care				we would recommend consistency.	**amended.**
Scrivens Opticial and hearing care	Full	057	1	"stokes" should be "strokes"	**Thank you for your comment. This has been amended.**
Scrivens Opticial and hearing care	Full	058	-	"This population are at risk" should be "This population is at risk"	**Thank you for your comment. This has been amended.**
Scrivens Opticial and hearing care	Full	060	Para 5.3.4	There is a duplication of "whether the signs and symptoms".	**Thank you for your comment. This has been amended.**
Scrivens Opticial and hearing care	Full	081	Other considerat ions	Ref. 'It is important that the hearing assessment is carried out . . . . in an appropriately sound-treated room.' This does not allow for domiciliary audiology services so we would suggest wording similar to the NHS Commissioning Framework allowing the audiologist to use their professional judgment on the suitability of the test environment.	**Thank you for your comment. We have changed this to 'sound attenuated environment'.**

[i] NHS England, 2016 Commissioning Services for People with Hearing Loss: Framework for Clinical Commissioning Groups, p 30 paragraph 2 and Appendix 8 pp. 68-69

[ii] NICE 2017, Hearing Loss, Hearing loss in adults: assessment and management. Full Form Draft Guideline p. 3

[iii] NICE 2017, Hearing Loss Consultation on draft scope Stakeholder comments table , https://www.nice.org.uk/guidance/gid-cgwave0833/documents/consultation-comments-and-responses

[iv] BAA, 2016, Guidance for Audiologists: Onward Referral of Adults with Hearing Difficulty Directly Referred to Audiology Services. page 7

[v] For example the Committee in its discussion on wax management make very clear they see a distinction between primary and community care, and secondary care.

[vi] NICE 2017, Hearing Loss Consultation on draft scope Stakeholder comments table , https://www.nice.org.uk/guidance/gid-cgwave0833/documents/consultation-comments-and-responses

[vii] National Schedule of Reference Costs - Year 2015-16 - NHS trusts and NHS foundation trusts, https://www.gov.uk/government/publications/nhs-reference-costs-2015-to-2016. NCHA analysis of outpatient activity

[viii] National Schedule of Reference Costs - Years 2012-16 - NHS trusts and NHS foundation trusts, https://www.gov.uk/government/publications/nhs-reference-costs-2015-to-2016. NCHA analysis of outpatient activity

[ix] NHS England and the Department of Health, 2015. Action Plan on Hearing Loss https://www.england.nhs.uk/wp-content/uploads/2015/03/act-plan-hearing-loss-upd.pdf, p21

[x] NHS England, 2016, Adult Hearing Services, model service specification in NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups, pages 11, 15, 16, 28, 29, 35 and 43

[xi] Monitor, 2015. NHS adult hearing services in England: exploring how choice is working for patients

[xii] National Schedule of Reference Costs - Years 2012-2016 - NHS trusts and NHS foundation trusts. NCHA analysis of outpatient activity. We would be happy to send a copy of these and other data to the Committee if that would be helpful

[xiii] Monitor, 2015. NHS adult hearing services in England: exploring how choice is working for patients

[xiv] NHS England, 2016, Adult Hearing Services, model service specification in NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups, pages 11, 15, 16, 28, 29, 35 and 43

[xv] NICE 2017, Hearing Loss, Hearing loss in adults: assessment and management. Full Form Draft Guideline. Table 4 page 42 and Table 8 page 47

[xvi] Meaning, government (department and agency) reports, professional guidelines etc. For a comprehensive definition of grey literature see Califorina University, Gray Literature, https://csulb.libguides.com/graylit accessed 11 Jan. 18

[xvii] See table 51, page 77 in Reeves D, Alborz A, Hickson C, Bamford J. Community provision of hearing aids and related audiology services: a review. *Health Technol Assess* 2000;4(4). Although some papers might not have made a refined search due to dates, this seems unlikely given all the studies at the time, because of the drive towards direct access audiology, took place during the same period. The most likely reason for the exclusion of this evidence is that the Committee did not search for who can and is referred to audiology. Instead they searched for medical referral.

