NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Health and social care directorate

Quality standards and indicators

Briefing paper

Quality standard topic: Hearing loss in adults

Output: Prioritised quality improvement areas for development.

Date of Quality Standards Advisory Committee meeting: 6 December 2018

Contents

1 Introduction

This briefing paper presents a structured overview of potential quality improvement areas for hearing loss in adults. It provides the committee with a basis for discussing and prioritising quality improvement areas for development into draft quality statements and measures for public consultation.

1.1 Structure

This briefing paper includes a brief description of the topic, a summary of each of the suggested quality improvement areas and supporting information.

If relevant, recommendations selected from the key development source below are included to help the committee in considering potential statements and measures.

1.2 Development source

The key development source referenced in this briefing paper is:

- Hearing loss in adults: assessment and management (2018) NICE guideline NG98.

2 Overview

2.1 Focus of quality standard

This quality standard will cover the assessment and management of hearing loss in adults.

2.2 Definition

Hearing loss can be temporary or permanent. It often comes on gradually as people get older, but it can sometimes happen suddenly.

Hearing loss can have many different causes. For example:

- Sudden hearing loss in 1 ear may be due to earwax, an ear infection, a perforated (burst) eardrum or Ménière's disease.
- Sudden hearing loss in both ears may be due to damage from a very loud noise, or taking certain medicines that can affect hearing.
- Gradual hearing loss in 1 ear may be due to something inside the ear, such as fluid (glue ear), a bony growth (otosclerosis) or a build-up of skin cells (cholesteatoma).

- Gradual hearing loss in both ears is usually caused by ageing or exposure to loud noises over many years[1].

2.3 Incidence and prevalence

Hearing loss is a major public health issue in England which affects about 9 million people. Estimates suggest that by 2035 there will be about 13 million people with hearing loss – a fifth of the population.

Age-related hearing loss is the single biggest cause of hearing loss with 5.3 million people aged over 65 reported to have hearing loss[2]. Hearing loss ranks second in terms of prevalence of impairment globally and is third for disease burden in England (years lived with disability).

2.4 Functional, emotional, social and cost impact

Hearing loss has a significant impact on individuals leading to difficulty with communication at work, socially and at home which can affect family relationships, employment or educational opportunities, enjoyment of leisure pursuits and independence. It can also cause feelings of isolation and low self-esteem and can lead to a significant reduction in quality of life.

Hearing loss doubles the risk of developing depression and increases the risk of anxiety and other mental health issues. Although hearing loss affects all ages it is more prevalent in older people and there is an association between hearing loss and cognitive performance as well as dementia.

Estimates suggest that in 2013 the UK economy lost more than £28.4 billion in potential output because of high unemployment rates in people with hearing loss. The cost may be higher if underemployment rates are also taken into account. These high unemployment rates and underemployment reflect the communication and participation difficulties experienced by people with hearing loss. In addition, the cost of a reduced quality of life as a consequence of hearing loss was estimated at £26 billion.

2.5 Management

Audiology services are provided in a number of NHS settings. In some parts of England this is through the any qualified provider (AQP) scheme, which means that there is a choice of providers ranging from traditional hospital or clinic-based audiology services, to independent high street providers.

The main adult referral pathway is directly from GP to local audiology services. However, some areas have open access where adults do not need a GP referral to

[1] NHS (2018) Hearing loss overview
[2] NHS England and Department of Health (2015) Action Plan on Hearing Loss

access audiological care. For medical input, GP or audiologists refer people directly to ear, nose and throat (ENT) or audiovestibular medicine services. For many cases hearing loss can be managed by the local service with medical investigation or treatment, but in other cases, where audiological care is complicated, access to specialist audiology services is important. There is however national variation with each local area having their own care pathway developed around the skills and expertise available within the different services.

Management pathways for adults with disabling hearing loss vary. In general, if there is hearing loss in both ears, hearing aids are recommended for both ears.

2.6 National policy

In 2015 the Department of Health and NHS England launched a cross-government strategy Action Plan[3] to encourage urgent action to reduce regional variations in hearing services, improve access to technology and to consider the needs of people with hearing loss when planning health and social care services. It also promoted change across all public service departments and stakeholder organisations across the voluntary, professional and private sectors, to deliver improved hearing services and outcomes and support for the increasing numbers of people with hearing loss.

The 2016 NHS England's Framework[4] was developed as part of NHS England's commitment to implement this Action Plan. It aimed to support local commissioners with commissioning of non–specialist services for people with hearing loss to improve quality, access and consistency across hearing loss services. The Government have committed to monitor the outcomes from the Action Plan to ensure improvements are made.

In 2008 a set of quality standards about adult hearing rehabilitation were published. Since 2010 all adult audiology services in Scotland and Wales have been measuring their services against these standards[5].

[3] NHS England and Department of Health (2015) Action Plan on Hearing Loss
[4] NHS England (2016) Commissioning Services for People with Hearing Loss: A framework for clinical commissioning groups
[5] Welsh Government (2015) NHS audiology service quality standards- national audit report 2014

3 Summary of suggestions

3.1 Responses

In total 25 stakeholders responded to the 2-week engagement exercise 9 October-23 October 2018.

Stakeholders were asked to suggest up to 5 areas for quality improvement. Specialist committee members were also invited to provide suggestions. The responses have been merged and summarised in table 1 for further consideration by the committee.

Full details of all the suggestions provided are given in appendices 2 and 3 for information.

Table 1 Summary of suggested quality improvement areas

Suggested area for improvement	Stakeholders
Assessment and referral • Hearing difficulties or suspected hearing difficulties • Sudden or rapid onset of hearing loss • Hearing loss with suspected or diagnosed dementia, mild cognitive impairment or a learning disability	• AHL, ATLA, BAAP, BSHAA, SCM1, SCM2, SCM3, SCM4, SCM5, NCHA, NIHR, UNINOTTS, WAHSG • BAASQC • BAA, BAAP, BAASQC, ENTUK, NIHRNOTTS, PHE, SCM1, SCM5, UNINOTTS
Treatment • Primary or community care services • Ear irrigation devices	• AHL, BAAP, BAASQC, NCHA, HLDA, SCM3, SCM5 • ENTUK,INHEALTH, RCGP, SCM2
Assessment and management in audiology services • Audiological assessment • Personalised care plans • Access to hearing aids • Assistive listening devices	• SCOTT, WAHSG, • SCOTT, SCM2, WAHSG • ATLA, BAAP, HLDA, NADP, NCHA, NIHRNOTTS, SCM1, SCM2, SCM3, SCM5, SCOTT, UNINOTTS • BAA, BAASQC, BSA, HLDA, NADP
Follow-up in audiology services	• AHL, ATLA, BAA, BAASQC, HLDA, NADP, NCHA, NIHRNOTTS, SCM1, SCM3, SCM4, SCM5, UNINOTTS
Information and support • Peer group support • Support to access services	• AHL, ATLA, DFPLUS, NADP, PHE, SIG • DFPLUS, HLDA, SCM2
Additional areas • Cochlear implants	• BAA, BAASQC, CEL, ENTUK

Suggested area for improvement	Stakeholders
• Data and outcome measures • Hearing aid use and dementia incidence • National screening programmes and public health campaigns • Patient awareness and information • Service improvements • Staff training	BSA, CEL, NIHRNOTTS, NADP, SCM1, SCOTT, UNINOTTS, WAHSG • SCM3 • BSHAA, CEL,SCM4, SIG • NADP • BAA, BSA, BSHAA, CEL, DFPLUS, PHE, RCGP, SCM4, SCOTT, WAHSG, • ATLA, BAAP, DFPLUS, ENTUK, SCM3, SIG, NADP, RCGP

AHL, Action on Hearing Loss
ATLA, Association of Teachers of Lipreading to Adults
BAA, British Academy of Audiology
BAASQC, British Academy of Audiology (Service Quality Committee)
BAAP, British Association of Audiovestibular Physicians
BSA, British Society of Audiology
BSHAA, British Society of Hearing Aid Audiologists
CEL, Cochlear Europe Limited
DFPLUS, DeafPLUS
ENTUK, ENT UK
HLDA, Hearing Loss and Deafness Alliance
INHEALTH, INHEALTH group, Audiology Division
NADP, National Association of Deafened People
NCHA, National Community Hearing Association
NHSCL, NHS Clinical Commissioners
NIHRNOTTS, NIHR Nottingham
PHE, Public Health England
RCGP, Royal College of General Practitioners
RCN, Royal College of Nursing
RCP, Royal College of Physicians
SCM, Specialist Committee Member
SCOTT, Scottish Audiology Heads of Services Group
SIG, Signature
SPEC, Specsavers
UNINOTTS, Hearing Sciences, University of Nottingham
WAHSG, Wales Audiology Heads of Service Group

3.2 Identification of current practice evidence

Bibliographic databases were searched to identify examples of current practice in UK health and social care settings; 1178 papers were identified for hearing loss. In addition, 42 papers were suggested by stakeholders at topic engagement and 8 papers internally at project scoping.

Of these papers, 9 have been included in this report and are included in the current practice sections where relevant. Appendix 1 outlines the search process.

4 Suggested improvement areas

4.1 Assessment and referral

4.1.1 Summary of suggestions

Hearing difficulties or suspected hearing difficulties

Stakeholders highlighted undertaking a range of assessments within routine appointments as an area for quality improvement. This will reduce the number of inappropriate referrals into non-routine pathways and in turn make better use of resources and reduce patient delays and costs.

Stakeholders also highlighted how early recognition and care of all hearing loss types is important from the outset as late diagnosis is linked to poor health outcomes.

Sudden or rapid onset of hearing loss

Timely access to ENT, audiovestibular medicine services and emergency departments for people with sudden hearing loss was highlighted as important with varied referral times reported nationally.

A stakeholder highlighted that many adults presenting with sudden hearing loss are not currently managed in accordance with NICE guideline NG98. This lack of access to appropriate treatment may affect long term outcomes and quality of life.

Hearing loss with suspected or diagnosed dementia, mild cognitive impairment or a learning disability

Hearing assessments for people with suspected or diagnosed dementia, mild cognitive impairment or a learning disability were supported as an area for quality improvement. Early detection of hearing loss for people with these conditions can reduce the impact of these comorbidities and social isolation. Also hearing tests for all new residents entering care homes was suggested.

4.1.2 Selected recommendations from development source

Table 2 below highlights recommendations that have been provisionally selected from the development source that may support potential statement development. These are presented in full after table 2 to help inform the committee's discussion.

Table 2 Specific areas for quality improvement

Suggested quality improvement area	Suggested source guidance recommendations
Hearing difficulties or suspected hearing difficulties	**Hearing difficulties or suspected hearing difficulties** NICE NG98 Recommendation 1.1.1
Sudden or rapid onset of hearing loss	**Sudden or rapid onset of hearing loss** NICE NG98 Recommendation 1.1.2
Hearing loss with suspected or diagnosed dementia, mild cognitive impairment or a learning disability	**Adults with suspected or diagnosed dementia, mild cognitive impairment or a learning disability** NICE NG98 Recommendations 1.1.8 – 1.1.10

Hearing difficulties or suspected hearing difficulties

NICE NG98 – Recommendation 1.1.1

For adults who present for the first time with hearing difficulties, or in whom you suspect hearing difficulties:

- exclude impacted wax and acute infections such as otitis externa, **then**
- arrange an audiological assessment (for more information on audiological assessment see recommendation 1.5.1) **and**
- refer for additional diagnostic assessment if needed (see recommendations 1.1.2 to 1.1.7 on sudden or rapid onset of hearing loss and hearing loss with specific additional symptoms or signs).

Sudden or rapid onset of hearing loss

NICE NG98 – Recommendation 1.1.2

Refer adults with sudden onset or rapid worsening of hearing loss in one or both ears, which is not explained by external or middle ear causes, as follows.

- If the hearing loss developed suddenly (over a period of 3 days or less) within the past 30 days, refer immediately (to be seen within 24 hours) to an ear, nose and throat service or an emergency department.
- If the hearing loss developed suddenly more than 30 days ago, refer urgently (to be seen within 2 weeks) to an ear, nose and throat or audiovestibular medicine service.
- If the hearing loss worsened rapidly (over a period of 4 to 90 days), refer urgently (to be seen within 2 weeks) to an ear, nose and throat or audiovestibular medicine service.

Hearing loss with suspected or diagnosed dementia, mild cognitive impairment or a learning disability

NICE NG98 – Recommendation 1.1.8

Consider referring adults with diagnosed or suspected dementia or mild cognitive impairment to an audiology service for a hearing assessment because hearing loss may be a comorbid condition.

NICE NG98 – Recommendation 1.1.9

Consider referring adults with diagnosed dementia or mild cognitive impairment to an audiology service for a hearing assessment every 2 years if they have not previously been diagnosed with hearing loss.

NICE NG98 – Recommendation 1.1.10

Consider referring people with a diagnosed learning disability to an audiology service for a hearing assessment when they transfer from child to adult services, and then every 2 years.

4.1.3 Current UK practice

Hearing difficulties or suspected hearing difficulties

The resource impact report[6] for NG98 estimated approximately 896 people per 100,000 population present to healthcare professionals annually with hearing difficulties which is not explained by impacted wax and acute infection. This is equivalent to approximately 491,000 people in England. Currently only 73% of these people go on to have hearing assessments.

Sudden or rapid onset of hearing loss

The 2017 British Society of Hearing Aid Audiologists Guidance for further referral in audiology clinic[7] and 2016 British Academy of Audiology Guidance for audiologists[8] outline onward referral criteria for people with hearing loss needing specialist audiology care. Variation was reported in how audiologists receive referrals and the services available for onward referral. These vary according to individual circumstances and region[8].

[6] NICE (2018) Resource impact report: Hearing loss in adults: assessment and management
[7] British Society of Hearing Aid Audiologists (2017) Guidance for further referral in audiology clinic
[8] British Academy of Audiology (2016) Guidance for audiologists: onward referral of adults with hearing difficulty directed referred to audiology services

Hearing loss with suspected or diagnosed dementia, mild cognitive impairment or a learning disability

No published studies on current practice were highlighted for this suggested area for quality improvement; this area is based on stakeholder's knowledge and experience.

4.1.4 Resource impact

The resource impact report[9] for NG98 anticipates that there would be a significant resource impact for recommendation 1.1.1. This is as a result of people with hearing difficulties, not explained by impacted wax and acute infection, presenting to healthcare professionals for the first time. Currently only 73% of these people go on to have hearing assessments. It was estimated that the cost of implementing this recommendation, for the remaining 27% of people presenting with hearing difficulties, may rise to £20.7 million by 2022/23.

[9] NICE (2018) Resource impact report: Hearing loss in adults: assessment and management

4.2 Treatment

4.2.1 Summary of suggestions

Primary or community care services

Stakeholders highlighted management of ear wax in primary and community based settings as an area for quality improvement. They suggested that current primary care services have limited or no access to wax removal services with ENT services managing earwax. Treatment in primary or community care settings can help ensure that people are managed closer to home in a timely manner without the need for an ENT appointment and the associated costs.

Ear irrigation devices

A stakeholder reported limited provision of these devices in primary care and community care services currently. This leads to delays in audiological care, inappropriate ear drop treatment and extra appointments in acute services.

4.2.2 Selected recommendations from development source

Table 3 below highlights recommendations that have been provisionally selected from the development source that may support potential statement development. These are presented in full after table 3 to help inform the committee's discussion.

Table 3 Specific areas for quality improvement

Suggested quality improvement area	Selected source guidance recommendations
Primary or community care services	**Removing earwax** NICE NG98 Recommendation 1.2.1
Ear irrigation devices	**Removing earwax** NICE NG98 Recommendations 1.2.3 and 1.2.4

Removing ear wax

NICE NG98 – Recommendation 1.2.1

Offer to remove earwax for adults in primary care or community ear care services if the earwax is contributing to hearing loss or other symptoms, or needs to be removed in order to examine the ear or take an impression of the ear canal.

NICE NG98 – Recommendation 1.2.3

Consider ear irrigation using an electronic irrigator, microsuction or another method of earwax removal (such as manual removal using a probe) for adults in primary or

community ear care services if:

- the practitioner (such as a community nurse or audiologist):
    - has training and expertise in using the method to remove earwax
    - is aware of any contraindications to the method
- the correct equipment is available.

NICE NG98 – Recommendation 1.2.4

When carrying out ear irrigation in adults:

- use pre-treatment wax softeners, either immediately before ear irrigation or for up to 5 days beforehand
- if irrigation is unsuccessful:
    - repeat use of wax softeners **or**
    - instil water into the ear canal 15 minutes before repeating ear irrigation.
- if irrigation is unsuccessful after the second attempt, refer the person to a specialist ear care service or an ear, nose and throat service for removal of earwax.

4.2.3 Current UK practice

Primary or community care services

A 2016 NHS England report on commissioning services for people with hearing loss[10] stated an estimated 4 million ears are being syringed annually within UK primary care services with GPs seeing on average 9 people a month requesting ear wax removal.

Ear irrigation devices

No published studies on current practice were highlighted for this suggested area for quality improvement; this area is based on stakeholder's knowledge and experience.

4.2.4 Resource impact

The resource impact report[11] for NG98 anticipates that there would be no resource impact from these recommendations. There would be a saving if ear wax was removed in primary care instead of secondary care due to the differences in secondary care and primary care funding. However the numbers who have ear wax removed in secondary care, that would be treated in primary in future would not be sufficient to have a significant impact.

[10] NHS England (2016) Commissioning Services for People with Hearing Loss: A framework for clinical commissioning groups
[11] NICE (2018) Resource impact report: Hearing loss in adults: assessment and management

4.3 Assessment and management in audiology services

4.3.1 Summary of suggestions

Audiological assessment

Stakeholders highlighted that audiological assessment should include relevant medical history and validated questionnaires. This information will help gain an understanding of the person's activity limitations, their social and environmental communication needs, their attitudes, expectations, motivation and behaviours. Stakeholders also highlighted the importance of high quality assessment conditions.

Personalised care plans

Stakeholders highlighted the importance of personalised care plans. These were reported as being most effective when they are carried out during consultation between the audiologist, the person and their family, friend or carer. The plan should include joint goals and needs with additional advice and information sources to support hearing loss.

Access to hearing aids

Stakeholders highlighted access to hearing aids as an area for quality improvement. A stakeholder reported CCGs currently have limited or propose limiting hearing aids to people who have specific hearing test results. This has led to many people who may benefit from hearing aids being denied the opportunity to try them. It was suggested that access to hearing aids should not be limited based on evidence which suggests that using one aid can lead to balance problems and more falls.

Well fitted hearing aids, with good follow-up support, was highlighted as important to minimise the risks and costs associated with unsupported hearing loss.

Assistive listening devices

A stakeholder suggested that access to assistive listening devices should be increased as although hearing aids provide some benefit in certain listening environments (such as the workplace) they are limited in more complex or challenging listening environments. Assistive equipment and technologies such as apps can help people who have hearing loss to communicate well and live safely and independently in their own home, and manage their condition more effectively.

4.3.2 Selected recommendations from development source

Table 4 below highlights recommendations that have been provisionally selected from the development source that may support potential statement development. These are presented in full after table 4 to help inform the committee's discussion.

Table 4 Specific areas for quality improvement

Suggested quality improvement area	Selected source guidance recommendations
Audiological assessment	**Assessment and management in audiology services** NICE NG98 Recommendation 1.5.1
Personalised care plans	**Assessment and management in audiology services** NICE NG98 Recommendation 1.5.2
Access to hearing aids	**Offering hearing aids to adults** NICE NG98 Recommendations 1.6.1, 1.6.2 and 1.6.4 **Prescribing and fitting hearing aids for adults** NICE NG98 Recommendations 1.6.5 – 1.6.7
Assistive listening devices	**Assistive listening devices** NICE NG98 Recommendations 1.6.8 and 1.6.9

Assessment and management in audiology services

NICE NG98 – Recommendation 1.5.1

Include and record the following as part of the audiological assessment for adults:

- a full history including relevant symptoms, comorbidities, cognitive ability, physical mobility and dexterity
- the person's hearing and communication needs at home, at work or in education, and in social situations
- any psychosocial difficulties related to hearing
- the person's expectations and motivations with respect to their hearing loss and the listening and communication strategies available to them
- any restrictions on activity, assessed using a self-report instrument such as the Glasgow Hearing Aid Benefit Profile or the Client-Orientated Scale of Improvement
- otoscopy
- pure tone audiometry
- tympanometry if indicated.

NICE NG98 – Recommendation 1.5.2

After the audiological assessment:

- agree and record a personalised care plan, taking into account the person's preferences, including goals, and give the person a copy.

Offering hearing aids to adults

NICE NG98 – Recommendation 1.6.1

Offer hearing aids to adults whose hearing loss affects their ability to communicate and hear, including awareness of warning sounds and the environment, and appreciation of music.

NICE NG98 – Recommendation 1.6.2

Offer 2 hearing aids to adults with aidable hearing loss in both ears. Explain that wearing 2 hearing aids can help to make speech easier to understand when there is background noise, make it easier to tell where sounds are coming from, and improve sound quality.

NICE NG98 – Recommendation 1.6.4

Show the hearing aids when they are first offered and discuss their suitability with the person.

Prescribing and fitting hearing aids for adults

NICE NG98 – Recommendation 1.6.5

When prescribing and fitting hearing aids, explain the features on the hearing aid that can help the person to hear in background noise, such as directional microphone and noise reduction settings.

NICE NG98 – Recommendation 1.6.6

Advise adults with hearing aids about choosing microphone and noise reduction settings that will meet their needs in different environments, and ensure that they know how to use them.

NICE NG98 – Recommendation 1.6.7

Give adults with hearing aids information about getting used to hearing aids, cleaning and caring for their hearing aids, and troubleshooting.

Assistive listening devices

NICE NG98 – Recommendation 1.6.8

Give adults with hearing loss information about assistive listening devices such as personal loops, personal communicators, TV amplifiers, telephone devices, smoke alarms, doorbell sensors, and technologies such as streamers and apps.

NICE NG98 – Recommendation 1.6.9

Tell adults with hearing loss about organisations that can demonstrate and provide advice on how to obtain assistive listening devices, such as social services, the fire service, or the government through programmes such as Access to Work or Disabled Student Allowance.

4.3.3 Current UK practice

Audiological assessment

A 2016 NHS England report on commissioning services for people with hearing loss[12] highlighted an 11 fold variation in the rate of adult audiology assessments from a primary care referral.

Personalised care plans

A 2015 Action on Hearing Loss report[13] examined the impact of budget cuts and the increased demand on audiology service provision. Questions were issued through a Freedom of Information request to all NHS audiology providers in England, Scotland and Wales with 116 out of 129 NHS Trusts responding. The report concluded:

- 66% of providers develop plans with all patients.
- 26% of providers develop plans with some patients.
- 1% of providers do develop plans but they do not involve patients in the process.
- 7% of providers do not develop plans at all.

Assistive listening devices

A 2016 Ear Foundation report on technology and communication support[14] for 65 young adults aged 18-25 years with hearing loss across the UK concluded that 73% use technology support. Setting use was also reported:

- At home: no technology support (46%), audio/lead cable (21%), tv/phone streamer (18%), loop/telecoil (18%);
- In education: FM/Radio aid system (69%), audio lead/cable (26%), remote microphone (21%), none (15%), loop/telecoil (15%);
- At work: no technology support (85%).

A 2018 Action on Hearing Loss report[15] examined the experiences of people who are deaf or have hearing loss when accessing GP surgeries to find out whether their GP surgeries were meeting the requirements of the Accessible Information Standard. Out of the 744 responses the findings concluded 26% of people reported that a

[12] NHS England (2016) Commissioning Services for People with Hearing Loss: A framework for clinical commissioning groups
[13] Action on Hearing Loss (2015) Under pressure
[14] Ear Foundation (2016) Technology and communication support
[15] Action on Hearing Loss (2018) Good practice

hearing loop system was not available at their GP surgery and 58% didn't know about their availability.

Access to hearing aids

A 2016 NHS England adult hearing services specification[16] highlighted approximately 2 million people currently have a hearing aid and 9 out of 10 hearing aid users benefit from them and use them regularly. However there are 4 million people who do not have hearing aids and would benefit from them.

4.3.4 Resource impact

The resource impact report[17] for NG98 anticipates that there would be no resource impact from these recommendations. The Tariff for the outpatient or community ear care appointment would be the same as current practice even with more requirements of what should be done in the appointment.

[16] NHS England (2016) Adult Hearing Service Specifications
[17] NICE (2018) Resource impact report: Hearing loss in adults: assessment and management

4.4 Follow-up in audiology services

4.4.1 Summary of suggestions

Follow-up after hearing aid fitting should take place to ensure the person is benefitting from their hearing aids, and they are signposted to further aftercare and additional support if required. Stakeholders however reported inconsistent and varied national provision of follow-up care. Face-to-face appointments were recommended as telephone appointments may not suit the person's needs.

At this appointment difficulties with hearing aids should be addressed. Asking the individual their concerns will enhance the hearing aid user's confidence.

4.4.2 Selected recommendations from development source

Table 5 below highlights recommendations that have been provisionally selected from the development source that may support potential statement development. These are presented in full after table 5 to help inform the committee's discussion.

Table 5 Specific areas for quality improvement

Suggested quality improvement area	Selected source guidance recommendations
Follow-up in audiology services	**Follow-up in audiology services** NICE NG98 – Recommendations 1.7.1, 1.7.2 and 1.7.4

Follow-up in audiology services

NICE NG98 – Recommendation 1.7.1

Offer adults with hearing aids a face-to-face follow-up audiology appointment 6 to 12 weeks after the hearing aids are fitted, with the option to attend this appointment by telephone or electronic communication if the person prefers.

NICE NG98 – Recommendation 1.7.2

At the follow-up audiology appointment for adults with hearing aids:

- ask the person if they have any concerns or questions
- address any difficulties with inserting, removing or maintaining their hearing aids
- provide information on communication, social care or rehabilitation support services if needed
- tell the person how to contact audiology services in the future for aftercare, including repairs and adjustments to accommodate changes in their hearing
- ensure that the person's hearing aids and other devices meet their needs by checking:

    - the comfort, sound quality and volume of hearing aids, including microphone and noise reduction settings, and fine-tuning them if needed
    - hearing aid cleaning, battery life and use with a telephone
    - use of assistive listening devices
    - hours the hearing aid has been used, if shown by automatic data logging

- review the goals identified in the personalised care plan and agree how to address any that have not been met (for information on the personalised care plan, see recommendation 1.5.2)
- update the personalised care plan and provide them with a copy.

NICE NG98 – Recommendation 1.7.4

For adults with hearing loss who have chosen a management strategy other than hearing aids, such as assistive listening devices or communication strategies, offer a follow-up appointment when the effectiveness of the device or strategy can be evaluated.

4.4.3 Current UK practice

A 2016 NHS England report on commissioning services for people with hearing loss[18] highlighted inconsistencies in follow-up provision.

Also, a 2015 Action on Hearing Loss report[19] examined the impact of budget cuts and the increased demand on audiology service provision. Questions were issued through a Freedom of Information request to all NHS audiology providers in England, Scotland and Wales with 116 out of 129 NHS Trusts responding. The report concluded 71% of providers with reduced budgets have seen a noticeable reduction in follow-up appointments with only 48% of providers in England offering face-to-face follow up appointments for people fitted with hearing aids.

4.4.4 Resource impact

The resource impact report[20] for NG98 anticipates that there would be no resource impact from these recommendations. There will be no additional costs for explaining how to use devices properly. The Tariff will be the same.

[18] NHS England (2016) Commissioning Services for People with Hearing Loss: A framework for clinical commissioning groups
[19] Action on Hearing Loss (2015) Under pressure
[20] NICE (2018) Resource impact report: Hearing loss in adults: assessment and management

4.5 Information and support

4.5.1 Summary of suggestions

Peer support groups

Stakeholders suggested access to peer support groups to effectively support hearing loss and promote hearing aid self-management as an area for quality improvement. Active support for new users from individuals and groups would reduce the number of unused hearing aids. Also improved access to communication support such as lip-reading and sign language classes was highlighted. This support and understanding of hearing loss in the workplace and education was felt to be important.

Support to access services

Hearing loss contributes to people experiencing difficulties in accessing services. Ensuring audiology services are accessible for all including people with disabilities and sensory loss was highlighted by stakeholders as important. It was also suggested that staff must ask about communication needs when offering appointments.

Effective communication was highlighted as key when health and social care professionals interact with people with hearing loss.

4.5.2 Selected recommendations from development source

Table 6 below highlights recommendations that have been provisionally selected from the development source that may support potential statement development. These are presented in full after table 6 to help inform the committee's discussion.

Table 6 Specific areas for quality improvement

Suggested quality improvement area	Selected source guidance recommendations
Peer group support	**Assessment and management in audiology services** NICE NG98 – Recommendation 1.5.3
Support to access services	**Information and support** NICE NG98 – Recommendation 1.8.1

Assessment and management in audiology services

NICE NG98 – Recommendation 1.5.3

Give the person and, if they wish, their family or carers, information about:

- the causes of hearing loss, how hearing loss affects the ability to communicate and hear, and how it can be managed

- organisations and support groups for people with hearing loss.

Information and support

NICE NG98 – Recommendation 1.8.1

Follow the principles on tailoring healthcare services for each person and enabling people to actively participate in their care in the NICE guideline on patient experience in adult NHS services by, for example:

- taking into account the person's ability to access services and their personal preferences when offering appointments
- taking measures, such as reducing background noise, to ensure that the clinical and care environment is conducive to communication for people with hearing loss, particularly in group settings such as waiting rooms, clinics and care homes
- establishing the most effective way of communicating with each person, including the use of hearing loop systems and other assistive listening devices
- ensuring that staff are trained and have demonstrated competence in communication skills for people with hearing loss
- encouraging people with hearing loss to give feedback about the health and social care services they receive, and responding to their feedback.

4.5.3 Current UK practice

A 2018 Action on Hearing Loss report[21] examined the experiences of people who are deaf or have hearing loss when accessing GP surgeries to find out whether their GP surgeries were meeting the requirements of the Accessible Information Standard. Out of the 744 responses the findings concluded:

- 64% of people who are deaf or have hearing loss feel unclear about the health advice after their GP appointments, at least some of the time.
- 45% of people with hearing loss felt unclear because their doctor or nurse did not speak clearly.
- 10% of people with hearing loss reported that their GP surgery had asked them about their communication needs, and only 5% had been asked about their information needs.

4.5.4 Resource impact

No resource impact was anticipated from these recommendations. This is because it is considered that where clinical practice changes, as a result of these recommendations, there will not be a significant change to resource impact, due to interventions having low costs.

[21] Action on Hearing Loss (2018) Good practice

4.6 Additional areas

Summary of suggestions

The improvement areas below were suggested as part of the stakeholder engagement exercise. However they were felt to be either unsuitable for development as quality statements, outside the remit of this particular quality standard referral or require further discussion by the committee to establish potential for statement development.

There will be an opportunity for the committee to discuss these areas at the end of the session on 6 December 2018.

Cochlear implants

Stakeholders highlighted how hearing loss cochlear implantation can be the most appropriate management solution in some cases. These devices are covered in NICE technology appraisal guidance TA166. Technology appraisal guidance is generally not considered as a source for quality standards because the NHS is legally obliged to fund and resource medicines and treatments recommended by NICE's technology appraisal guidance.

Data and outcome measures

Stakeholders highlighted the importance of audit data and outcomes with central funding needed for implementation. Accurate and detailed prevalence data would improve planning and budgeting for hearing services in England. Also outcome measures would assess the long-term effects of hearing aids and other clinical audiology interventions. This suggestion has not been progressed. Participation in audit is a method by which quality improvement can be evidenced. Quality statements focus on actions that demonstrate high quality care or support, not the methods by which evidence is collated. However, audits and suggested methods of data collection may be referred to in the data sources for quality measures.

Hearing aid use and dementia incidence

A stakeholder highlighted how hearing aids in people with hearing loss and dementia can lead to them having better access to aural communication such as British Sign Language and Braille and it can reduce confusion. This suggestion has not been progressed as this area is a research recommendation. Quality statements must be based on source guidance recommendations which have a clear evidence base.

National screening programmes and public health campaigns

Stakeholders highlighted the need to develop a national adult screening programme for identifying adult onset hearing loss to proactively identify at risk and hard to reach groups such as people with severe and enduring mental health, dementia, learning disabilities and people entering care homes. This suggestion has not been progressed as it is not within the remit of NICE. Screening is within the remit of the UK National Screening Committee within Public Health England.

Also stakeholders supported the need to challenge and reduce the stigma on hearing loss through public health campaigns. These would raise awareness and promote the importance of hearing care. This suggestion has not been progressed as this area is not within the scope of this quality standard.

Patient awareness and information

A stakeholder suggested audiogram copies should be given to all patients for information and evidence of their disability. This suggestion has not been progressed as this area is not within the scope of this quality standard.

A stakeholder also highlighted that patients need to be aware that their earmolds need to be regularly updated. This area has not been progressed as quality statements must be based on source guidance recommendations which have a clear evidence base.

Service improvements

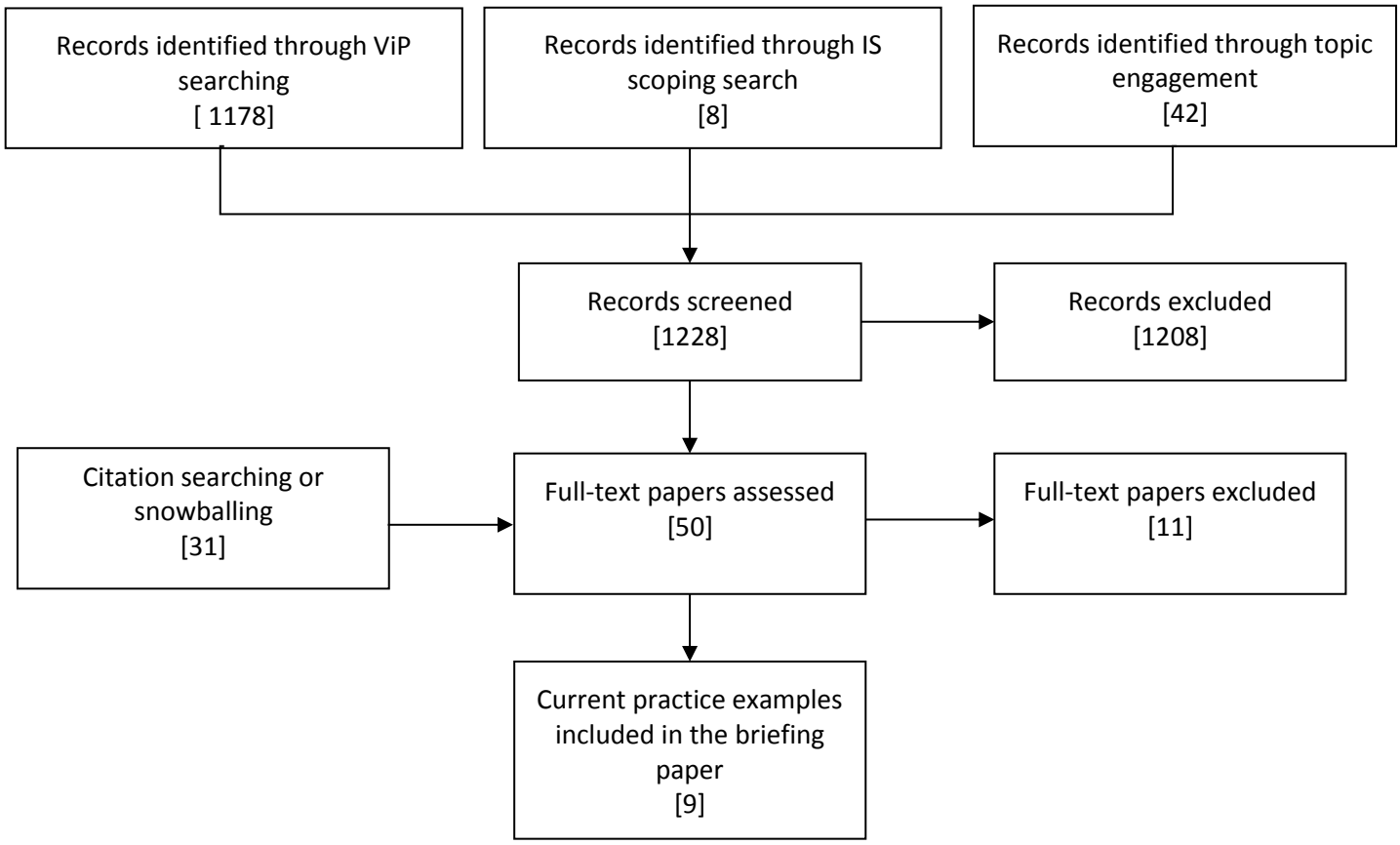
Stakeholders suggested a number of improvements to hearing care services which would meet demand and the wider needs of the patient such as access, speech discrimination testing, joined up service delivery, funding and regulations. Quality statements focus on evidence based, measurable actions that demonstrate high quality care or support not these broader aspects of service improvement.

Staff training

The training of a wide range of staff was suggested as an area of quality improvement. Training areas included sudden sensorineural hearing loss and the need for urgent management, communication, appropriate referrals and tuning forks.

This suggestion has not been progressed. Quality statements focus on actions that demonstrate high quality care or support, not the training that enables the actions to take place. The committee is therefore asked to consider which components of care and support would be improved by increased training. However, training may be referred to in the audience descriptors.

Appendix 1: Review flowchart



Appendix 2: Suggestions from stakeholder engagement exercise – registered stakeholders

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
General comments				
1	AHL	**About us** Action on Hearing Loss, formerly RNID, is the UK's largest charity working for people with deafness, hearing loss and tinnitus. Our vision is of a world where deafness, hearing loss and tinnitus do not limit or label people and where people value and look after their hearing. 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 give people support and care; develop technology and treatments and campaign for equality. Throughout this response we use the terms 'people with hearing loss' to refer to people with all levels of hearing loss and 'people who are deaf' to refer to people who are profoundly deaf who use British Sign Language (BSL) as their first or preferred language **Introduction** Action on Hearing Loss welcomes the opportunity to submit evidence on the key areas of quality improvement that we would like to see covered by the forthcoming NICE Hearing Loss Quality Standard. 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 published in March 2015, and NHS England Commissioning Framework for Adult Hearing Loss Services published in April 2016. The recently published NICE guideline on '*Hearing loss in adults: assessment and management'* is vital in strengthening 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 will 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. We therefore welcome the opportunity to respond the NICE guidelines for hearing loss topic engagement consultation for quality standards. In this response, we set out five key areas that would improve quality of care and support for people with hearing loss. For ease of reference, the five key areas for quality improvement are listed below:			

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
		1. Improving the awareness of hearing loss and benefits of hearing aids. 2. Ensuring audiology services are accessible for people with disabilities and sensory loss 3. Ensuring that wax removal services are an integral part of the hearing loss pathway 4. Improving access to hearing aid aftercare and support 5. Improving the availability and quality of social care services for people who are deaf or have hearing loss		
2	HLDA	**About us** The Hearing Loss and Deafness Alliance, a group of voluntary, independent and professional organisations, has worked with NHS England on developing and implementing the Action Plan on Hearing Loss. This has included developing a Commissioning Framework for Hearing Loss Services and we have coproduced and extensive range of resources with NHSE to support the understanding of the needs of people with hearing loss. We are 32 organisations spanning the voluntary and independent sectors and professionals working in the NHS. The Alliance seeks to represent the needs of children, young people and adults with hearing loss, deafness and tinnitus across the UK on issues related to audiology, hearing services and public health. Given the short timescale for this consultation this response has only had input from a limited number of members and therefore should not necessarily be considered representative of all members of the Alliance. **Introduction** 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 published in March 2015, and NHS England Commissioning Framework for Adult Hearing Loss Services published in April 2016 which the Alliance was centrally involved in coproducing. The recently published NICE guideline on '*Hearing loss in adults: assessment and management'* is vital in strengthening 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 will 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. We therefore welcome the opportunity to respond the NICE guidelines for hearing loss topic engagement consultation for quality standards.		