[xviii] Slide, 10, http://www.baaudiology.org/files/9413/9650/0357/MOD_BAA_Trent_Regional_meeting_03.14.pdf

[xix] Page 2, http://www.baaudiology.org/files/1714/3029/2743/BAA_Guidance_on_Identifying_Cases_of_Non_Routine_Hearing_Loss_in_Adults_April_2015.pdf

[xx] NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups. Section 8.4.2 page 36

[xxi] List of references 1 to 12

1.Johnson, Grover and Martin, 1984. A survey of NHS hearing aid services. RNID. London
RNID.
2. RNID, Age Concern and the British Association of the Hard of Hearing, 1986. Conference Papers presented at the Breaking the Sound Barrier event.
3. Technical Department Report". RNID, London; RNID, Age Concern and British Association of the Hard of Hearing (1986) Breaking the Sound Barrier
4. RNID 1988. Hearing aids the case for change. London
5. RNID 1999 "Waiting to hear? A report on waiting times for hearing tests" RNID, London
6. Audit Commission, (2000). "Fully equipped: the provision of equipment to older or disabled people by the NHS and social services in England and Wales" Audit Commission, London
7. Bhatt L, Martin M, King A, Grover B. A fact-finding survey of hearing aid services in trust and
non-trust NHS Hospitals. Science and Technology Unit, RNID 1993. London. cited in Jayarajan, V. and Rangan, S. 2000. Evaluation of hearing-aid provision in adults. Journal of Audiological Medicine, 9(1), pp. 25-34
8. Jayarajan, V. and Rangan, S. 2000. Evaluation of hearing-aid provision in adults. Journal of Audiological Medicine, 9(1), pp. 25-34
9. Matthews, L. (2011) "Seen but not heard: People with hearing loss are not receiving the support they need". London, RNID; Action on Hearing Loss (2011) "Hearing Matters", London.
10. Edmond, 2011. Hear me out. Audiology services in Scotland – services provided, patients' experience and needs. RNID Scotland.
11. Lowe, C (2015) "Under Pressure: NHS Audiology Across the UK." London, Action on Hearing Loss.
12. Monitor, 2015. NHS adult hearing services in England: exploring how choice is working for patients

[xxii] NHS England, 2016, Adult Hearing Services, model service specification in NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups. p. 32