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
		In this response, we set out five key areas that would improve quality of care and support for people with hearing loss; 1. Early Diagnosis and Management of Hearing Loss, Improving awareness of hearing aids including binaural fitting. 2. Ensuring audiology services are accessible for people with disabilities and sensory loss 3. Ensuring that wax removal services are an integral part of the hearing loss pathway and not reliant on ENT led visits for removal. 4. Improving access to hearing aid aftercare and support 5. Improving the availability and quality of social care services for people who are deaf or have hearing loss		
3	Specsavers	There is clear and compelling evidence that the treatment of sensorineural hearing loss with hearing aids not only addresses the directly debilitating effects of hearing impairment, it also reduces mental ill-health, reduces social isolation, delays the onset and reduces the impact of dementia, reduces A&E attendance, unplanned hospital admission and unplanned re-admission following discharge from hospital. Moreover it is low cost, low risk and largely free of side effects. Despite this 45% of people who would benefit from hearing aids do not seek help and those that do, typically take 7-10 years to do so. The degree of rehabilitation that can be achieved with hearing aids diminishes, the longer after the onset of loss that the user starts to wear them The greatest quality improvements in adult hearing care could be achieved by addressing the current extent of unmet need. This falls into three areas: 1. Awareness and attitudes – hearing loss is regarded as part of “growing old” and carries a degree of stigma associated with old age and infirmity. Patients tell us of GPs who tell them not to worry about hearing loss, they are just getting old. NHS commissioners ration hearing aid services on the premise that age related hearing loss is neither a disease nor an injury. Patients are embarrassed to be seen wearing hearing aids. We need a major public health campaign to make it clear that uncorrected hearing loss is a major threat to health and well-being and hearing aids boost quality of life as well as hearing. 2. Access and affordability – 40% of CCGs in England do not commission community audiology services and all NHS audiology in Scotland, Wales and Northern Ireland is provided by hospitals. This reduces accessibility and choice for patients while some hospital providers struggle with capacity and long waiting times. Hospital provision is also more expensive and more audiology pathways can be provided by community providers for the same limited budget. Some patients are faced with choosing a long wait for a less accessible NHS hospital service, or “going private” which is unaffordable for many. NHS community audiology should be commissioned throughout the UK and should be the default model of care for adults with hearing loss		

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
		3. NHS Commissioning – is inconsistent across England and many CCGs ration hearing aids through capped budgets, block contracts, arbitrary age thresholds and hearing loss thresholds that have no basis in clinical evidence. Neighbours whose GPs are in different CCG areas are subject to different availability of NHS hearing services. In nearly all cases the commissioning model is based on an assumption that this is an expense to be constrained, not an investment in health and wellbeing. Demand management is entirely inappropriate when there is such a large extent of unmet need and when the consequences of unmet need are so severe to the health system and to patients. There should be a single, evidence based model for the commissioning and provision of adult hearing loss services across the UK. Ideally this should be a primary care model analogous to community optometry and pharmacy services. Patients who have come to terms with their hearing loss and recognised the need to do something about it would know that there is help available and how to get it – regardless of where they live.		
4	NHS Clinical Commissioners	No comments at this stage.		
5	RCN	No comments at this stage.		
6	RCPHYS	No comments at this stage.		
Assessment and referral				
7	ATLA		Hearing loss must always be treated as important from the outset.	Although hearing loss is not unusual in older people, it must always be treated as important as it is linked to so many other poor health outcomes.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
8	NCHA	Early diagnosis and management of adult hearing loss	Delaying assessment and management for adult hearing loss can have a major and adverse impact on individuals, friends and family; and increase cost for the NHS and care system and society. There is good evidence that early diagnosis and management of adult hearing loss can reduce the risks and costs associated with hearing loss, and that hearing aids are very cost-effective. This is why the NICE has recommended timely referral, assessment and support for adults with hearing loss. This will also help monitor change in practice/provision following publication of the NICE guideline NG98, https://www.nice.org.uk/guidance/ng98/evidence/full-guideline-pdf-4852693117, and in particular recommendation 12.	People currently wait too long to access adult hearing services, those that seek support experience additional barriers, and there is evidence of significant unwarranted variation. Evidence/information to support this: The Department of Health, NHS England, NHS Improvement (Monitor) and NICE refer to the same evidence: on average people wait 10 years between experiencing hearing problems and seeking help, and when they do seek help their GP might not refer them to an audiologist for support. They also note that there is significant unwarranted variation in access to adult hearing services. All these organisations have called on NHS commissioners and providers to improve access to adult hearing care and take early diagnosis and intervention more seriously. Despite hearing loss being recognised as a major public health challenge, there is significant unmet need. The NHS Atlas of Variation also suggests there is significant unwarranted variation*. References: Endnote

9	WAHSG	Key area for quality improvement No2 <u>Assessment</u> All patients receive an individually-tailored Audiological assessment which is carried out to recognised national standards. *Areas judged of particular need for improvement under this heading:* Test environment - Hearing assessment should be carried out in appropriate acoustical conditions according to national and international standards.	Rationale re test environment: Accurate hearing assessment of the quietest sounds hear (thresholds) is easily compromised by noisy test environments. For that reason, specialist test environments (sound proof rooms or booths) are required for diagnostic assessment. The impact of inaccurate hearing test results is likely to lead to an exaggerated assessment of hearing loss, and inappropriate/unnecessary or inaccurate intervention (e.g. hearing aid fitting prescription). In outcome this would be wasteful of NHS resources, in addition to risk to the patient. The diagnostic sensitivity of hearing assessment depends directly on the acoustical conditions, with national and international standards which define these. Measures are compromised if not gathered using equipment calibrated to national and international standards in an appropriate environment for the diagnostic test employed.	Basis of identifying areas in need of improvement: NHS Audiology Services in Wales are required to participate in and be externally audited against Quality Standards for Hearing Rehabilitation Services. These standards are evidenced based and have been developed in association with third sector organisations representing service users. The standards were initially developed collaboratively with NHS Scotland. They cover all elements of the patient pathway. Most significantly, the regular national audit of services over several years has provided insight into areas of service delivery in need of improvement that can usefully inform this NICE engagement exercise. Hearing assessment conditions are currently likely variable across the UK. Whilst international standards exist for ambient noise levels for hearing test environments, there is no requirement for Audiologists to be aware of the minimum hearing test level for the test environment used. This might reasonably vary dependent upon the level/type of audiology service delivered, such as screening versus diagnostic audiological assessment. However, at present it is regarded that there will be many Audiologists performing NHS hearing assessment s, typically in community settings, who are not aware of the lowest hearing levels that they can safely test (i.e., at which point the ambient noise may affect results). Historically major hospitals have benefited from good sound proof accommodation with Audiologists confident that test results and outcomes for patients will not be compromised. In recent years, health policy in UK home countries has been to move health

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
				services, including some audiology services, away from major hospitals towards community settings (e.g. community hospitals and high street practices). This is judged to pose a significant risk and challenge to provide the appropriate test environment for audiological assessment. This is a key area for improvement. Guidance is required on the minimum test levels for different transducers for different level/type of assessment. Associated guidance is required to describe a robust verification of the test environment, reporting and routine assurance.
10	SCM5	Early access to audiological assessment for people who present with hearing difficulties, or in whom hearing difficulties are expected	Unmanaged hearing difficulties have a significant impact on an individual's health, wellbeing and quality of life. There is good evidence that hearing difficulties can be effectively managed through interventions provided by audiology services and good evidence that early v delayed intervention is cost effective. NICE guidance recommends that people who present with hearing difficulties or in who hearing loss is suspected, should be referred for audiological assessment.	There is evidence of significant unmet need across the UK with many people who could benefit from intervention not receiving it. There is evidence that people with hearing loss delay seeking help. There is additional evidence that GPs further delay access to audiology services.

11	AHL	Improving awareness of hearing loss and the benefits of hearing aids	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. This worsens health inequalities and increases avoidable costs for individuals, the health and care system and the economy. 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. There are 11 million people with hearing loss in the UK and this is set to increase to 15.6 million by 2035 as our population ages. People with hearing loss are too often unable to communicate with friends and family, colleagues and health professionals. 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 doubles the risk of developing depression and dementia. There is good evidence that hearing aids improve employment prospects, quality of life, social activity and	The Department of Health and NHS England's *Action Plan on Hearing Loss* states that hearing loss is a "major public health issue" and in older age, "people with hearing loss can find it difficult to follow speech without hearing aids and are at great risk of social isolation and reduced mental well-being. Social isolation has an effect on health and in older people; there is strong correlation between hearing loss and cognitive decline, mental illness and dementia." The Action Plan also states that "older adults with age related hearing loss are the largest patient population in need of hearing healthcare". Adult onset hearing loss is among the top 10 disabilities in terms of years lived with disability (YLD) for those over 60 years in England and as life expectancy increases, YLD increases. Despite gold-standard evidence that hearing aids improve quality of life and reduce health risks, research shows that only two-fifths of people who need hearing aids have them as mentioned. Negative stereotypes about hearing loss and hearing aids as well as fear of stigma itself can be a significant barrier stopping people from seeking help. Current evidence shows that hearing loss is the largest modifiable risk factor for dementia. Other studies have demonstrated that hearing aids slow down cognitive decline and may even slow down the risk of developing dementia. • To help overcome challenges users should refer to NHS England's Healthy Ageing 'What Works' Guide, which recommends training for care staff on

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
			mental health. However, approximately only two fifths of people who need hearing aids have them, and wait on average 10 years before seeking help. GPs are the gatekeepers for people in accessing free NHS audiology support for their hearing, but evidence shows that 30 to 45 percent are not referred on for a hearing assessment. 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, suggesting that there is significant variation in referrals made by GPs for people with hearing loss. 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. 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. Research shows that	the communication and hearing needs of older people. Additional guidance can be found in the Action Plan on Hearing Loss, 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.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
			hearing aids may also reduce the risk of developing dementia, however evidence shows that only two fifths of people that need hearing aids have them. A recent study identified hearing loss as **the largest modifiable risk factor for dementia**. If removed, the study states that 9% of dementia cases could be prevented. Our '*A World of Silence'* 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*' 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. Unaddressed hearing loss can lead to social isolation, emotional	

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
			distress and withdrawal from social situations. For example, one study found that hearing loss is associated with feelings of loneliness – but only for people who don't wear hearing aids.	
12	SCM2		Anyone presenting to a GP or health /social care professional with either self reported or overt symptoms of hearing loss that is unrelated to wax, otitis, infection or effusion to be referred for an audiology assessment of their hearing needs (? Within 1 month of referral)	NICE guidance – Recommendation 1.1.1
13	SCM3	Refer all adults who present for the first time with hearing difficulties, or in whom you suspect hearing difficulties to audiology services for an assessment.	Early care for treatable causes can prevent deterioration in hearing e.g. for chronic suppurative otitis media, otosclerosis. Audiologists may identify these more easily than GPs. Early recognition and care of all types of hearing losses gives people choices about how they manage their difficulties and allows them access to early amplification if this is required. Early management prevents limitations in activity and participation	There is evidence that shows significant delay in people being referred for audiological care. The average delay is thought to be about 10 years between people being aware of their hearing loss and receiving care. Studies have identified that between 27% and 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. There is also evidence that shows older people find it more difficult to get used to using hearing aids making it all the more important to offer early care.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
14	SCM1		There is good evidence that fitting hearing aids to adults when they first notice and report hearing difficulties (early management) is both clinically and cost-effective. NICE guidance recommends that adults who present with difficulties for the first time (or where GPs suspect have hearing difficulties) should be referred for an audiological assessment (recommendation 1.1.1). Guidance recommends early rather later management of hearing difficulties.	NHS England reports that (i) adults with hearing loss wait an average of around 10 years before they seek help for their hearing loss, and (ii) between 30 to 45 percent of those referred to GPs are not referred on for a hearing assessment in audiology. The delay in assessment of hearing and appropriate management of hearing loss results in continued communication and hearing problems that ultimately lead to reduced quality of life. Onward referral for audiological assessment for those with awareness of hearing difficulties is varied and inconsistent across England.
15	SCM4	Early diagnosis and identification of hearing impairment	Many people with hearing loss delay seeking professional help for up to 10 years after the hearing difficulty first becomes apparent, leading to increasing difficulties for themselves, their families, carers and work colleagues. Denial embarrassment at the thought of having to wear hearing aids, being unaware of the degree of their hearing difficulties, and a lack of knowledge of the support and help available all contribute.	People should be referred early for a hearing assessment (after excluding serious causes) and have pure tone audiometry and where necessary tympanometry. Delay increases the likelihood of social isolation and early retirement.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
16	NIHR Nottingham Biomedical Research Centre	Primary care referral to audiology for hearing assessments	There is good evidence that fitting hearing aids to adults when they first notice and report hearing difficulties (early management) is both clinically and cost-effective. NICE guidance recommends that adults who present with difficulties for the first time (or where GPs suspect have hearing difficulties) should be referred for an audiological assessment (recommendation 1.1.1). Guidance recommends early rather later management of hearing difficulties.	NHS England reports that (i) adults with hearing loss wait an average of around 10 years before they seek help for their hearing loss, and (ii) between 30 to 45 percent of those referred to GPs are not referred on for a hearing assessment in audiology. The delay in assessment of hearing and appropriate management of hearing loss results in continued communication and hearing problems that ultimately lead to reduced quality of life. Onward referral for audiological assessment for those with awareness of hearing difficulties is varied and inconsistent across England.
17	UNINOTTS	Key area for quality improvement 2	There is good evidence that fitting hearing aids to adults when they first notice and report hearing difficulties (early management) is both clinically and cost-effective. NICE guidance recommends that adults who present with hearing difficulties for the first time (or where GPs suspect they have hearing difficulties) should be referred for an audiological assessment (recommendation 1.1.1). Guidance recommends early rather later management of hearing difficulties.	NHS England reports that (i) adults with hearing loss wait an average of around 10 years before they seek help for their hearing loss, and (ii) between 30-45% of those visiting GPs for hearing problems are not referred on for a hearing assessment in audiology. The delay in assessment of hearing and appropriate management of hearing loss results in continued communication and hearing problems that ultimately lead to reduced quality of life. Onward referral for audiological assessment for those with awareness of hearing difficulties is varied and inconsistent across England.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
18	BAAP	Refer all adults who present for the first time with hearing difficulties, or in whom you suspect hearing difficulties to audiology services for an assessment	Early care for treatable causes can prevent deterioration in hearing e.g. for chronic suppurative otitis media, otosclerosis. Audiologists may identify these more easily than GPs. Early recognition and care of all types of hearing losses gives people choices about how they manage their difficulties and allows them access to early amplification if this is required. Early management prevents limitations in activity and participation	There is evidence that shows significant delay in people being referred for audiological care. The average delay is thought to be about 10 years between people being aware of their hearing loss and receiving care. Studies have identified that between 27% and 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. There is also evidence that shows older people find it more difficult to get used to using hearing aids making it all the more important to offer early care.
19	BAAP	Additional developmental areas of emergent practice Investigation into the underlying cause of hearing loss should be offered to those with an early onset of hearing loss.	Hearing loss is a neurological problem and can be associated with other neurological pathology which needs early identification and management. Hearing loss can also be associated with other pathology such as renal disease where early identification can make a difference to long term health.	Recent advances in genomic research will make the identification of the cause of hearing loss mare accessible and it is important that this group of people have access to this information.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
20	BSHAA	Recommended assessments within routine appointments	Reduce the considerable (and inappropriate) variation in the number of referrals into non-routine pathways to make better use of resources and reduce delays/costs for patients, by ensuring that the recommended range of assessments is properly covered within routine appointment costs and times;	

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
21	BAASQC	Key area for quality improvement 5: If sudden hearing loss developed over a period of 3 days or less within the past 30 days, refer immediately (to be seen within 24 hours) to an ear, nose and throat service or an emergency department. If sudden hearing loss developed more than 30 days ago, refer urgently (to be seen within 2 weeks) to an ear, nose and throat or audiovestibular medicine service. If sudden hearing loss worsened rapidly (over a period of 4 to 90 days), refer urgently (to be seen within 2 weeks) to an ear, nose and throat or audiovestibular medicine service. Consider a steroid to treat idiopathic sudden sensorineural hearing loss in adults.	Management of sudden hearing losses is variable across the country. There is no current UK consensus on the management of idiopathic Sudden sensorineural hearing loss (Stobbs et al. 2014). Many adults presenting with sudden loss are not managed in accordance with the NICE guidelines (NICE, 2018). This inaccessibility of appropriate treatment may hinder long-term patient outcomes and quality of life (Lloyd, 2013).	Stobbs, N., Goswamy, J. & Ramamurthy, L. (2014) How are we managing sudden sensorineural hearing loss in the United Kingdom?: Our Experience Department of Otolaryngology-Head and Neck Surgery, Stepping Hill Hospital, Cheshire, UK. Clinical Otolaryngology 39, 375–396. Lloyd, S (2013) Sudden sensorineural hearing loss: early diagnosis improves outcome. Br J Gen Pract 2013; DOI: 10.3399/bjgp13X670877.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
22	BAA	Improved implementation of the NICE guidelines that recommends screening of those with suspected or diagnosed Dementia, mild cognitive impairment or a learning disability	Evidence presented by the NICE guidance shows early detection of hearing loss in these populations can reduce the impact of the comorbidity.	There are no national referral programmes for this type of screening. There are no requirements in dementia care guidance to screen hearing levels
23	BAASQC	Key area for quality improvement 4: Consider referring adults with diagnosed dementia or mild cognitive impairment to an audiology service for a hearing assessment and for repeat assessment every 2 years (if they have not previously been diagnosed with hearing loss). Consider referring people with a diagnosed learning disability to an audiology service for a hearing assessment when they transfer from child to adult services, and then every 2 years.	Hearing loss is a comorbid condition of dementia and mild cognitive impairment. Recent evidence suggests hearing loss speeds up dementia by 75% (Dawes et al. 2015) Hearing loss in adults with LD is underdiagnosed due to under-reporting of symptoms and assumptions that symptoms of hearing loss are related to other aspects of the LD.	Bauer, Schwarzkopf, Graessel and Holle. (2014) A claims data-based comparison of comorbidity in individuals with and without dementia. BMC Geriatrics 2014, 14:10 Dawes P, Emsley R, Cruickshanks KJ, Moore DR, Fortnum H, Edmondson-Jones M, et al. (2015) Hearing Loss and Cognition: The Role of Hearing Aids, Social Isolation and Depression. PLoS ONE 10(3): e0119616. https://doi.org/10.1371/journal.pone.0119616 Lin, Metter, O'Brien, Resnick, Zonderman and Ferrucci (2011) Hearing Loss and Incident Dementia. Arch Neurol; 68(2): 214–220. doi:10.1001/archneurol.2010.362.
24	ENT UK	Improve patient and GP awareness of the link between dementia and deafness	There is increasing evidence of the link between hearing loss and deafness. Failure to identify hearing loss may lead to social isolation and cognitive decline.	With an aging population hearing loss and dementia are increasing are growing areas of disability. Early identification and treatment may prove beneficial.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
25	PHE	Link between hearing loss and dementia which isn't fully understood yet, and the management of hearing loss in those who have dementia. This was highlighted in the Lancet Commission on dementia https://www.thelancet.com/infographics/dementia2017 where hearing loss is identified as contributing 9% to the preventable dementias identified.		
26	SCM5	Regular hearing assessment for adults with diagnosed or suspected dementia or mild cognitive impairment; and those with diagnosed learning disability	There is growing evidence of a link between hearing loss and dementia and of the potential benefits of managing hearing loss for people with dementia. NICE guidance recommends that people with suspected or diagnosed dementia and those with diagnosed learning disability are assessed regularly to ensure their communication needs are met.	There is increasing evidence emerging about the impact of communication difficulties on dementia and the potential benefit of audiological intervention. A Lancet report published in 2017 identified hearing loss as the single biggest modifiable risk factor for dementia. https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(17)31363-6.pdf Due to the relative recent identification of hearing loss as an important factor, and the potential complexities of service provision for this group of people, it is unlikely that services are in place or consistent across the UK.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
27	SCM1		There is good evidence that hearing loss is associated with an increased risk of dementia, and hearing loss is the top modifiable risk factor for dementia in mid-life. The NICE guidance on hearing loss recommends that adults with dementia, mild cognitive impairment or a learning disability should be referred for a hearing assessment every 2 years.	NHS England recommends that people with dementia or learning disabilities should receive regulate hearing tests. Undetected hearing loss is particularly prevalent in those with dementia or learning disabilities. There is inconsistent and varied services to identify and support people from under-served populations, such as those with dementia and learning disabilities.
28	NIHR Nottingham Biomedical Research Centre	Identification of hearing loss in under-served populations	There is good evidence that hearing loss is associated with an increased risk of dementia, and hearing loss is the top modifiable risk factor for dementia in mid-life. The NICE guidance on hearing loss recommends that adults with dementia, mild cognitive impairment or a learning disability should be referred for a hearing assessment every 2 years.	NHS England recommends that people with dementia or learning disabilities should receive regulate hearing tests. Undetected hearing loss is particularly prevalent in those with dementia or learning disabilities. There is inconsistent and varied services to identify and support people from under-served populations, such as those with dementia and learning disabilities.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
29	UNINOTTS	Key area for quality improvement 4	There is good evidence that hearing loss is associated with an increased risk of dementia, and hearing loss is the top modifiable risk factor for dementia in mid-life. The NICE guidance on hearing loss recommends that adults with dementia, mild cognitive impairment or a learning disability should be referred for a hearing assessment every two years.	NHS England recommends that people with dementia or learning disabilities should receive regular hearing tests. Undetected hearing loss is particularly prevalent in those with dementia or learning disabilities. There is inconsistent and varied services to identify and support people from under-served populations, such as those with dementia and learning disabilities.
30	BAAP	Testing the hearing of people in whom dementia or mild cognitive impairment is suspected or diagnosed as part of the initial assessment	There is a growing body of evidence linking hearing loss and dementia. Hearing loss can cause similar symptoms to early dementia and can affect the tests performed for dementia. Hearing aids in people with hearing loss and dementia can allow them better access to aural communication and reduce confusion.	This is not yet fully recognised as an important area but the evidence is accruing to support hearing tests and early management in this particular population as good medical practice.
Treatment				

31	HLDA	Ensuring that wax removal services are an integral part of the hearing loss pathway and not reliant on ENT led visits for removal.	Wax is a major cause of temporary hearing loss and cause of hearing aid malfunction. There are variations in services provided for wax and hard to navigate systems, which can lead to delays and wasted audiology appointments. Ear wax causes a temporary conductive hearing loss that affects around 2.3 million people in the UK each year seriously enough to require intervention. 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". To make the best use of scarce NHS resources and ensure patients see the right person, in the right place, at the right time. Also to help ensure that recommendation 15 in the NICE guideline on adult hearing loss is implemented. "Offer to remove	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. Increasingly GP surgeries are refusing to manage impacted earwax. ENT clinics are busy, with significant capacity pressures. This results in delays and other barriers to accessing support for impacted earwax. Unless there is a focussed attempt to implement the NICE recommendation on managing earwax then patients are likely to continue to be adversely affected by existing service configuration. Too often quality standards miss opportunities to focus minds on better use of scarce and costly professional expertise – which comes at significant opportunity cost. With general waiting list and cost pressures in ENT, it is important that other suitably trained health care professionals provide more aural care support out of hospital – e.g. as per the NICE guideline on adult hearing loss, earwax can be managed by suitably trained audiologists in primary and community based settings. Better utilisation of ENT capacity will have a positive impact on quality outcomes for people who need

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
			earwax for adults in primary care or community ear care services if the earwax is contributing to hearing loss or other symptoms, or needs to be removed in order to examine the ear or take an impression of the ear canal".	medical support – e.g. people will not have to wait as long if they need to see ENT because ENT surgeons will not be managing earwax. It will help ensure that people with earwax are managed closer to home in a timely manner without the need for an ENT appointment and the associated opportunity costs. In addition to this, GPs are also reporting they no longer have the capacity to manage impacted earwax. The same opportunity cost arguments as those applied to ENT apply here. It is therefore important to focus NHS commissioners minds on developing alternative pathways to support adults with impacted wax so that they don't face delays in having this addressed and poor quality hearing.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
32	AHL	Ensuring that wax removal services are an integral part of the hearing loss pathway	Wax is a major cause of temporary hearing loss and cause of hearing aid malfunction. There are variations in services provided for wax and hard to navigate systems, which can lead to delays and wasted audiology appointments. Ear wax causes a temporary conductive hearing loss that affects around 2.3 million people in the UK each year seriously enough to require intervention. 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”.	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.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
33	BAASQC	Removal of earwax for adults in primary care or community ear care services.	Earwax can contribute to hearing loss or other audiological symptoms. Ear wax needs to be removed in order for professionals to examine the ear and/or take an impression of the ear-canal. Often ear wax removal cannot be performed in a primary care setting using techniques recommended by NICE (2018) i.e. electronic irrigator, micro-suction or manual removal). This leads to delays in audiological care and extra appointments in an acute service.	Although recommended, services often fail to have a clear logical pathway in place for wax removal (NHS England, 2016; Framework of action for Wales, 2017). Framework of Action for Wales, 2017-2020 Integrated framework of care and support for people who are D/deaf or living with hearing loss (May 2017) NHS England (2016) Commissioning Services for People with Hearing Loss: A framework for clinical commissioning groups. https://www.england.nhs.uk/wp-content/uploads/2016/07/HLCF.pdf

34	NCHA	Reduction in ENT led visits for earwax management	To make the best use of scarce NHS resources and ensure patients see the right person, in the right place, at the right time. Also to help ensure that recommendation 15 in the NICE guideline on adult hearing loss is implemented. “Offer to remove earwax for adults in primary care or community ear care services if the earwax is contributing to hearing loss or other symptoms, or needs to be removed in order to examine the ear or take an impression of the ear canal”.	Increasingly GP surgeries are refusing to manage impacted earwax. ENT clinics are busy, with significant capacity pressures. This results in delays and other barriers to accessing support for impacted earwax. Unless there is a focussed attempt to implement the NICE recommendation on managing earwax then patients are likely to continue to be adversely affected by existing service configuration. Evidence/information to support this: Too often quality standards miss opportunities to focus minds on better use of scarce and costly professional expertise – which comes at significant opportunity cost. With general waiting list and cost pressures in ENT, it is important that other suitably trained health care professionals provide more aural care support out of hospital – e.g. as per the NICE guideline on adult hearing loss, earwax can be managed by suitably trained audiologists in primary and community based settings. Better utilisation of ENT capacity will have a positive impact on quality outcomes for people who need medical support – e.g. people will not have to wait as long if they need to see ENT because ENT surgeons will not be managing earwax. It will help ensure that people with earwax are managed closer to home in a timely manner without the need for an ENT appointment and the associated opportunity costs. In addition to this, GPs are also reporting they no

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
				longer have the capacity to manage impacted earwax. The same opportunity cost arguments as those applied to ENT apply here. It is therefore important to focus NHS commissioners minds on developing alternative pathways to support adults with impacted wax so that they don't face delays in assessment, treatment and support for any underlying ear or hearing related issue. References: see Endnote

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
35	SCM5	Removal of problematic earwax for adults in primary care or community ear care services	Wax removal within PC or community care is recommended within NICE guidance. The guidance states that earwax should be removed if the earwax is contributing to hearing loss or other symptoms, or needs to be removed in order to examine the ear or take an impression of the ear canal. Unmanaged problematic earwax can cause pain and discomfort as well as hearing loss/communication difficulties. Additionally, earwax can prevent full examination and assessment of the ear/hearing, resulting in important medical conditions being missed. Wax removal is of particular importance for hearing aid users who will not be able to get optimal benefit from their devices if they are unable to have problematic earwax removed.	Access to wax removal services differ across the UK with many patients waiting for long periods of time or being passed between services resulting in reduced quality of life, unsafe attempts to self manage or patients needing to access private paid for services.
36	SCM3	Prompt and effective earwax removal in primary or community care	Obstructing earwax affects hearing and can make it impossible for those reliant on hearing aids to use their devices. It can also delay treatment of significant pathology.	There is evidence that it is difficult for people to get obstructing earwax removed quickly and effectively. Current practice is poor with either significant cost to the individual or significant delay. Ear care services vary across England.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
37	BAAP	Prompt and effective earwax removal in primary or community care	Obstructing earwax affects hearing and can make it impossible for those reliant on hearing aids to use their devices. It can also delay treatment of significant pathology	There is evidence that it is difficult for people to get obstructing earwax removed quickly and effectively. Current practice is poor with either significant cost to the individual or significant delay. Ear care services vary across England.
38	INHEALTH	Ear Wax Removal to be offered as part of any adult rehabilitation or assessment. The gold standard is microsuction and other safe methods such as irrigations.	There is good evidence that arranging for ear wax removal by the audiology service saves money, better audiology pathways and less paper work and visits to GPs and Nurses.	Providing audiology providers can supply assurances that their audiologists are competent in performing aural microsuction. Providers should be given the responsibility to remove ear wax to reduce workload on nurses and GPs This also improves patient access to hearing aids and provide a simple pathway should there be a contraindication to hearing assessments, fittings, repairs. Especially to those hearing aid users whom are prone to have higher incidences of ear wax due to hearing aid usage. Sending this patient group back and forth to GPs is frustrating to patients, audiologists and GPs and can cause multiple repair appointments.
39	RCGP	Key area for quality improvement 3 Local availability of ear irrigation using an electronic irrigator, microsuction or another method of earwax removal (such as manual removal using a probe) for adults in primary or community ear care services	Ear wax is a common condition (about 2 million treatments per year in England). As well as interfering with hearing it can affect balance. It is a cause of accidents and is dangerous for people such as cyclists, builders and drivers.	Patients complain about inconsistent and inequitable access to wax removal services which they may be unable to afford. Treatment is often required repeatedly. In some places services are not available on the NHS, in others there are dedicated clinics which may be inaccessible to the elderly. In the absence of local community provision of ear irrigation some patients are being recommended lengthy preliminary treatment with ear drops, contrary to NICE guidance and contributing to the burden for patients. In some areas patients are referred to hospital departments, again contrary to NICE guidance.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
40	SCM2	Additional developmental areas of emergent practice	Local provision of free micro-suction services in community settings All people with dementia and learning disability to be reviewed every two years	This is currently a CONSIDER recommendation and a RESEARCH recommendation. Microsuction is becoming more widely available in community settings due to increased numbers of nursing staff being trained in the UK. Microsuction also has high rates of patient satisfaction. This is currently a CONSIDER recommendation.
41	ENT UK	Improve guidance and awareness of the urgency of referral in Sudden Sensorineural Hearing Loss (SSNHL)	Urgent intervention with oral and / or intratympanic steroid improves outcomes in patients with SSNHL.Yet awareness of the urgency and management of this condition is poor both in primary and secondary care.	The evidence is present. It is awareness of the urgency of referral that is not. Improving understanding will lead to reduced life long hearing loss in this population.
Assessment and management in audiology services				

42	WAHSG	Assessment All patients receive an individually-tailored Audiological assessment which is carried out to recognised national standards. Areas judged of particular need for improvement under this heading: Test environment - Hearing assessment should be carried out in appropriate acoustical conditions according to national and international standards.	Rationale re test environment: Accurate hearing assessment of the quietest sounds hear (thresholds) is easily compromised by noisy test environments. For that reason, specialist test environments (sound proof rooms or booths) are required for diagnostic assessment. The impact of inaccurate hearing test results is likely to lead to an exaggerated assessment of hearing loss, and inappropriate/unnecessary or inaccurate intervention (e.g. hearing aid fitting prescription). In outcome this would be wasteful of NHS resources, in addition to risk to the patient. The diagnostic sensitivity of hearing assessment depends directly on the acoustical conditions, with national and international standards which define these. Measures are compromised if not gathered using equipment calibrated to national and international standards in an appropriate environment for the diagnostic test employed.	Basis of identifying areas in need of improvement: NHS Audiology Services in Wales are required to participate in and be externally audited against Quality Standards for Hearing Rehabilitation Services. These standards are evidenced based and have been developed in association with third sector organisations representing service users. The standards were initially developed collaboratively with NHS Scotland. They cover all elements of the patient pathway. Most significantly, the regular national audit of services over several years has provided insight into areas of service delivery in need of improvement that can usefully inform this NICE engagement exercise. Hearing assessment conditions are currently likely variable across the UK. Whilst international standards exist for ambient noise levels for hearing test environments, there is no requirement for Audiologists to be aware of the minimum hearing test level for the test environment used. This might reasonably vary dependent upon the level/type of audiology service delivered, such as screening versus diagnostic audiological assessment. However, at present it is regarded that there will be many Audiologists performing NHS hearing assessment s, typically in community settings, who are not aware of the lowest hearing levels that they can safely test (i.e., at which point the ambient noise may affect results). Historically major hospitals have benefited from good sound proof accommodation with Audiologists confident that test results and outcomes for patients will not be compromised. In recent years, health policy in UK home countries has been to move health

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
				services, including some audiology services, away from major hospitals towards community settings (e.g. community hospitals and high street practices). This is judged to pose a significant risk and challenge to provide the appropriate test environment for audiological assessment. This is a key area for improvement. Guidance is required on the minimum test levels for different transducers for different level/type of assessment. Associated guidance is required to describe a robust verification of the test environment, reporting and routine assurance.
43	SCOTT	Environment/Soundproofing	Undertaking hearing assessments & the rehabilitation of people with hearing loss should be carried out in an appropriate environment. Failure to do so may compromise the accuracy of a hearing assessment and the subsequent treatment and aftercare being offered or provided. It may also influence the need or otherwise for treatment/aftercare. Environments where hearing loss is assessed have specific acoustic and physical space requirements.	Historically, Services have at times delivered services from locations that are neither soundproofed nor sound-treated. Additional pressure/demand/drive to deliver services in the community is now raising additional concerns that accommodation is not always suitable (fit for purpose).

44	SCOTT	Assessment	The need for, and content of, any Individual Management Plan (IMP) requires knowledge of a patient's hearing status. The quality of assessment is more likely to be assured if undertaken in accordance with nationally recommended procedures. Measures are compromised if not gathered using equipment calibrated to national and international standards in a quiet test environment. A relevant medical history is required to develop an IMP. Hearing status is a necessary prerequisite, but is not sufficient information alone to configure an IMP. Understanding the patient's activity limitations, their social and environmental communication needs, their attitudes, expectations, motivation and behaviours as a result of hearing impairment will enable an appropriate Individual Management Plan to be developed. Validated self-report questionnaires	NHS Audiology services in Scotland have been externally audited against nationally devised and government endorsed quality standards for adult hearing rehabilitation services. These standards were developed jointly and shared with NHS Wales. Across several years, regular audit across NHS Scotland's Services shows variation against these standards, indicating that this area in particular is a key area for improvement. The service standards are evidenced based, were developed with third sector input and were presented in a prescribed Quality Improvement Scotland format. This variation results in different standards of service delivery which should be avoided.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
			can support the assessment of activity limitations related to hearing impairment. Situation-specific structured questionnaires (e.g. Glasgow Hearing Aid Benefit Profile) have been shown to offer significant advantages in clinical settings over more general disability and handicap inventories.	

45	SCOTT	Individual patient Management Plans	An Individual Management Plan approach is most effective if it takes into account a range of factors in addition to the type and level of hearing loss. An effective IMP relies on consultation between the Audiology professional, the hearing impaired person and his or her significant other(s). Only when all parties are committed to the joint goals is an optimal outcome achieved To be successful, IMPs need to be flexible. Flexibility within the structure of the IMP is beneficial because the content and the goals of the IMP may change over time, reflecting the positive outcomes of interventions An effective IMP will detail specific actions associated with agreed goals that take into account a listener's social, communication and listening needs, in addition to their hearing impairment and related activity limitations, e.g. living alone vs family setting vs sheltered accommodation. The IMP is flexible so that different goals can be set if the patient's circumstances/environment changes.	Audit from across NHS Scotland's Services shows variation. This variation results in different standards of service delivery which should be avoided. Public criticism from 3rd Sector and negative press related to this may impact the views of service users, their families and fellow professionals.

			Planned and coordinated intervention leads to better outcomes. Such an approach requires recording of interventions and their effectiveness to guide on-going development of the IMP. In order for agreed interventions to be effective, referral to another agency/service for interventions should be prompt so as to be based upon an up-to-date appraisal of need. Audiologists should be confident that the aid is working to specification before fitting it to a patient so that the aid does not cause harm. Professional bodies and national guidelines should be followed to ensure provision meets the needs of the individual. Evidence suggests that hearing aids are most effective when their performance is carefully matched to the requirements of the individual.	

			Hearing related assistive technology can be used alongside or in some cases instead of hearing aids to support effective communication and in meeting individual needs. Evidence suggests a range of non instrumental aural rehabilitation interventions can improve outcomes for patients and their significant other(s). This can include improvements in function, activity, participation and quality of life through: •Increased use of aids •Better speech perception in noise •Lower perception of hearing handicap •Improvement in psychosocial factors Interventions shown to be effective are: •Group and/ or individual Aural Rehabilitation sessions for patients and their significant other(s) / communication partners, including information provision, clear speech training, communication tactics, counselling	

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
			•Auditory training •Lipreading classes Promotion of self efficacy and management will result in increased independence On-going use of and benefit from a hearing aid is likely to be increased if the process of support and maintenance includes routine Audiological reviews and potential for updating the IMP. Such provision is required to accommodate the changing rehabilitation needs of individuals	

46	WAHSG	Key area for quality improvement No3 <u>Individual management plans (IMPs)</u> An agreed approach to IMP development should be in place and followed. This should include being agreed with the patient and their significant other(s), and include agreed needs, actions and outcomes. *Areas judged of particular need for improvement under this heading:* Coproduced person-centred planning – The individual management plan should be created and developed with the patient, the professional and the patient's social network as equal partners.	Rationale from Quality Standards for Hearing Rehabilitation: An Individual Management Plan approach is most effective if it takes into account a range of factors in addition to the type and level of hearing loss. An effective IMP relies on consultation between the Audiology professional, the hearing impaired person and his or her significant other(s). Only when all parties are committed to the joint goals is an optimal outcome achieved. An effective IMP will detail specific actions associated with agreed goals that take into account a listener's social, communication and listening needs, in addition to their hearing impairment and related activity limitations, e.g. living alone vs family setting vs sheltered accommodation. Planned and coordinated intervention leads to better outcomes. Such an approach requires recording of interventions and their effectiveness to guide on-going development of the IMP. Rationale for development of person-centred planning: Outcomes are improved where individual needs and goals are co-	Basis of identifying areas in need of improvement: NHS Audiology Services in Wales are required to participate in and be externally audited against Quality Standards for Hearing Rehabilitation Services. These standards are evidenced based and have been developed in association with third sector organisations representing service users. The standards were initially developed collaboratively with NHS Scotland. They cover all elements of the patient pathway. Most significantly, the regular national audit of services over several years has provided insight into areas of service delivery in need of improvement that can usefully inform this NICE engagement exercise. Use and quality of Individual Management Plans is currently highly varied across the UK. The Wales Quality Standards service audit has demonstrated improvement over several years through agreement of a consistent approach. Person centred planning is optimised when completed as equal partners through co-production. This is supported through core approaches across the NHS in the UK (Prudent healthcare in Wales; Personalised care and support planning in England). Social network refers to significant others, close family, and the person's wider care network. The evidence base for this involvement of family and carers, has increased in recent years (see Hickson et al literature). Where the individual is in a residential or care home, this includes working collaboratively with those supporting that individual to ensure that agreed goals are supported.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
			produced by the patient, professional and the patient's social network as equal partners.	Uptake and use of rehabilitation e.g. hearing aids is supported in this way, promoting identification of individuals not motivated for this particular intervention, where additional or alternative support may then be offered in a person-centred and cost effective approach. Support and endorsement of a truly coproduced approach for audiology services is needed in order to maximise patient outcomes and satisfaction, and improve cost effectiveness of services.