[xxiii] Monitor, 2015. NHS adult hearing services in England: exploring how choice is working for patients, page 31 footnote 107
[xxiv] This report was submitted during the consultation on the guideline Scope. It is also cited widely, including in the Action Plan on Hearing Loss and NHS England's Commissioning Framework which the Committee refer to throughout the full version guideline
[xxv] NHS England, 2016, Adult Hearing Services, model service specification in NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups.
[xxvi] Reeves D, Alborz A, Hickson C, Bamford J. Community provision of hearing aids and related audiology services: a review. *Health Technol Assess* 2000;4(4)
[xxvii] Benova, L., Grundy, E., & Ploubidis, G.B. (2014). Association between socioeconomic position and health-seeking behavior for hearing loss among the older population in England. *Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, doi:10.1093/geronb/gbu024
[xxviii] NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups.
[xxix] Monitor, 2015. NHS adult hearing services in England: exploring how choice is working for patients
[xxx] NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups.
[xxxi] NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups. page 69
[xxxii] We understand that one set of criteria is for when to consider a MRI scan and the other is for when audiologists should refer to a medically qualified colleague. However in a real-world clinical setting the reason for referral relates to the adult population, similar (if not the same) differential diagnosis and risks etc. Therefore how these two criteria interact in a real-world setting is very important and should be examined in greater detail. It could for example result in removing recommendation 9 (understanding that most these patients will go to ENT/audiovestibular medicine and Recommendation 8 will form the main basis for an MRI (and then clinical judgement might be used to decide on whether other patients need an MRI or indeed the criteria in Recommendation 9 will be used instead of clinical judgement for the additional marginal cases), or this might lead to updating the definition of clinically significant asymmetric hearing loss for audiologist and therefore result in fewer cases of asymmetric hearing loss being referred to ENT/audiovestibular medicine but more MRI scans for the cohort that is referred, or other scenario. The point is it is difficult to see, from existing committee notes and Appendices, whether sufficient consideration has been given to this.
[xxxiii] Fortnum H, O'Neill C, Taylor R, Lenthall R, Nikolopoulos T. The role of magnetic resonance imaging in the identification of suspected acoustic neuroma: a systematic review of clinical and cost effectiveness and natural history. *Health Technol Assess* 2009;13(18)
[xxxiv] Zapala et al., (2010) provide the highest estimates of conditions that would require medical review, whilst their study is based in the United States, their estimates are from the literature and therefore can be generalised. Ref: 10 – Cited in Zapala, D. A. et al 2010. Safety of Audiology Direct Access for Medicare Patients Complaining in Impaired Hearing. *Journal of the American*
[xxxv] NHS England and the Department of Health, 2015. Action Plan on Hearing Loss https://www.england.nhs.uk/wp-content/uploads/2015/03/act-plan-hearing-loss-upd.pdf
[xxxvi] The NICE Short form guideline suggests 2.3 million people need support for their earwax each year in the UK. Controlling for the English population, this is likely to be c. 2 million. NHS reference cost data for NHS England suggest c. 350,000 adults see ENT to clear for clearance procedures. Assuming some of the more complicated cases are referred to ENT, then it is very likely the vast majority of cases are already managed outside of secondary care.
[xxxvii] The CRD York reviewed a 2007 systematic review on the same topic in 2007, https://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0025339/#d12007001399.summary. It reached the same conclusion. Although the recent Cochrane review is much welcomed, and better branding, it has not added fundamentally to the body of existing knowledge. It has only further, and marginally, reduced the level of uncertainty since Chisolm T H, Johnson C E, Danhauer J L, Portz L J, Abrams H B, Lesner S, McCarthy P A, Newman C W. A systematic review of health-related quality of life hearing aids: final report of the American Academy of Audiology Task Force on the Health-Related Quality of Life Benefits of Amplication in Adults. Journal of the American Academy of Audiology 2007; 18(2): 151-183. [PubMed]
[xxxviii] Appendix 3, first paragraph page 55 in NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups)