47	WAHSG	Key area for quality improvement No3 Individual management plans (IMPs) An agreed approach to IMP development should be in place and followed. This should include being agreed with the patient and their significant other(s), and include agreed needs, actions and outcomes. Areas judged of particular need for improvement under this heading: Coproduced person-centred planning – The individual management plan should be created and developed with the patient, the professional and the patient's social network as equal partners.	Rationale from Quality Standards for Hearing Rehabilitation: An Individual Management Plan approach is most effective if it takes into account a range of factors in addition to the type and level of hearing loss. An effective IMP relies on consultation between the Audiology professional, the hearing impaired person and his or her significant other(s). Only when all parties are committed to the joint goals is an optimal outcome achieved. An effective IMP will detail specific actions associated with agreed goals that take into account a listener's social, communication and listening needs, in addition to their hearing impairment and related activity limitations, e.g. living alone vs family setting vs sheltered accommodation. Planned and coordinated intervention leads to better outcomes. Such an approach requires recording of interventions and their effectiveness to guide on-going development of the IMP. Rationale for development of person-centred planning: Outcomes are improved where individual needs and goals are co-produced by the patient,	Basis of identifying areas in need of improvement: NHS Audiology Services in Wales are required to participate in and be externally audited against Quality Standards for Hearing Rehabilitation Services. These standards are evidenced based and have been developed in association with third sector organisations representing service users. The standards were initially developed collaboratively with NHS Scotland. They cover all elements of the patient pathway. Most significantly, the regular national audit of services over several years has provided insight into areas of service delivery in need of improvement that can usefully inform this NICE engagement exercise. Use and quality of Individual Management Plans is currently highly varied across the UK. The Wales Quality Standards service audit has demonstrated improvement over several years through agreement of a consistent approach. Person centred planning is optimised when completed as equal partners through co-production. This is supported through core approaches across the NHS in the UK (Prudent healthcare in Wales; Personalised care and support planning in England). Social network refers to significant others, close family, and the person's wider care network. The evidence base for this involvement of family and carers, has increased in recent years (see Hickson et al literature). Where the individual is in a residential or care home, this includes working collaboratively with those supporting that individual to ensure that agreed goals are supported.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
			professional and the patient's social network as equal partners.	Uptake and use of rehabilitation e.g. hearing aids is supported in this way, promoting identification of individuals not motivated for this particular intervention, where additional or alternative support may then be offered in a person-centred and cost effective approach. Support and endorsement of a truly coproduced approach for audiology services is needed in order to maximise patient outcomes and satisfaction, and improve cost effectiveness of services.
48	SCM2		All patients referred to Audiology services to have documented evidence of a full assessment* of their hearing needs, results of all tests, treatment options, a follow up face to face appointment, referrals to Fire Service/Council and a personalised care plan that includes hearing aid care and additional sources of advice, information about support for hearing loss. OR All NHS Standard contracts with providers of NHS audiology services to include a service specification based on NICE recommendations which is performance reviewed annually (Monitor AQP review 2015)	Refer to NICE Guidance Recommendation 1.4.1.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
49	ATLA		Hearing aids should never be rationed, if a person has hearing loss in both ears, they need two hearing aids.	It is poor practice to give one hearing aid to a person with hearing loss in both ears. There is evidence that using one aid can lead to balance problems and more falls. It is also more difficult to get used to one hearing than two.

50	NCHA	Binaural fitting rate	NHS England and NICE agree, people with a hearing loss in both ears should be offered two hearing aids, unless there are contraindications for doing so. This does not always happen, and unwarranted variation in this area is a longstanding challenge in the NHS. Whether adults have one or two hearing aids should be based on informed consent and evidence based practice – i.e. it should be based on informed consent, and should not be so sensitive to non-evidence-based commissioning policies or individual clinician biases/assumptions. Prioritising this will also help monitor whether practice has changed following NICE guideline recommendations 25 to 27 https://www.nice.org.uk/guidance/ng98/evidence/full-guideline-pdf-4852693117	There is unwarranted variation in the provision of two hearing aids. The provision of two hearing aids for people with a hearing loss in both ears is cost-effective and recommended by NICE. Existing variation in the bilateral fitting range cannot be explained by population needs, and suggests a significant variation in quality of care provided. Evidence/information to support this: It is widely acknowledged, including by NICE, that there is significant unwarranted variation in the proportion of people that receive two hearing aids. There is limited published data on this issue however. The NCHA undertook a national Freedom of Information project in 2015 when we asked every NHS trust for their bilateral fitting rate. We have performed a random selection of the responses for the purposes of this NICE consultation. Bilateral fitting rates: 75%, 89%, 72%, 56%, 40%, “not measured”, 80%, “not recorded”, 90%, 43%, 75%, 82%, 90%, 78%, 7% (seven). This unwarranted variation is not always justified based on local service specifications or reimbursement – i.e. clinical practice at an individual audiologist or department level is also likely to be a cause and risks adversely affecting patient outcomes. Although we lack evidence on NHS audiologist attitudes to prescribing two hearing aids in England, we do know that in 2002 eight out of 21 (38%) of Scottish audiology departments disagreed with best practice advice that people with hearing loss in both

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
				ears should receive two hearing aids; although they had no evidence to support their position at the time. References: Endnote

51	NCHA	Ongoing use of, and benefit from, hearing aids	To ensure people continue to use and benefit from hearing aids and the risks associated with unsupported hearing loss are minimised, that providers do not skimp on quality and NHS resources are effectively used.	Why is this a key area for QI? Well fitted hearing aids, with good follow-up support, are shown to minimise the risks and costs associated with unsupported hearing loss. Non-use rates should be monitored and benchmarked so that the root cause of non-use can be assessed and addressed. Evidence/information to support this: People who are fitted with hearing aids and offered the right support will get more out of the their hearing aids. They are also more likely to continue using them, and as a result – other things being equal – the intervention is likely to be more cost-effective for the NHS. There is a longstanding challenge however in the NHS, with people not always getting the right support at the right time (as noted above in our recommendation to improve follow-up care). This can reduce the effectiveness of hearing aids and result in non-use. Which is bad for patients, the NHS and taxpayer. In addition to supporting early diagnosis and management, it is also important to ensure people continue to be supported with their hearing problems and benefit from interventions. Hearing aids are the primary intervention for hearing loss and therefore it is important to measure ongoing use and satisfaction. Doing so should also tackle the culture of “fit and forget”, and make it more difficult for providers who operate at above 100% utilisation to skimp on quality at a cost to patient outcomes.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
				The NHS in some regions is also likely to move back to block contracts and a recent consultation by NHS England suggests service specific service specifications will also be removed from a new Integrated Provider Contracts. History has shown when this happens, NHS audiology services are forced to compromise on quality and outcomes suffer. It is therefore important to ensure NICE quality standard provides a way to incentivise the provision of quality hearing care independent of the local commissioning/provider/contract model. References: Endnote (and 1,3,5)
52	SCM5	Offer hearing aids to adults who need them	Unmanaged hearing difficulties have a significant impact on an individual's health, wellbeing and quality of life. There is good evidence that hearing aids are clinically and cost effective. NICE guidance recommends that hearing aids should be offered to people who's hearing loss effects their communication abilities.	There have been a number of CCGs that have limited, or proposed limiting, the supply of hearing aids to those people who have specific hearing test results. This has resulted in many people who may benefit from hearing aids being denied the opportunity to try. Similarly there is evidence that one hearing aid may be offered when the patients could benefit from two.
53	SCM2		Bilateral hearing aids prescribed to people with evidence of bilateral loss (cost free) unless contraindicated or absence of consent	NICE Guidance 1.5.2

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
54	SCM3	Offer hearing aids to adults whose hearing loss affects their ability to communicate	Early management prevents limitations in activity and participation	There is evidence that indicates some areas (CCGs) are refusing hearing aids to people with milder degrees of hearing loss yet the evidence is that early use of hearing aids is important in prevention of limitations in activity and participation but also in prevention of mental health issues associated with hearing loss. Early amplification has been found to be cost effective.
55	SCM1		There is good evidence that hearing aids are effective at improving hearing- and health-related quality of life for adults with mild to moderate hearing loss. NICE Guidance recommends that hearing aids should be offered to those whose effects their ability to communicate or hear. (recommendation 1.6.1 and 1.6.2)	NHS England reports that (i) between 30 to 45 percent of those referred to GPs are not referred on for a hearing assessment in audiology, and (ii) around only two-fifths of those who hearing aid have them. Therefore there is a huge unmet need in terms of adults receiving management for hearing loss. There is considerable variation in onward referral to audiology. One clinical commissioning group does not routinely fund and offer hearing aids to adults who have mild to moderate hearing loss. This inequity leads to continued communication and hearing problems that ultimately leads to reduced quality of life. There is inconsistent and varied hearing aid provision across England

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
56	NIHR Nottingham Biomedical Research Centre	Increase awareness and uptake of hearing aids	There is good evidence that hearing aids are effective at improving hearing- and health-related quality of life for adults with mild to moderate hearing loss. NICE Guidance recommends that hearing aids should be offered to those whose effects their ability to communicate or hear. (recommendation 1.6.1 and 1.6.2)	NHS England reports that around only two-fifths of those who hearing aid have them. Based on the available scientific evidence, untreated hearing loss is likely to lead to continued communication and hearing problems that ultimately leads to reduced quality of life. There is inconsistent and varied hearing aid provision across England
57	UNINOTTS	Key area for quality improvement 1	There is good evidence that hearing aids are effective at improving hearing- and health-related quality of life for adults with mild to moderate hearing loss. NICE Guidance recommends that hearing aids should be offered to those whose hearing loss affects their ability to communicate or hear (recommendation 1.6.1 and 1.6.2)	NHS England reports that (i) 30-45% of those visiting GPs for hearing problems are not referred on for a hearing assessment in audiology, and (ii) only around 40% of those who need hearing aids have them. Therefore there is a huge unmet need in terms of adults receiving management for hearing loss. There is considerable variation in onward referral to audiology. One clinical commissioning group does not routinely fund and offer hearing aids to adults who have mild to moderate hearing loss. There is inconsistent and varied hearing aid provision across England.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
58	BAAP	Offer hearing aids to adults whose hearing loss affects their ability to communicate. Two hearing aids should be offered for bilateral aidable hearing loss.	Early management prevents limitations in activity and participation	There is evidence that indicates some areas (CCGs) are refusing hearing aids to people with milder degrees of hearing loss yet the evidence is that early use of hearing aids is important in prevention of limitations in activity and participation but also in prevention of mental health issues associated with hearing loss. Early amplification has been found to be cost effective.

59	HLDA	Early diagnosis and management of adult hearing loss and improving awareness of hearing aids including ensuring binaural fitting.	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. This worsens health inequalities and increases avoidable costs for individuals, the health and care system and the economy. 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. There are 11 million people with hearing loss in the UK and this is set to increase to 15.6 million by 2035 as our population ages. People with hearing loss are too often unable to communicate with friends and family, colleagues and health professionals. 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 doubles the risk of developing depression and dementia. Delaying assessment and management for adult hearing loss	The Department of Health and NHS England's Action Plan on Hearing Loss states that hearing loss is a "major public health issue" and in older age, "people with hearing loss can find it difficult to follow speech without hearing aids and are at great risk of social isolation and reduced mental well-being. Social isolation has an effect on health and in older people; there is strong correlation between hearing loss and cognitive decline, mental illness and dementia." The Action Plan also states that "older adults with age related hearing loss are the largest patient population in need of hearing healthcare". Adult onset hearing loss is among the top 10 disabilities in terms of years lived with disability (YLD) for those over 60 years in England and as life expectancy increases, YLD increases." Despite gold-standard evidence that hearing aids improve quality of life and reduce health risks, research shows that only two-fifths of people who need hearing aids have them as mentioned. Negative stereotypes about hearing loss and hearing aids as well as fear of stigma itself can be a significant barrier stopping people from seeking help. Current evidence shows that hearing loss is the largest modifiable risk factor for dementia. Other studies have demonstrated that hearing aids slow down cognitive decline and may even slow down the risk of developing dementia. To help overcome challenges users should refer to NHS England's Healthy Ageing 'What Works' Guide, which recommends training for care staff on the

			can have a major and adverse impact on individuals, friends and family; and increase cost for the NHS and care system and society. There is good evidence that early diagnosis and management of adult hearing loss can reduce the risks and costs associated with hearing loss, and that hearing aids are very cost-effective. This is why the NICE has recommended timely referral, assessment and support for adults with hearing loss. This will also help monitor change in practice/provision following publication of the NICE guideline NG98, https://www.nice.org.uk/guidance/ng98/evidence/full-guideline-pdf-4852693117, and in particular recommendation 12. However, approximately only two fifths of people who need hearing aids have them, and wait on average 10 years before seeking help. GPs are the gatekeepers for people in accessing free NHS audiology support for their hearing, but evidence shows that 30 to 45 percent are not referred on for a	communication and hearing needs of older people. Additional guidance can be found in the Action Plan on Hearing Loss, 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. People currently wait too long to access adult hearing services, those that seek support experience additional barriers, and there is evidence of significant unwarranted variation. The Department of Health, NHS England, NHS Improvement (Monitor) and NICE refer to the same evidence: on average people wait 10 years between experiencing hearing problems and seeking help, and when they do seek help their GP might not refer them to an audiologist for support. They also note that there is significant unwarranted variation in access to adult hearing services. All these organisations have called on NHS commissioners and providers to improve access to adult hearing care and take early diagnosis and intervention more seriously. Despite hearing loss being recognised as a major public health challenge, there is significant unmet need. The NHS Atlas of Variation also suggests there is significant unwarranted variation*.

			hearing assessment. 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, suggesting that there is significant variation in referrals made by GPs for people with hearing loss. 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. 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. Research shows that hearing aids may also reduce the risk of developing dementia, however evidence shows that only two fifths of people that need hearing aids have them. A recent study identified hearing loss as the largest modifiable risk factor for dementia. If removed, the study states that 9% of dementia cases could be prevented. The ‘A World of Silence’ 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. The 'Under Pressure' 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. Unaddressed hearing loss can lead to social isolation, emotional distress and withdrawal from social situations. For example, one study found that hearing loss is associated with feelings of loneliness – but only for people who don't wear hearing aids. Binaural Fitting There is also an issue around binaural fitting rates. NHS England and NICE agree, people with a hearing loss in both ears should be offered two hearing aids, unless there are contraindications for doing so.	

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
			This does not always happen, and unwarranted variation in this area is a longstanding challenge in the NHS. The NCHA undertook a national Freedom of Information project in 2015 when they asked every NHS trust for their bilateral fitting rate. They then performed a random selection of the responses for the purposes of this NICE consultation. Bilateral fitting rates: 75%, 89%, 72%, 56%, 40%, “not measured”, 80%, “not recorded”, 90%, 43%, 75%, 82%, 90%, 78%, 7% (seven). Whether adults have one or two hearing aids should be based on informed consent and evidence based practice – i.e. it should be based on informed consent, and should not be so sensitive to non-evidence-based commissioning policies or individual clinician biases/assumptions. Prioritising this will also help monitor whether practice has changed following NICE guideline recommendations 25 to 27 https://www.nice.org.uk/guidance/ng98/evidence/full-guideline-pdf-4852693117	

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
60	NADP	Hearing aid features/ programs offered to the patients	Patients are not always given explanation about different hearing aid features available.	Patients' needs are different and should be acknowledged by audiologists.

61	HLDA	Improving the availability and quality of social care services for people who are deaf or have hearing loss	There is more support available for people with hearing loss than hearing aids. Providers 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. 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. Additionally, 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' report identified a range	Anecdotally, we have heard that audiologists are not always clear on how and what information to provide people about assistive listening devices or what other support services such as lip reading classes are available locally for people with hearing loss. Evidence from our 'Under Pressure' report 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, 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. Our 'A World of Silence' 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. 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 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

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
			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 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. 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. One of the key areas is to improve access to high-quality cost-effective assistive hearing technologies and products.	system". According to our Not Just Lip service report (2013), a range of mechanisms should be provided to enable people to effectively adjust to and manage hearing loss. Government should recognise lipreading and managing hearing loss support as vital to complementing interventions such as hearing aids, for people adjusting to and managing hearing loss. As such, lipreading and managing hearing loss support should be seen as an important contribution to re-ablement: the development of skills necessary for longer-term wellbeing. This should include consideration of funding and delivery mechanisms where necessary, including the position that this support has within hearing services, to ensure people with hearing loss are able to access this support as close to diagnosis as possible.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
62	BAA	Access to and information on Assistive listening devices should be improved and standardised across the country	Hearing systems alone cannot provide help in all circumstances such as at work. Keeping those with hearing impairment engaged or employed is cost effective to our economy in the long term.	An Ear Foundation Report looked at access to assistive technologies. AoHL looked at Access to equipment in work places and the effect of the lack of it.
63	NADP	Assistive listening devices (ALDs)	Hearing aids on NHS are limited in their capabilities , however in combination with assistive listening device it can enhance speech understanding	A hearing aid wearer attending different meetings where hearing loop is not offered or not working may need ALD to support their participation. Audiologists should be explaining more on assistive listening devices and their benefits
64	BSA	Key area 3: Improved and standardised access to assistive listening devices (ALDs – equipment designed to improve peoples' communication by improving the signal to noise ratio).	Whilst hearing aids provide some benefit in certain listening environments (such as the workplace), they are limited in more complex/challenging listening environments. Use of ALDs can enhance people's access to communication in these difficult situations. There have been substantial developments in the technology that can be employed in ALDs (e.g. direct streaming). There are economic benefits for allowing those with hearing impairment to remain engaged in employment.	

65	BAASQC	Additional developmental areas of emergent practice: The use of technology such as real-time phone apps for measuring outcome with hearing aids. Use of outcome measures to inform patient choice. Best-practice from other professions suggests outcome measure data can be useful when helping adults make decisions about their treatment. NICE could help push towards standard achievable KPIs and mandatory IQIPS accreditation for hearing care services. If NICE was to support IQIPS and encourage quality routine KPIs the quality of assessment and management of adults with hearing loss with significantly improve.	Outcome with hearing aids is traditionally measured via validated questionnaires. These measures rely on accurate patient recall at the follow up appointment. Mobile phone applications could enable the user to record an instant evaluation of outcome with their hearing aid in personalised listening situations. Responses could be used to help tailor the hearing aid fitting to the users listening needs. e.g. an adult deciding if they should have a cochlear implant (CI) could find it helpful to know how users of CIs rated the intervention compared to users of hearing aids.	Limited research is available but this technology is commercially available: Phonak Hearing Diary https://www.phonakpro.com/com/en/esolutions/solutions/hearing-diary/overview-hearing-diary.html) , Oticon Hearing Diary https://appadvice.com/app/oticon-hearing-diary/797098069 Wilson (2018) Patient led PROMs must take centre stage in cancer research. Research Involvement and Engagement. 4:7 DOI 10.1186/s40900-018-0092-4 https://www.ukas.com/services/accreditation-services/physiological-services-accreditation-iqips/# NHS England (2016) Commissioning Services for People with Hearing Loss: A framework for clinical commissioning groups. https://www.england.nhs.uk/wp-content/uploads/2016/07/HLCF.pdf

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
66	NADP	Telecoil program/ feature should be offered and demonstrated to all hearing aid users.	Hearing loops are used in most public buildings, university and public venues. If the telecoil is not activated in a hearing aid, the user is effectively prevented from accessing hearing loops and benefit from inclusion and active participation.	Hearing loops provision is part of Equality Act 2010, however all too often HA users do not have the program activated. It is also important that this feature is demonstrated to someone who is new to HA.
67	NADP	Auditory retraining	Patients need to be aware that it can take time to get used to their hearing aids.	An auditory retraining app can be useful
68	NADP	Offering Bluetooth connected hearing aids	Direct Bluetooth connectivity improves access to telephone conversations	Individuals can have direct conversations without background noise with the Bluetooth technology
Follow-up in audiology services				

69	AHL	Ensuring audiology services are accessible for people with disabilities and sensory loss	People with hearing loss will have different communication needs and, in addition, some may require information in easy read format or advocacy support. Aside from information in accessible formats, such as Easy Read or advocacy support, people with dementia who are deaf or have hearing loss may need a range of support to communicate well. This could include: • Many people who are deaf or have hearing loss will find it difficult or impossible to use the telephone and may benefit from alternative contact options such as email, Text messages, Next Generation Text Relay (NGTR) or BSL Video Relay Services (VRS) • For face-to-face contact, people with hearing loss may need other people to follow simple communication tips such as speaking clearly and avoid obstructing their lip movements with hand gestures or other objects. People who use hearing aids may benefit from hearing loop systems that make speech clearer by reducing background noise.	Although all organisations that provide NHS services are legally required to follow the Accessible Information Standard, research shows that often this is not the case. Findings from NHS England's review on the Accessible Information Standard showed that although there was widespread support for the Standard, significant challenges remained in terms of its implementation. For example, more than half (53%) of patients who responded to NHS England's survey said they had not experienced any improvement in getting accessible information or communication support over the last six months. Many people who are deaf or have hearing loss who provided feedback to NHS England as part of their review also said they were still experiencing barriers to communication when accessing health and social care.

			• Some people who are deaf or have hearing loss will need support from a communication professional to follow conversations, such as a British Sign Language (BSL) interpreter or Speech-To-Text-Reporter (STTR). • English may not be the first or preferred language of people who are deaf, so information should be written in Plain English. While many people who are deaf can read and write English, some cannot, so services should consider producing BSL videos of key documents or other information and promote these to the Deaf community. • Poor communication may cause considerable stress and anxiety for people who are deaf or have hearing loss and may lead to missed appointments and ineffective care. Improving the accessibility of care settings will also save the NHS money: • NHS England estimates that the cost of people with hearing loss missing appointments – because they didn't hear their name being called in the waiting room – could	

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
			be as high as £15m every year. • The Ear Foundation estimates that, because of communication difficulties, people with hearing loss cost the NHS £76m in extra GP visits every year. • SignHealth estimates that missed diagnosis and poor treatment of people who are deaf costs the NHS £30m every year.	
70	ATLA		A follow up appointment needs to be made when a person is given aids, this may ensure that they try to get used to them. A phone follow up is not suitable for a person with hearing loss.	
71	BAA	Increase in availability of in person follow up appointments after hearing instrument fittings in all areas and with all service providers	NICE guidance on managing Adult Hearing Loss recommended in person appointments are first choice of follow up to encourage use of devices fitted.	Many BAA Members inform us that no routine in person appointments are available for follow ups in their services and those that are do not meet waiting time targets suggested by NICE. Funding is seen as the key issue and a lack of appropriate staffing due to workforce shortages.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
72	BAASQC	Adults given hearing aids should be offered a face-to-face follow-up audiology appointment 6 to 12 weeks after the hearing aids are fitted.	Section 1.7 of the NICE guidance discusses the role of follow up in audiology services. Many adults fitted with hearing aids are not routinely offered any type of follow up. Reasons may include; lack of funding for follow up services leading to lack of motivation by the service to pursue follow ups (Calton, 2012).	Calton, R (2012) Cut Off: Assessing provision of adult audiology services and the impact of budget cuts. Action on Hearing Loss. https://www.actiononhearingloss.org.uk/how-we-help/information-and-resources/publications/research-reports/cut-off-report/ Framework of Action for Wales (2017), 2017-2020 Integrated framework of care and support for people who are D/deaf or living with hearing loss. NHS England (2016) Commissioning Services for People with Hearing Loss: A framework for clinical commissioning groups. https://www.england.nhs.uk/wp-content/uploads/2016/07/HLCF.pdf

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
73	SCM5	Follow up/review following intervention for communication difficulties (including instrumental or non- instrumental interventions)	Follow-up and review is included within current recommended/good practice documents (i.e. adult service model specification within NHS England's 'Commissioning Services for People with Hearing Loss; Welsh and Scottish quality standards for adult hearing rehabilitation) NICE guidance recommends offering face to face FU and considering a system of recall for regular reassessment. FU is essential to ensure the effective use of any interventions and identify any additional support required. FU also provides the opportunity to measure outcomes (PROMs).	Offer and provision of follow up following intervention varies across the UK. National Quality Standards have been developed and implemented in Wales. Services have undergone annual external audit against these standards since 2009/10. Criteria related to provision of FU and review have consistently been within the lowest scoring criteria in Wales A number of reports by Action on Hearing loss highlight the variability in provision of FU and review across the UK (e.g. Time to Raise the Standards; Cut Off; Under Pressure, NI audiology patients Survey).
74	SCM3	Ensure effective follow up care and monitoring of people with hearing loss	Proper follow up to address issues as well as continuing support for things like earwax removal, retubing, replacing split moulds, ensuring proper insertion and proper use of optional facilities such as noise reduction are essential to good use of hearing aids.	There is evidence that people do not use hearing aids because of difficulties due to a lack of proper follow up or monitoring. Follow up does not always occur or is conducted over the telephone which may not suit the person receiving care. Troubleshooting of hearing aid problems is difficult, particularly for the elderly and infirm, and this combined with ignorance of the need for good hearing amongst their carers leads to poor care.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
75	SCM1		The NICE guidance on hearing loss recommends that adults who are fitted with hearing aids should be offered a follow-up appointment 6 to 12 weeks following hearing aid fitting.	NHS England states that follow-up after hearing aid fitting should take place to ensure the person is benefitting from their hearing aids, and they are signposted to further aftercare and additional support if required. There is inconsistent and varied provision of follow-up care across England.
76	NIHR Nottingham Biomedical Research Centre	Follow-up of adults after hearing aid fitting	The NICE guidance on hearing loss recommends that adults who are fitted with hearing aids should be offered a follow-up appointment 6 to 12 weeks following hearing aid fitting.	NHS England states that follow-up after hearing aid fitting should take place to ensure the person is benefitting from their hearing aids, and they are signposted to further aftercare and additional support if required. There is inconsistent and varied provision of follow-up care across England.
77	Hearing Sciences, University of Nottingham	Key area for quality improvement 3	The NICE guidance on hearing loss recommends that adults who are fitted with hearing aids should be offered a follow-up appointment 6 to 12 weeks following hearing aid fitting	NHS England states that follow-up after hearing aid fitting should take place to ensure the person is benefitting from their hearing aids, and they are signposted to further aftercare and additional support if required. There is inconsistent and varied provision of follow-up care across England.

78	AHL	Improving access to hearing aid aftercare and support	Hearing aids have shown to improve the quality of life and economic prospects as well as reducing loneliness. They also improve mental health by reducing the psychological and social effects associated with hearing loss. Additionally, emerging research has highlighted that the rate of cognitive decline decreases with the use of hearing aids which may reduce the risk of developing dementia. In order to provide continued benefit, hearing aids require regular maintenance. They have to be cleaned properly, they often need minor repairs, and the batteries and tubing need to be replaced frequently. Many people need ongoing support to help them with hearing aid maintenance. This is particularly the case for new hearing aid wearers or older people with dexterity or sight problems. In order for individuals to fully benefit from hearing aids and continue to experience an improved quality of life, appropriate aftercare and support should be provided. Follow-up appointments allow	There are variations in access and quality of services across the country. The Commissioning Framework suggests that follow-up and ongoing support are inconsistently provided across England and people might not always receive information from their audiologist about other support and equipment that could help them. Our Under Pressure report (2015), which looked at the impact of budget shows that that follow-up and other support after the initial hearing aid fitting has been shown to improve satisfaction with hearing aids and increase hearing aid use. A number of providers who provide face-to-face follow-up told us they work well – one provider said that they “have audited alternatives [to face-to-face follow-up] in the past and found that they led to a reduced quality in service and uptake and use of hearing aids”. However, it also showed that due to budget cuts follow up appointments are being reduced. It was also found that only 49% of providers offered face to face follow up appointments to individuals fitted with hearing aids.

			audiology providers to check to see how well the person is adjusting to their hearing aid(s), and to give additional information or support. British Academy of Audiology guidance (2014) and quality standards in Wales, Scotland and Northern Ireland state that each patient should be given a follow-up appointment within 12 weeks after a hearing aid fitting. Patients have told us that good follow-up appointments are essential, and evidence shows that people need continuing support and training to get the most out of their hearing aids after fitting – even if they do not realise they need extra help. Face-to-face follow-up appointments give audiologists an opportunity to observe the patient's ability to use the hearing aid, as well as to discuss how they are coping and provide guidance or make any alterations that can ensure they continue to wear the hearing aids. In our research (RNID Cymru, 2009) we found that 66% of people had difficulties using their hearing aid when they first received it. Getting timely, easy-to-access, ongoing support is crucial, since hearing aid users who have	

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
			difficulty in handling and maintaining their aids often stop using them altogether. As we've outlined above, many older people have hearing loss alongside other health or mobility problems, so convenience and accessibility are important.	

79	NCHA	Follow-up care	Follow-up care after a hearing aid fitting is key to securing good outcomes. This is why NICE, NHS England, NHS Improvement (Monitor) and other organisations strongly recommend offering follow-up care. However, there is a long history of NHS providers failing to offer this important service. Taking action here will help improve outcomes and improve transparency, hopefully helping tackle a problem NHS audiology has failed to address for several decades. Prioritising this will also help monitor whether practice has changed following NICE guideline recommendation 30 https://www.nice.org.uk/guidance/ng98/evidence/full-guideline-pdf-4852693117	Far too many patients experience poor access to follow-up care once they are fitted with hearing aids. This adversely affects patient outcomes. Gaps in follow-up care is also a longstanding challenge in NHS adult hearing services. Evidence/information to support this: Significantly more people that are offered a follow-up appointment report being very satisfied with their hearings aids than those who are not offered a follow-up appointment, 68% very satisfied compared to 46% (Monitor, 2015, ft.107, p.31). This is not surprising. Despite this and other evidence on the benefits of offering follow-up care, there is evidence that up to 40% of people fitted with NHS hearing aids were not provided with a follow-up appointment in 2015 (Monitor, patient survey pages 55-56) This is a chronic problem in NHS audiology, and although results from various sources are not easy to compare –because different audiences are asked different questions – research shows various studies reporting similar gaps in follow-up care between 1982 and 2015. It is best practice to offer follow-up care after a hearing aid fitting, and this should be standard practice across England given a model hearing care specification since 2012 (updated in 2016) has required this to be provided; and that since 2010 NHS reimbursement has covered follow-up care. Taking action here should improve outcomes and

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
				value for money (see our recommendation on prioritising ongoing use of, and benefit from hearing aids) References: see Endnote

80	HLDA	Improving access to hearing aid aftercare and support.	Follow-up care after a hearing aid fitting is key to securing good outcomes. This is why NICE, NHS England, NHS Improvement (Monitor) and other organisations strongly recommend offering follow-up care. Taking action here will help improve outcomes and improve transparency, hopefully helping tackle a problem NHS audiology has failed to address for several decades. Prioritising this will also help monitor whether practice has changed following NICE guideline recommendation 30 https://www.nice.org.uk/guidance/ng98/evidence/full-guideline-pdf-4852693117 Hearing aids have shown to improve the quality of life and economic prospects as well as reducing loneliness. They also improve mental health by reducing the psychological and social effects associated with hearing loss. Additionally, emerging research has highlighted that the rate of cognitive decline decreases with the use of hearing aids which may	Far too many patients experience poor access to follow-up care once they are fitted with hearing aids. This adversely affects patient outcomes. Gaps in follow-up care is also a longstanding challenge in NHS adult hearing services. Significantly more people that are offered a follow-up appointment report being very satisfied with their hearings aids than those who are not offered a follow-up appointment, 68% very satisfied compared to 46% (Monitor, 2015, ft.107, p.31). This is not surprising. Despite this and other evidence on the benefits of offering follow-up care, there is evidence that up to 40% of people fitted with NHS hearing aids were not provided with a follow-up appointment in 2015 (Monitor, patient survey pages 55-56) It is best practice to offer follow-up care after a hearing aid fitting, and this should be standard practice across England given a model hearing care specification since 2012 (updated in 2016) has required this to be provided; and that since 2010 NHS reimbursement has covered follow-up care. Taking action here should improve outcomes and value for money (see the recommendation on prioritising ongoing use of, and benefit from hearing aids) There are variations in access and quality of services across the country. The Commissioning Framework suggests that follow-up and ongoing support are inconsistently provided across England and people might not always receive information from their

			reduce the risk of developing dementia. To ensure people continue to use and benefit from hearing aids and the risks associated with unsupported hearing loss are minimised, that providers do not skimp on quality and NHS resources are effectively used. In order to provide continued benefit, hearing aids require regular maintenance. They have to be cleaned properly, they often need minor repairs, and the batteries and tubing need to be replaced frequently. Many people need ongoing support to help them with hearing aid maintenance. This is particularly the case for new hearing aid wearers or older people with dexterity or sight problems. In order for individuals to fully benefit from hearing aids and continue to experience an improved quality of life, appropriate aftercare and support should be provided. Follow-up appointments allow audiology providers to check to see how well the person is adjusting to their hearing aid(s), and to give	audiologist about other support and equipment that could help them. The Under Pressure report (2015), which looked at the impact of budget shows that that follow-up and other support after the initial hearing aid fitting has been shown to improve satisfaction with hearing aids and increase hearing aid use. A number of providers who provide face-to-face follow-up told us they work well – one provider said that they "have audited alternatives [to face-to-face follow-up] in the past and found that they led to a reduced quality in service and uptake and use of hearing aids". However, it also showed that due to budget cuts follow up appointments are being reduced. It was also found that only 49% of providers offered face to face follow up appointments to individuals fitted with hearing aids. Well fitted hearing aids, with good follow-up support, are shown to minimise the risks and costs associated with unsupported hearing loss. Non-use rates should be monitored and benchmarked so that the root cause of non-use can be assessed and addressed. People who are fitted with hearing aids and offered the right support will get more out of the their hearing aids. They are also more likely to continue using them, and as a result – other things being equal – the intervention is likely to be more cost-effective for the NHS. There is a longstanding challenge however in the NHS, with people not always getting the right support at the right time (as noted above in the recommendation to improve follow-up care). This can reduce the effectiveness of hearing aids and result in

			additional information or support. British Academy of Audiology guidance (2014) and quality standards in Wales, Scotland and Northern Ireland state that each patient should be given a follow-up appointment within 12 weeks after a hearing aid fitting. Patients have told us that good follow-up appointments are essential, and evidence shows that people need continuing support and training to get the most out of their hearing aids after fitting – even if they do not realise they need extra help. Face-to-face follow-up appointments give audiologists an opportunity to observe the patient's ability to use the hearing aid, as well as to discuss how they are coping and provide guidance or make any alterations that can ensure they continue to wear the hearing aids. RNID Cymru, 2009 found that 66% of people had difficulties using their hearing aid when they first received it. Getting timely, easy-to-access, ongoing support is crucial, since hearing aid users who have difficulty in handling and maintaining their aids often stop using them altogether. As we've outlined above, many older people	non-use. Which is bad for patients, the NHS and taxpayer.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
			have hearing loss alongside other health or mobility problems, so convenience and accessibility are important.	
81	NADP	Follow up appointments should be offered to all patients regardless if they are new or regular users of hearing aid	Follow up appointments are important to analyse the patients hearing journey after fitting with new hearing aid.	Everyone who gets fitted with new hearing aid needs period of adjustment and fine tuning of the HA settings. This will encourage the individual to use their hearing aids more effectively. If the HA has capability of self-adjustment by user after initial setting by audiologist, then it should be offered to those who are confident with the feature. Using the person-centred approach asking the individual what concerns they have with wearing a hearing aid will enhance the hearing aid user's confidence.
82	SCM4	Monitoring and Follow Up of Adults with newly fitted Hearing Aids should be by an Audiologist or suitably trained staff	A significant number of people stop using their hearing aids or use them suboptimally in the first 6 months despite objectively needing them. Follow up between 6 and 12 weeks by an Audiologist to assess person and their use of their hearing aids enables them to ask questions Improving hearing aid support and advice as well as maintenance of hearing aids improves adherence	A follow-up appointment 6–12 weeks after initial hearing aid fitting is current best practice, and is recommended in the NHS England commissioning framework for audiology by AQP There are clinical benefits of increasing the number of people able to use their hearing aids effectively, thereby reducing wastage of money on hearing aids that are not used, or used suboptimally. There is currently no audit of follow up appointments and no penalties if the AQP does not comply with the NHS England commissioning framework.
Information and support				

83	PHE	Connection between hearing loss and social isolation & loneliness. A recent survey by Action on Hearing Loss found that 65% of people with hearing loss said they felt isolated at work and 47% felt lonely. 79% went on to say that their hearing loss made work more stressful. loneliness costs businesses £2.5bn a year through the harm it does to workers or the people they care for. Around half of the people we surveyed said they'd hidden their hearing loss from people at work. Employers should be encouraging employees to disclose their hearing loss, indeed all disabilities – and create the environment and culture that allows this to happen. Employers must also make the small, simple adjustments necessary to accommodate the needs of people with hearing loss. Many of these cost nothing. For example, letting someone move their desk to face colleagues, or making sure meeting rooms		

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
		are well-lit so employees can lip-read. Some adjustments do cost money, such as providing a hearing loop or a listening device such as a Roger Pen – but when these are classified as more than a 'reasonable adjustment', the cost can be met, in full or in part, by the government's Access to Work scheme.		

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
84	DeafPLUS	Access to funded lip-reading and sign language classes, and a range of online information to support deaf adults.	Lip reading classes are not routinely available and when they are participants usually have to pay. Sign language classes are particularly expensive and have limited availability in some areas. Provision of BSL courses should be recognised as a complementary therapy, and as a tool to assist self-expression, extend channels of social inclusion, reduce isolation, reduce mental health issues in deaf adults. Provide more information online for deaf adults, e.g. how their hearing aids work.	Research has shown that individuals who are losing their hearing and have attended lipreading classes have benefited by “reporting positive changes in different areas of their life as a result of the learning from the course. This is in line with deafPLUS outcomes from lipreading classes we have run. Do you Feel more confident that you can cope with everyday tasks and remain independent? - 79% Has attending the course made you feel more empowered less isolated and more confident? 69% Has the information you have received had a positive impact on your life? - 64% Has your quality of life improved due to the courses? - 82% Has the project helped to improve your communication -65% Has the training increased your social contact? - 65%

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
85	ATLA	When prescribing a hearing aid, the audiologist should recommend a Lipreading and Managing Hearing Loss class.	Too many people given hearing aids don't use them. This is in part due to stigma attached to hearing aids. At a class they meet others with similar experiences, and will then be far more inclined to use their aids. They will also learn about all the things that the audiologist will not have time to cover.	Lipreading and Managing Hearing Loss classes combat the social isolation that hearing loss can lead to, they also are a practical way for people to help themselves, but most importantly, the improve confidence, which will have been damaged by realising they are losing their hearing.
86	NADP	Lipreading classes	Patients need to be aware that with lipreading can enhance their listening ability	Visual clues can help hearing aid users in challenging social situations
87	Signature	Improved communication support	Improved access to communication support and understanding in the workplace and education – to include the provision of appropriate communication support (BSL interpreters, Lipspeakers, STTRs)	
88	Signature	Improved access to communication and language strategies	Improved access to communication and language strategies – options for learning BSL, lip-reading classes etc.	