[xxxix] Table 1, page 51 in NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups)
[xl] NHS, 7 March 20 16, NHS Choices Hyperacusis, accessed 7 Jan. 18 https://www.nhs.uk/conditions/hyperacusis/
[xli] We use NHS England and Health Education England definition of audiologist, which includes Hearing Aid Dispensers registered with the Health and Care Professions Council
[xlii] By this we mean: adults with hearing difficulties without the symptoms and signs that require referral to ENT or audiovestibular medicine (stated in the Recommendations) because in real-world settings these typically prompt adults to visit a doctor (e.g. medically qualified GP). We also take account of: NICE comments in response to the consultation on the draft scope – e.g. the Committee not recognising "non-medical hearing loss"; the Full version of the guideline, including its definition of medical and non-medical pathways, and the analysis of adult hearing loss, risk and presentation undertaken by National Academies of Sciences, Engineering and Medince, 2016, Hearing Health Care for Adults, priorities for improving access and affordability, pp 98-103
[xliii] Later in our response we provide a more detailed explanation, including addressing status quo bias (e.g. assuming the GP has to manage wax and therefore a GP visit is worthwhile would also overlook the fact audiologist can also do this as per this NICE draft guideline recommendation) – e.g. see our feedback on Annex N and O.
[xliv] National Academies of Sciences, Engineering and Medince, 2016, Hearing Health Care for Adults, priorities for improving access and affordability, pp 98-103
[xlv] Several NHS regions do this, but the region that is documented by NHS England is Coventry and Rugby CCG, NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups. Page 42
[xlvi] NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups. Page 36, section 8.4.2, in particular final paragraph
[xlvii] Monitor, 2015. NHS adult hearing services in England: exploring how choice is working for patients
[xlviii] NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups.
[xlix] Monitor, 2015. NHS adult hearing services in England: exploring how choice is working for patients
[l] NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups.
[li] This can be seen by reviewing footnote 2 in Monitor's report. Monitor, 2015. NHS adult hearing services in England: exploring how choice is working for patients
[lii] Monitor, 2015. NHS adult hearing services in England: exploring how choice is working for patients
[liii] NHS England and Department of Health, 2015. Action Plan on Hearing Loss
[liv] NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups.
[lv] Monitor, 2015. NHS adult hearing services in England: exploring how choice is working for patients; NHS England and Department of Health, 2015. Action Plan on Hearing Loss; NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups.
[lvi] Reeves D, Alborz A, Hickson C, Bamford J. Community provision of hearing aids and related audiology services: a review. *Health Technol Assess* 2000;4(4)
[lvii] Monitor, 2015. NHS adult hearing services in England: exploring how choice is working for patients; NHS England and Department of Health, 2015. Action Plan on Hearing Loss; NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups.
[lviii] Longworth L, Yang Y, Young T, Mulhern B, Hernández Alava M, Mukuria C, et al. Use of generic and condition-specific measures of health-related quality of life in NICE decision-making: a systematic review, statistical modelling and survey. Health Technol Assess 2014;18(9).
[lix] NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups. Page 42
[lx] Reeves, D.J. et al., 2000, *Community provision of hearing aids and related audiology services*, *Health technology assessment (Winchester, England)*, vol. 4, no. 4 **p. 31**)
[lxi] Monitor, 2015. NHS adult hearing services in England: exploring how choice is working for patient and annexes. **NICE might claim this report was missed because**

- Monitor's report was not found during the literature search, however nor was version of the referral criteria that the Committee has relied so heavily on. Monitor's report was however, unlike the version of the referral document the Committee relied upon, shared during development of the guideline scope and therefore the NICE Committee could have used Monitor's evidence in the same way it used other grey literature (some of which was itself produced in response to Monitor's original report)
- there was no evidence to suggest providing community based hearing care. However this does not explain the Committee's approach to wax management, where based on no evidence at all regarding clinical setting the Committee was very firm in recommending that people should not be referred to secondary care for basic wax management.

[lxii] National Schedule of Reference Costs - Year 2015-16 - NHS trusts and NHS foundation trusts, https://www.gov.uk/government/publications/nhs-reference-costs-2015-to-2016. NCHA analysis of outpatient activity

[lxiii] National Schedule of Reference Costs - Year 2015-16 - NHS trusts and NHS foundation trusts, https://www.gov.uk/government/publications/nhs-reference-costs-2015-to-2016. NCHA analysis of adult audiology activity

[lxiv] Department of Health, 2009, Payment by Results Guidance 2009-10 p44-45
http://webarchive.nationalarchives.gov.uk/20110503200334/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_097469.pdf#page=44

[lxv] Department of Health 2012, Any Qualified Provider Adult Hearing Services Implementation Packs page 40-43,
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/475660/DH_-_Adult_Hearing_Implementation_Pack.pdf#page=40

[lxvi] Monitor, 2015. NHS adult hearing services in England: exploring how choice is working for patients

[lxvii] NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups.

[lxviii] If annual battery costs are an additional £7.26, moulds £8 and tubes and domes £1.50. The annual cost would be £16.76 per patient.

[lxix] NHS England, 2016, Commissioning Services for People with Hearing Loss: A Framework for Clinical Commissioning Groups. Page 35

[lxx] Monitor, 2015. NHS adult hearing services in England: exploring how choice is working for patients