89	AHL	Improving the availability and quality of social care services for people who are deaf or have hearing loss	There is more support available for people with hearing loss than hearing aids. Providers 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. 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. Additionally, 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'* report identified a range	Anecdotally, we have heard that audiologists are not always clear on how and what information to provide people about assistive listening devices or what other support services such as lip reading classes are available locally for people with hearing loss. Evidence from our '*Under Pressure'* report 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, 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. Our '*A World of Silence'* 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. 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 states that *"commissioners should be open to new ideas about how to meet needs and deliver services wherever they come from, including working*

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
			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 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. 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	*closely with other parts of the health and social care system".* According to our Not Just Lip service report (2013), a range of mechanisms should be provided to enable people to effectively adjust to and manage hearing loss. Government should recognise lipreading and managing hearing loss support as vital to complementing interventions such as hearing aids, for people adjusting to and managing hearing loss. As such, lipreading and managing hearing loss support should be seen as an important contribution to re-ablement: the development of skills necessary for longer-term wellbeing. This should include consideration of funding and delivery mechanisms where necessary, including the position that this support has within hearing services, to ensure people with hearing loss are able to access this support as close to diagnosis as possible.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
			hearing loss. One of the key areas is to improve access to high-quality cost-effective assistive hearing technologies and products.	
90	DeafPLUS	Timely and appropriate communication support provided at GPs, Hospitals and ENT: • Appreciation of diversity of hearing loss and support needed. • Tailored support to meet the individual needs of the patient	Effective communication is key when medical and/or social care staff interact with patients. For patients with hearing loss, the lack of appropriate communication support can make visits to the GP, hospital and ENT even more stressful, and they may even delay or avoid visits. There is also a risk of miscommunication which could even be dangerous e.g. where understanding of doctor's instruction re medication is critical. From the NHS perspective, whilst there is a cost, this must be balanced against the time saved by having communication support, and of course the meeting of those patients' needs is an issue of equality, under the Equality Act. Provision of Communication Support is a reasonable adjustment. Reliance on family members is not appropriate as it compromises the patient's confidentiality.	There is good evidence that Hearing loss contributes to difficulties in accessing services that are costly to the health and social care system, through: - reduced communication leading to increased length and number of GP visits - more missed appointments - increased risks of misdiagnosis and mismanagement of other conditions - greater use of hospital and social care services. This is an important area for a Quality standard as it is a matter of judgment for individual practitioners currently. A clear standard would ensure a consistent level of service across the country. It should specify that patients must be asked what their communication needs are at point of booking or referral. Patients who have hearing loss should not be required to telephone as the only means of contacting any department.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
91	SCM2		Each care home to have documented evidence of screening/referrals for hearing loss of all new residents, and an annual onsite review of all care home residents by specialist hearing staff (nursing or audiology) to address any identified hearing loss, ear wax, or hearing aid related issues.	NICE Guidance 1.7.2- make provision for people who have difficulty travelling e.g. people in care homes. NICE quality standard on mental wellbeing in care homes refers to the need for regular hearing tests. Commissioning services… for people with hearing loss pg 68 refers to not excluding domiciliary patients from audiology provision NICE Guidance Pryce and Gooberman Hill 2012 & 2013
92	SCM2		Evidence of an assessment of healthcare & social care environments by local hearing aid users/user groups to accommodate the needs of people with hearing loss.	NICE Guidance 1.7.1 which refers to specific application of other NICE Guidance (patient experience) to people with hearing loss. This should apply to care home environments as well where residents can struggle to hear or engage with staff, activities, and other residents.

93	HLDA	Ensuring audiology services are accessible for people with disabilities and sensory loss	People with hearing loss will have different communication needs and, in addition, some may require information in easy read format or advocacy support. Aside from information in accessible formats, such as Easy Read or advocacy support, people with dementia who are deaf or have hearing loss may need a range of support to communicate well. This could include: • Many people who are deaf or have hearing loss will find it difficult or impossible to use the telephone and may benefit from alternative contact options such as email, Text messages, Next Generation Text Relay (NGTR) or BSL Video Relay Services (VRS) • For face-to-face contact, people with hearing loss may need other people to follow simple communication tips such as speaking clearly and avoid obstructing their lip movements with hand gestures or other objects. People who use hearing aids may benefit from hearing loop systems that make speech clearer by reducing background noise. • Some people who are deaf or have hearing loss will need support from a communication professional	Although all organisations that provide NHS services are legally required to follow the Accessible Information Standard,[1] research shows that often this is not the case. Findings from NHS England's review on the Accessible Information Standard showed that although there was widespread support for the Standard, significant challenges remained in terms of its implementation. For example, more than half (53%) of patients who responded to NHS England's survey said they had not experienced any improvement in getting accessible information or communication support over the last six months. Many people who are deaf or have hearing loss who provided feedback to NHS England as part of their review also said they were still experiencing barriers to communication when accessing health and social care.

			to follow conversations, such as a British Sign Language (BSL) interpreter or Speech-To-Text-Reporter (STTR). • English may not be the first or preferred language of people who are deaf, so information should be written in Plain English. While many people who are deaf can read and write English, some cannot, so services should consider producing BSL videos of key documents or other information and promote these to the Deaf community. • Poor communication may cause considerable stress and anxiety for people who are deaf or have hearing loss and may lead to missed appointments and ineffective care. Improving the accessibility of care settings will also save the NHS money: • NHS England estimates that the cost of people with hearing loss missing appointments – because they didn't hear their name being called in the waiting room – could be as high as £15m every year. • The Ear Foundation estimates that, because of communication difficulties, people with hearing loss	

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
			cost the NHS £76m in extra GP visits every year. SignHealth estimates that missed diagnosis and poor treatment of people who are deaf costs the NHS £30m every year.	
Additional Areas				
Cochlear implants				
94	BAA	Additional developmental areas of emergent practice	New NICE Guidance on referral criteria for Cochlear Implants is expected later this year and awareness of this needs to be increased in audiology services, with the public and with other health professionals to increase referral rates for implants.	Updated guidance should be publicised widely by NHS England to ensure it is effectively transmitted.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
95	BAASQC	Key area for quality improvement 2: Timely referral of adults for implantable devices such as cochlear implants, bone-anchored	Adults with profound hearing loss derive little benefit from conventional hearing aids. Adults with persistent infections and middle ear problems derive little benefit from conventional hearing aids. Audiologists act as 'gate-keepers' for referrals, although often their experience/knowledge in the area of implants is limited. Adults who are suitable for implantable devices should be offered a timely referral to a service that can provide an assessment for a suitable implantable device. (see NICE's technology appraisal guidance on cochlear implants for children and adults with severe to profound deafness and interventional procedures guidance on auditory brain stem implants)	Adults with profound hearing loss have higher levels of anxiety and depression compared to those with milder losses (Carlsson et al., 2015). Carlsson, Hjaldahl, Magnuson, Ternevall, Edén, Skagerstrand & Jönsson (2015) Severe to profound hearing impairment: quality of life, psychosocial consequences and audiological rehabilitation, Disability and Rehabilitation, 37:20, 1849-1856, DOI: 10.3109/09638288.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
96	Cochlear Europe Limited	1. Improved referral pathways and clinical guidelines for hearing implants	Current clinical guidelines, published by NICE, do not adequately address the management of hearing loss beyond the use of hearing aids. To improve patient outcomes, the pathway between existing clinical guidelines and technology appraisal needs to be more clearly defined.	In June 2018 NICE published NG98 titled “Hearing loss in adults assessment and management” and are also currently at the end of reviewing clinical candidacy of TA 166 – “Cochlear implants for children and adults with severe to profound deafness”. At present NG98 takes the clinician / audiologist up to the threshold of hearing aid benefit but fails to direct them to other commissioned interventions such as Bone Anchored Hearing Aids, Middle Ear Implants, and Cochlear Implants which have significantly proven clinical benefit. Currently the standard of care in England for people with more severe hearing loss is still predominantly hearing aids. Clear clinical guidelines and referral pathways for hearing implants will reduce inequalities in access to care by empowering clinicians to make timely referrals.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
97	Cochlear Europe Limited	3. Improved awareness of hearing implants	Hearing aids can make a huge difference to the majority of people, however, in some cases are not the most appropriate management solution. It is important that all healthcare professionals involved in a patients hearing health care (e.g. GPs, audiologists, ENT professionals) are familiar with who, how and where to refer for an implant assessment so as not to delay treatment. Patients and the public should also be empowered to ask their healthcare professional about how hearing implants may benefit them	Hearing aids are a well-established intervention and provide benefit for the large majority of people with hearing loss. However, for those with more severe losses, or who cannot wear conventional hearing aids, hearing implants can be an effective solution with proven health, social and economic benefits. There are an estimated 100,000 people with a profound hearing loss and 360,000 with a severe hearing loss who might benefit from implantation at any one time. Yet an estimated 5% of eligible adults actually receive one. For example cochlear implantation has been proven to significantly improve quality of life and there is compelling data underpinning hearing technology, including hearing aids and implants allowing people with hearing loss to stay socially active, reduce the risk of depression and may even reduce cognitive decline. A single and clear clinical guideline which includes implants (as per key area 1 highlighted in this document) will help to drive awareness but is only one step. Limited time is devoted to hearing implants in audiology training and therefore audiologists don't feel confident referring, determining eligibility, or counselling patients on hearing implants. This is also true for other healthcare professions such as nurses, GPs and ENT professionals.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
98	ENT UK	Awareness of cochlear implantation criteria	The eligibility criteria for cochlear implantation are evolving. Cochlear implants can provide enormous benefit to users. Yet many eligible patients are not being referred through a lack of knowledge and understanding from primary and secondary care providers. Appropriate referrals will change lives.	Improve awareness of eligibility criteria for cochlear implant referral amongst primary and secondary care providers for patients not benefitting from hearing aids.
Data and outcome measures				
99	SCM1	Key area for quality improvement 5	Outcome measures are needed to assess the long-term effects of hearing aids and other clinical audiology interventions. There is an absence of evidence for the long-term effects of clinical interventions for hearing loss. However, it has been suggested that this could be addressed by collating and synthesising outcomes reported at consistent time points following hearing aid fitting.	To ensure that fitting hearing aids and follow-up appointments are beneficial for the person with hearing loss there needs to be a robust way of monitoring and measuring these benefits, and highlighting where further clinical input is required. Recent evidence from a 2018 survey from the British Society of Audiology (as yet unpublished) shows that 70% of participants would be willing to contribute to a national database of outcome measures.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
100	UNINOTTS	Additional developmental areas of emergent practice	Outcome measures are needed to assess the long-term effects of hearing aids and other clinical audiology interventions. There is an absence of evidence for the long-term effects of clinical interventions for hearing loss. However, it has been suggested that this could be addressed by collating and synthesising outcomes reported at consistent time points following hearing aid fitting.	To ensure that fitting hearing aids and follow-up appointments are beneficial for the person with hearing loss there needs to be a robust way of monitoring and measuring these benefits, and highlighting where further clinical input is required.
101	Cochlear Europe Limited	4. Accurate and detailed prevalence data	In order to adequately plan and budget for the future of hearing services in England, a more detailed understanding of the prevalence of hearing loss and the barriers impacting referral and treatment is required.	At present the ONS publish data on the number of people with hearing loss of at least 25 dBHL in each CCG area. These numbers present a large problem but fail to articulate hearing loss of greater severities, 50-70, and > 70 dBHL. They also fail to provide detail on the clinically relevant population within these cohorts, or in other words the actual number of people that should be receiving care. Davis' (1995) report on hearing loss, on which the ONS data is based, was conducted over 23 years ago. Updating this prevalence data will allow care providers to better determine and plan service development. The WHA resolution on hearing loss (2017) highlighted the need to collect high quality population-based data on ear diseases and hearing loss to develop evidence-based strategies and policies.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
102	ENT UK	Central funding for the national audit of otologic surgery	Audit is at the heart of good clinical practice. Yet audit data capture and the use of databases are expensive and not widely utilised in otology.	It is central to the provision of quality health care that surgical outcomes are audited. Centrally funded electronic data capture of surgeries and audiograms will allow national standards to be set and monitored and outliers to be assisted. The British Society of Otology has attempted to develop this but funding has not been forthcoming. Setting a standard that central funding is required may allow this to be implemented.
103	BSA	Key area 2: Improved use and standardisation of patient reported outcome measures (PROMs), to include better pooling of outcome data across trusts, regions and country.	The impact of a hearing impairment on the patient's communication, functioning and activity limitation can be assessed by subjective outcome measures can assess the impact. This is important from an individual patient management planning perspective, but also allows evidence-based service development and evaluation at local, regional and national level. The existence of such large datasets would allow research led enquiry into a number of important issues.	

104	SCOTT	Verification & outcomes	The management of hearing impairment, within a comprehensive management plan, involves more than a simple technical matter of hearing aid fitting. It involves the provision of a systematic approach, supported by evidence, which addresses not only the hearing impairment, but also other related activity limitations and consequent reductions in quality of life (QoL). Subjective outcome measures, in the form of disease-specific questionnaires, can assess the impact of a hearing impairment on the patient's communication, functioning and activity limitation. This can then be used in the evaluation process to measure how effective the IMP has been. IMP's help to record multiple outcomes, such as functional benefit, satisfaction and QoL. Measurement of outcome is required to shape further progression of IMP's. Measurement of outcome is required to obtain feedback (including a progressive evidence base) on the effectiveness and	Audit from across NHS Scotland's Services shows variation. This variation results in different standards of service delivery which should be avoided.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
			benefit associated with the service delivered to the patient group.	
105	WAHSG	Patient Reported Outcome Measurement (PROMS) Individual outcomes should be evaluated and recorded for all patients. These should be directly related to the needs within the IMP, contain information on the extent to which the goals have been met, include a validated quantitative measure, and also be analysed at service level. Areas judged of particular need for improvement under this heading: Use of appropriate PROMS – All patients should complete patient reported outcome measures that have been validated and identified as appropriate for audiology services.	Rationale from Quality Standards for Hearing Rehabilitation: Subjective outcome measures, in the form of disease-specific questionnaires, can assess the impact of a hearing impairment on the patient's communication, functioning and activity limitation. This can then be used in the evaluation process to measure how effective the IMP has been. IMPs help to record multiple outcomes, such as functional benefit, satisfaction and Quality f Life (QoL). Measurement of outcome is required to shape further progression of IMPs. Measurement of outcome is required to obtain feedback (including a progressive evidence base) on the effectiveness and benefit associated with the service delivered to the patient group.	Basis of identifying areas in need of improvement: NHS Audiology Services in Wales are required to participate in and be externally audited against Quality Standards for Hearing Rehabilitation Services. These standards are evidenced based and have been developed in association with third sector organisations representing service users. The standards were initially developed collaboratively with NHS Scotland. They cover all elements of the patient pathway. Most significantly, the regular national audit of services over several years has provided insight into areas of service delivery in need of improvement that can usefully inform this NICE engagement exercise. Use of patient reported outcome measures is currently poor or varied and not universally implemented across the UK. Guidance developed by the BSA promotes uptake and good practice with respect to use of PROMS. This provides: i) a significant opportunity to improve individual patient care and ii) an opportunity to appraise and improve service efficacy /value for money at a service level. There is a need for recognition, endorsement and promotion of measures appropriate for audiology services such that they are used routinely and robustly across all services.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
106	NIHRNOTTS	Collection of comparable routine data on outcomes across services and sharing of routine data	Outcome measures are needed to assess the long-term effects of hearing aids and other clinical audiology interventions. There is an absence of evidence for the long-term effects of clinical interventions for hearing loss. However, it has been suggested that this could be addressed by collating and synthesising outcomes reported at consistent time points following hearing aid fitting.	To ensure that fitting hearing aids and follow-up appointments are beneficial for the person with hearing loss there needs to be a robust way of monitoring and measuring these benefits, and highlighting where further clinical input is required. Recent evidence from a 2018 survey from the British Society of Audiology (as yet unpublished) shows that 70% of participants would be willing to contribute to a national database of outcome measures.
107	UNINOTTS	Additional developmental areas of emergent practice	Outcome measures are needed to assess the long-term effects of hearing aids and other clinical audiology interventions. There is an absence of evidence for the long-term effects of clinical interventions for hearing loss. However, it has been suggested that this could be addressed by collating and synthesising outcomes reported at consistent time points following hearing aid fitting.	To ensure that fitting hearing aids and follow-up appointments are beneficial for the person with hearing loss there needs to be a robust way of monitoring and measuring these benefits, and highlighting where further clinical input is required.
108	NADP	Data Logging	The patient consent must be obtained. All current HA and CI users should be informed about data logging.	This needs urgent review considering implementation of GDPR and guidelines must be developed urgently.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
Hearing aid use and dementia incidence				
109	SCM3	Additional developmental areas of emergent practice Testing the hearing of people in whom dementia or mild cognitive impairment is suspected or diagnosed as part of the initial assessment	There is a growing body of evidence linking hearing loss and dementia. Hearing loss can cause similar symptoms to early dementia and can affect the tests performed for dementia. Hearing aids in people with hearing loss and dementia can allow them better access to aural communication and reduce confusion.	This is not yet fully recognised as an important area but the evidence is accruing to support hearing tests and early management in this particular population as good medical practice.
National screening programmes and public health campaigns				
110	SCM4	Proactively target at risk and hard to reach groups such as people with Severe and Enduring Mental Health Learning Disability Patients entering Nursing Homes Patients with Dementia	These patient groups are not currently proactively screened but have an above average prevalence of hearing impairment. This makes them more vulnerable to social isolation.	Comply with the Equality Act 2010 Reduce inequality Reduce unwarranted variation in access These patients are sometimes vulnerable and unable to act on their own behalf

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
111	Cochlear Europe Limited	2. Development of a national adult screening program for hearing loss	The WHO approximate that one third of people over 65 years of age are affected by disabling hearing loss (defined for adults as hearing loss greater than 40 decibels (dB) in the better hearing ear). Within the UK alone, there are an estimated 5.3 million adults over the age of 65 with hearing loss. The Action Plan on Hearing Loss for England recognises that adult onset hearing loss is among the top ten disabilities in terms of years lived with disability. The cost-effectiveness of interventions such as hearing aids and cochlear implants have been clearly demonstrated, however, they are under-utilised. For example, it is estimated that < 5% of adults eligible for cochlear implantation actually receive one.	The new-born screening program (NHSP) has been hugely successful in the UK with 98.9% of babies tested, and receiving appropriate care and management for their hearing loss as result. This is thanks to a well organised national program and dedication from local screening and audiology services. However, a similar programme for identifying adult onset hearing loss has not been established. Unaddressed hearing loss is associated with increased burden and costs for the health service and has been linked with other conditions such as cognitive decline and depression. Livingston et al (2017) have recently shown that mid-life hearing loss may account for up to 9.1% of preventable dementia cases world-wide and is potentially a modifiable risk factor. The World Health Assembly Resolution on the Prevention of deafness and hearing loss (2017) identified the need to implement screening programmes for early identification of hearing loss in high-risk populations, including older adults.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
112	BSHAA	Public healthy campaigns	public health campaign to raise awareness, promote the importance of hearing care as a key contributor to healthy and productive ageing, remove the perceived barriers to take-up, challenge the many false myths surrounding attitudes to hearing instruments and their success at improving quality of life;	
113	Signature	Reducing the stigma	Reducing the stigma related to having a hearing loss.	
Patient awareness and information				
114	NADP	Copies of audiogram should be given to all patients	Patients should be given information about their hearing loss over a period. It is also proof of evidence of their disability.	Patients should have access to their own health record as well as keeping their own copy which helps when obtaining assistive listening device
115	NADP	Earmolds management	Patients need to be aware that their moulds need to be updated regularly	A lot of hearing aid users are not aware that their earmolds and plastic tubes needs to be changed regularly
Service improvements				

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
116	SCM4	Test patients for Speech Discrimination if hearing impairment is diagnosed on pure tone audiogram (PTA)	The speech discrimination test will identify those patients who will benefit most from hearing aids and those that almost certainly will not.	Hearing loss is the result of damaged hearing hair cells in the cochlear part of the inner ear. As a result, a person with a hearing loss needs more volume in order to hear the sounds that people with normal hearing can hear. In contrast, speech discrimination is a measure of how well a person understands what they hear when speech is loud enough to hear comfortably. Audiologists measure speech discrimination in percent. A speech discrimination score of 100% meaning a patient understands everything they hear. At the other end of the spectrum, 0% speech discrimination means they don't understand a single word that is spoken, no matter how loud it is. If a patient has a hearing loss and their speech discrimination is good (80% or higher), typically hearing aids are very useful. However, if their speech discrimination is poor (below 40%), hearing aids will just make the "unintelligible noise" louder and the patient will stop using hearing aids as they make the hearing impairment worse; in the latter case therefore they are not cost effective. Those with moderate speech discrimination benefit from their hearing aids being set at a louder volume.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
117	BAA	Access to MRI services direct from audiology	People assessed by Audiology who have an asymmetrical hearing loss detected in most services must currently be referred back to GP who should refer for MRI or to ENT services for imaging of the auditory canal. This adds delay and unnecessary stress to the pathway as well as cost.	Examples of audiology services referring directly for MRI scanning exist in some services, such as South End NHS Trust but protocols are not nationally accepted.
118	BSHAA	Access	widen access to the proven benefits of direct referral into audiology services to reduce unnecessary burden on GPs in primary care, and reduce the barriers faced by those seeking help with hearing;	
119	BSA	Key area 1: Improve equality of access to hearing assessment and hearing aid services through the use of individual self-referral (rather than via GP referral)	Evidence suggests that reliance on GP referral restricts access to early referral for hearing assessment. Patients with hearing loss are not “ill” and referral within medical model approach is likely to reduce access. Well-known evidence also suggests early assessment of hearing and appropriate intervention reduces many issues associated with social isolation and other health issues such as Dementia.	

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
120	RCGP	Key area for quality improvement 2 Patients can directly access NHS audiology services and have an annual ear check over people over 65 years	There is good evidence that early provision of hearing aids improves quality of life, reduces isolation, improves safety, and is associated with a lower incidence of dementia. The NICE guideline confirms early provision is more cost effective.	There is evidence that people with hearing loss wait on average 10 years before accepting treatment. Between 27-54% of newly diagnosed patients say they had been deterred from seeking treatment by their GP or other health professional.

121	WAHSG	Key area for quality improvement No1 <u>Access</u> Direct access to Audiology should be available for new patients (referral direct from primary care), and either direct access, self-referral (no referral needed) or open access (no appointment needed) to Audiology should be available for existing patients. *Areas judged of particular need for improvement under this heading:* Cerumen management - To ensure effective Audiology care, agreed multidisciplinary local ear care/cerumen (earwax) management procedures should be in place. Access to volunteer peer support – In order to effectively support acceptance of hearing loss and promote hearing aid self-management, volunteer	Rationale re. Access from Quality Standards for Hearing Rehabilitation: Direct access to Audiology services is a more effective and efficient way of meeting patients' clinical needs where there is no robust evidence of otological pathology. Simple equity implies that patients who have previously accessed an Audiology service must be able to re-access it via self referral. Prompt access for existing hearing aid patients to a basic repair service, replacement batteries, and onward referral as necessary is required to help maintain long term use and benefit. Rationale re. cerumen: Cerumen (Ear wax) is a very common cause of hearing loss and relatively easy to address. Rationale re. volunteer peer support: Key to successful audiological rehabilitation is acceptance and understanding of the condition and self-management of any intervention, which may be accessed through peer support.	Basis of identifying areas in need of improvement: NHS Audiology Services in Wales are required to participate in and be externally audited against Quality Standards for Hearing Rehabilitation Services. These standards are evidenced based and have been developed in association with third sector organisations representing service users. The standards were initially developed collaboratively with NHS Scotland. They cover all elements of the patient pathway. Most significantly, the regular national audit of services over several years has provided insight into areas of service delivery in need of improvement that can usefully inform this NICE engagement exercise. Access is currently variable across the UK, despite commissioning guidelines in place in England and quality standards in place in Scotland and Wales. In particular there is variability in provision and uncertainty over delivery affecting ready access to wax (cerumen) removal services. In some areas there is no signposting to NHS provision leading to inequity of access. This is regarded as a key area for improvement. There are large numbers of complaints received by service user organisations (e.g. Community Health Councils in Wales and third sector organisations) reporting poor access to NHS cerumen management. New cerumen management pathways are being developed (e.g. through a Welsh Government task and finish group). UK guidance is required to support implementation into practice and wider adoption. Audiology hearing aid patients are well placed to benefit from peer volunteer support on a widespread

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
		peer support should be available.		basis across the UK. Where volunteer support is available, national audits have shown that access and provision is patchy, but there is evidence of good service models which could be more widely adopted, offering potential for significant improvement in outcomes for patients across the UK. Where volunteer schemes work well, it is evident that there is very close working with audiology services, including in-house schemes. There is Welsh Government guidance available for use of audiology hearing aid support volunteers, which could help guide such improvement. See attached document.

122	WAHSG	Key area for quality improvement No4 <u>Integrated service delivery</u> Each Audiology service has in place processes and structures to ensure effective collaborative working. Collaborations appropriate to patient and service needs should be identified and established and may be with internal and external agencies and services. *Areas judged of particular need for improvement under this heading:* Integrated services – Services should work in an integrated way, considering the wider needs of the patient.	Rationale from Quality Standards for Hearing Rehabilitation: Understanding the collaborations required to deliver an effective, joined up service will improve service user experience and outcomes. Having awareness of and appropriate links to specialist Audiological services, other health services, Social Services, peer and voluntary sector support is more likely to result in the hearing, communication and additional health needs of patients being met. Planning and coordinating services in collaboration with other relevant partners (including service users and their significant others) is more likely to result in services that better address the needs of hearing impaired patients. Hearing related assistive technology can be used alongside or in some cases instead of hearing aids to support effective communication and in meeting individual needs. Rationale from Framework for Action: People who are D/deaf or living with hearing loss will have available to them integrated health and social care services to support	Integration of services is currently variable across the UK. Historically provision of service to meet the needs of patients have been through discrete organisation, or services within organisations, i.e. not in holistic or joined up way. It is increasingly recognised that all health needs, but particularly hearing, have across health and social impact and should be addressed in a more integrated and holistic way (see Welsh Framework of Action). At the level of the individual patient, individual services are judged not to be working collaboratively to meet their needs through signposting, cross-referral and joint working. Audit against quality standards has shown improvement in this over several years in Wales and has been seen to benefit from that joint working where it exists. Likewise, at a service level it is judged that there is scope for improvement for inter-agency working (e.g. health, social services and third sector) and intra-agency (e.g. audiology, ENT and memory services). There are few integrated services and evidence of insufficient referral and joint working between services. Typically pathways are not multiagency and may be specific to only one service, e.g. hearing aid assessment and fitting. There is less evidence of multiagency pathways to meet wider rehabilitation needs relating to hearing. Examples of good practice exist but are not widespread. People living with dementia and hearing loss would particularly benefit from this approach, and this will be a growing need, with services such and audiology and

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
			their needs, to live independent lives and support to enable well-being.	memory services needing to work in partnership along with social care settings and agencies. Improvement would be achieved if there were multi-agency integrated pathways and collaboration at a planning level.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
123	SCOTT	Integrated Care/Signposting/collaboration	Understanding the collaborations required to deliver an effective, joined up service will improve service user experience and outcomes [123][124][125][126][127][128][129][130][131]. Having awareness of and appropriate links to specialist Audiological services, other health services, Social Services, peer and voluntary sector support is more likely to result in the hearing, communication and additional health needs of patients being met [30][90][132][133][134][135][136]. Planning and coordinating services in collaboration with other relevant partners (including service users and their significant others) is more likely to result in services that better address the needs of hearing impaired patients [137][138][139][140][141].	Audit from across NHS Scotland's Services shows variation. This variation results in different standards of service delivery which should be avoided.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
124	RCGP	Key area for quality improvement 4 Audiologist can refer directly to specialist ENT as ophthalmology services can to avoid delay	At present most audiologists sends the patient back to the GP. There is often a lack of information about the findings and the reason(s)for onward referral	Reduce delays in referrals
125	DeafPLUS	Speedy access to ENT and Audiology	Most people acquiring hearing loss later in life, delay seeking help as the loss is gradual so it isn't immediately noticeable. Those with a severe to profound hearing loss have lived with their symptoms for, on average,10 years before being referred for the most appropriate treatment. When they do consult primary care there is considerable variation in onward referral	This is a very basic requirement for timely access to health services. Waiting times vary wildly across the country for initial assessment and then for provision of hearing aids. This causes stress, can impact on work, family relationships and mental health. Knowing the timescale, and it being measured in weeks rather than months or years would significantly help people who have finally decided they need help.
126	BAA	Increase in open access to Audiology services for adults without a G.P. referral.	There is evidence that G.P.s restrict access to early referral for hearing loss assessment. Early assessment and fitting of hearing systems is shown to reduce many issues associated with social isolation and other health issues such as rate of Dementia.	Only one truly open access NHS audiology service exists in England. Evidence that formed the commissioning guidance for hearing loss showed this single service as an example of good commissioning.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
127	DeafPLUS	Joined up care with other health departments/signposting to community services	There is good evidence that Hearing loss “can reduce chances of employment, restrict aspirations and life chances, increase the risk of mental health problems and interfere with peoples’ ability to care for their own and their families’ long term health conditions (5). This can lead to low achievement, low self-esteem, isolation, loneliness and depression.” (Action Plan on Hearing loss – NHS England 2015)	Hearing loss does not exist in isolation and it is essential that at the earliest opportunity the patient’s overall health and well-being is assessed and relevant support offered. Charities like deafPLUS and other local services offer holistic care and ongoing support. Referrals and signposting should be made at the earliest opportunity.

128	WAHSG	Key area for quality improvement No4 Integrated service delivery Each Audiology service has in place processes and structures to ensure effective collaborative working. Collaborations appropriate to patient and service needs should be identified and established and may be with internal and external agencies and services. Areas judged of particular need for improvement under this heading: Integrated services – Services should work in an integrated way, considering the wider needs of the patient.	Rationale from Quality Standards for Hearing Rehabilitation: Understanding the collaborations required to deliver an effective, joined up service will improve service user experience and outcomes. Having awareness of and appropriate links to specialist Audiological services, other health services, Social Services, peer and voluntary sector support is more likely to result in the hearing, communication and additional health needs of patients being met. Planning and coordinating services in collaboration with other relevant partners (including service users and their significant others) is more likely to result in services that better address the needs of hearing impaired patients. Hearing related assistive technology can be used alongside or in some cases instead of hearing aids to support effective communication and in meeting individual needs. Rationale from Framework for Action: People who are D/deaf or living with hearing loss will have available to them integrated health and social care services to support	Integration of services is currently variable across the UK. Historically provision of service to meet the needs of patients have been through discrete organisation, or services within organisations, i.e. not in holistic or joined up way. It is increasingly recognised that all health needs, but particularly hearing, have across health and social impact and should be addressed in a more integrated and holistic way (see Welsh Framework of Action). At the level of the individual patient, individual services are judged not to be working collaboratively to meet their needs through signposting, cross-referral and joint working. Audit against quality standards has shown improvement in this over several years in Wales and has been seen to benefit from that joint working where it exists. Likewise, at a service level it is judged that there is scope for improvement for inter-agency working (e.g. health, social services and third sector) and intra-agency (e.g. audiology, ENT and memory services). There are few integrated services and evidence of insufficient referral and joint working between services. Typically pathways are not multiagency and may be specific to only one service, e.g. hearing aid assessment and fitting. There is less evidence of multiagency pathways to meet wider rehabilitation needs relating to hearing. Examples of good practice exist but are not widespread. People living with dementia and hearing loss would particularly benefit from this approach, and this will be a growing need, with services such and audiology and memory services needing to work in partnership along

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
			their needs, to live independent lives and support to enable well-being.	with social care settings and agencies. Improvement would be achieved if there were multi-agency integrated pathways and collaboration at a planning level.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
129	Cochlear Europe Limited	5. Service development and enhancement	Ensuring that there is adequate infrastructure and funding in place to treat the population in a timely manner.	The Action Plan on Hearing Loss , published by DoH states: ..and NHS England in 2015, made clear that there should be 'timely access to specialist services when required, including assessment for cochlear implants As hearing loss in itself isn't a life threatening illness, it becomes deprioritised by the health service. We have an aging population and by 2035 over 13 million people in England (1 in 5) will have hearing loss. To adequately address this problem broader understanding and service improvement will be required to meet demands.
130	BSHAA	Integration of the approaches to private and NHS provision of hearing instruments	To allow clients/patients to move seamlessly between providers, including provision for private purchase of "top-up" services over the basic NHS provision, as is readily available in eye-care	

131	PHE	Environmental protection	From an environmental perspective, for the majority of residential settings, noise from transport (road/rail/air) is not deemed to be a risk factor to permanent hearing loss For occupational settings, there is legislation in force. The Control of Noise at Work Regulations 2005 (Noise Regulations 2005) require employers to prevent or reduce risks to health and safety from exposure to noise at work. The Health and Safety Executive is responsible for enforcing this, and they have produced plenty of guidance. Recently there has been increased awareness/concern about non-workers voluntarily spending time in places with high levels of sound/noise - nightclubs, pubs and fitness classes; live sporting events; concerts or live music venues. The WHO Regional Office for Europe has just published guidelines for these situations (classified as leisure noise). Earlier this year there was also media coverage of one study looking at noise exposure in the London Underground. According to the HSE website “The [Control of	

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
			Noise at Work] Regulations do not apply to members of the public exposed to noise from their non-work activities, or making an informed choice to go to noisy places". However according to the Health and Safety at Work Act (HSWA) and its related Regulations, an occupier, the person who is in occupation, or has control of the premises owes a duty of care to all their visitors, to ensure, as far as is reasonably practicable, that in the course of their activities persons who are not their employees are not put at risk. There is also increased awareness/concern about (mostly young) people listening to loud music for long periods of time through their personal listening devices. The WHO has an active work programme on this, called Make Listening Safe. There are also national campaigns run by the charities Noise Abatement Society and Action on Hearing Loss.	

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
132	BSHAA	Single statutory regulation process	Move all hearing care professionals to a single statutory regulation process to avoid confusion and unnecessary/ unhelpful barriers to seamless care.	
Staff training				
133	SCM3	Key area for quality improvement 1 For every member of staff involved in patient contact or care in health and social care settings to have training in communication with people with hearing loss and to ensure that training is put into practice	People with hearing loss have hearing needs that are often ignored in current clinical and care environments yet simple measures such as reducing extraneous noise, speaking to the person face to face and ensuring the person with hearing loss has use of the devices they need to help them ie hearing aids or assistive listening devices can make a significant difference in their ability to access proper care, to understand others and gain pleasure from their social interactions.	There is good evidence that clinic and care home environments are too noisy making it difficult for those with hearing loss to hear what is said to them. People with hearing loss miss their appointments and mishear during appointments because of this. We also know that staff do not take the effort to ensure people with hearing loss have heard. By raising awareness of the specific needs of those with hearing difficulties we can improve their care and their ability to communicate and participate. This will also improve the mental health of those with hearing loss. Knowledge underlies change in practice.
134	ENT UK	All medical staff assessing patients with hearing loss should have access to and be able to interpret tuning fork tests	Management of patients with sensorineural and conductive hearing loss is very different. Especially so when acute hearing loss occurs. For primary or emergency care doctors being able to distinguish is critical for correct management.	Many primary care doctors neither have access to tuning forks nor necessarily can interpret them. They are a cheap and simple resource all doctors managing hearing loss should be familiar with. This is an easy step to improve diagnosis and appropriate referral.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
135	ATLA		All NHS staff who come into contact with people with hearing loss need to have deaf awareness training	It is scary losing your hearing. I can't tell you how many times I hear about a patient not hearing their name called, or the doctor looking at a computer screen while speaking, not at them. It makes the whole process so much more difficult.
136	RCGP	Key area for quality improvement 1 GP practices meet accessible information standards, record reasonable adjustments and are able to assess and appropriately refer people with hearing loss	All GP clinical and administrative personnel, including temporary and new personnel, should be instructed to take note of the support needs of the patient (as indicated by a systematic identification system and single page profile) and to make reasonable adjustments in their methods and tone of communication to help improve two-way understanding. The guideline (NG98) focuses on causes of hearing loss that require specialist attention. But in primary care most patients presenting with hearing loss have simple conditions: acute infections, impacted wax, or sensorineural deafness of old age. None of these conditions require the attention of ENT specialists	For GPs a test of quality could be that most of the patients presenting with hearing loss are not referred to specialist ENT services but have

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
137	BAAP	Every member of staff involved in patient contact or care in health and social care settings must have training in communication with people with hearing loss. There should be safeguards to ensure that training is put into practice	People with hearing loss have hearing needs that are often ignored in current clinical and care environments yet simple measures such as reducing extraneous noise, speaking to the person face to face and ensuring the person with hearing loss has use of the devices they need to help them ie hearing aids or assistive listening devices can make a significant difference in their ability to access proper care, to understand others and gain pleasure from their social interactions.	There is good evidence that clinic and care home environments are too noisy making it difficult for those with hearing loss to hear what is said to them. People with hearing loss miss their appointments and mishear during appointments because of this. We also know that staff do not take the effort to ensure people with hearing loss have heard. By raising awareness of the specific needs of those with hearing difficulties we can improve their care and their ability to communicate and participate. This will also improve the mental health of those with hearing loss.
138	ATLA	Additional developmental areas of emergent practice	Hearing loss affects so many areas of the persons life, all NHS trusts need to emphasise its importance, and make sure all staff are aware of some simple rules, like getting the persons attention before speaking, and making sure they have been understood.	

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
139	deafPLUS	Mandatory deaf awareness training for all staff. For all employers providing health services. Including training on appropriate language, see examples	The concept of hearing loss as a negative pervades the language used in health care and other settings. The following applies to both children and adults. Assessment of hearing loss The language used by medical workers is routinely in breach of the NHS equalities policy. For example -Babies are labelled as having a hearing 'problem' and parents are traumatised by being told their baby / young child has 'failed' the hearing test. This language treats disabled people as inferior to non-disabled. For children and adults, compare the language used with that used when someone has a sight test. There is no stigma to having sight loss or needing stronger lenses. Deaf and hard of hearing adults commonly say 'sorry' when they can't hear something, so ingrained is the idea of fault. Rather the speaker should ask themselves how can I better make myself understood?	Hearing loss is both a health issue and an equalities issue. Currently access to health care is adversely impacted by the lack of support for people with hearing loss. Quality standards should include both specific health care responses to hearing loss itself, and ensuring that patients with hearing loss receive appropriate support whatever health care setting they are engaging with. For example a family with hearing loss in Maternity. A resident of a care home who has hearing loss. A doctor or nurse who has hearing loss. A relative of a patient who has hearing loss and needs to communicate with medical staff.

ID	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?
140	Signature	Awareness and training information	Improved provision of deaf awareness and training information for organisations and education.	
141	Signature	Staff training	Improved deaf awareness training to support staff – audiologists, department staff etc.	
142	NADP	All audiology staff need to be trained in deaf awareness	Deaf and hard of hearing individuals need audiology staff acting in respectful and understanding manner while interacting with HA users	Lack of effective communication between audiology staff and users is a serious issue which needs to be addressed.