NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Guideline scope

Hearing loss (adult onset): assessment and management

Topic

The Department of Health in England has asked NICE to produce a guideline on the assessment and management of adult-onset hearing loss.

This guideline will also be used to develop the NICE quality standard for hearing loss (adult onset).

For more information about why this guideline is being developed, and how the guideline will fit into current practice, see the context section.

Who the guideline is for

- Healthcare professionals in primary, secondary and tertiary care
- Social care professionals
- People using services, families and carers and the public.

NICE guidelines cover health and care in England. Decisions on how they apply in other UK countries are made by ministers in the Welsh Government, Scottish Government, and Northern Ireland Executive.

Equality considerations

NICE has carried out an equality impact assessment during scoping. The assessment:

- lists equality issues identified, and how they have been addressed
- explains why any groups are excluded from the scope.

The guideline will look at inequalities relating to disability.

26 # 1 What the guideline is about

27 ## *1.1 Who is the focus?*

28 **Groups that will be covered**

29 - Adults (aged 18 years and older) with hearing loss, including those with
30 onset before the age of 18 but presenting in adulthood.
31 - Special consideration will be given to:
32 - young adults (aged 18–25)
33 - people with unilateral hearing loss
34 - people with speech and language difficulties.

35 **Groups that will not be covered**

36 - Adults who presented with hearing loss before the age of 18.

37 ## *1.2 Settings*

38 **Settings that will be covered**

39 - Primary, secondary and tertiary care.
40 - Community settings (including care homes and domiciliary care) where
41 NHS-commissioned care is provided.

42 ## *1.3 Activities, services or aspects of care*

43 We will look at evidence on the areas listed below when developing the
44 guideline, but it may not be possible to make recommendations on all the
45 areas.

46 **Key areas that will be covered**

47 - Initial assessment.
48 - Appropriate referral to specialist care.
49 - Assessment in audiology (community or secondary care settings) and
50 secondary medical care.
51 - Management of hearing loss.

52 **Areas that will not be covered**

53 - Tinnitus (without hearing loss).
54 - Vertigo (without hearing loss).
55 - Acute temporary hearing loss caused by traumatic head injuries, for
56 example perforated tympanic membranes or middle ear effusions.
57 - Management of disease processes underlying hearing loss.
58 - Surgical management of hearing loss.

59 ## *1.4 Economic aspects*

60 We will take economic aspects into account when making recommendations.
61 We will develop an economic plan that states for each review question (or key
62 area in the scope) whether economic considerations are relevant, and if so
63 whether this is an area that should be prioritised for economic modelling and
64 analysis. We will review the economic evidence and carry out economic
65 analyses, using an NHS and personal social services (PSS) perspective, as
66 appropriate.

67 ## *1.5 Key issues and questions*

68 While writing this scope, we have identified the following key issues, and key
69 questions related to them:

70 1 Initial assessment
71 1.1 What audiological assessments in addition to clinical history and
72 examination should be carried out in primary care?
73 1.2 Which causes of hearing loss can be identified and treated in primary
74 care?
75 1.3 What are the signs and symptoms that allow early recognition of
76 hearing loss needing urgent referral to a specialist?
77 1.4 How can hearing loss be identified in people with mild cognitive
78 impairment or dementia?
79 2 Appropriate referral to specialist care
80 2.1 Who should be referred directly to audiology from primary care?
81 2.2 Who should be referred to audiovestibular medicine or ear, nose and
82 throat (ENT) for medical assessment?

83 3 Assessment in audiology (community or secondary care settings) and
84 secondary medical care
85 3.1 How should hearing and communication needs be assessed? For
86 example, history, examination, pure tone audiometry, tympanometry,
87 speech and hearing in noise, patient-reported quality of life, needs and
88 goal-setting (individual management plans).
89 3.2 Which tests and investigations should be used in medical services to
90 assess the underlying cause of hearing loss?
91 3.3 Which investigations should be used to determine the cause of
92 sudden-onset sensorineural hearing loss?
93 4 Management of hearing loss
94 4.1 What tools (for example, patient-centred decision aids) help people
95 with hearing loss choose between different management strategies,
96 including: hearing tactics, lip reading, hearing aids, assistive listening
97 devices, communication training, counselling?
98 4.2 What are the information, support and advice needs of people with
99 hearing loss and their families and carers?
100 4.3 What is the effectiveness and cost effectiveness of 1 hearing aid
101 compared with 2?
102 4.4 What is the most clinically and cost effective treatment for idiopathic
103 sudden-onset sensorineural hearing loss?
104 4.5 How and when should people with hearing loss using prescribed
105 hearing aids be monitored and followed up?
106 4.6 What is the clinical and cost effectiveness of different types of
107 hearing aid microphones and digital noise reduction technologies?
108 4.7 What is the clinical and cost effectiveness of intervention methods
109 and their impact on continuing appropriate use of devices?

110 The key questions may be used to develop more detailed review questions,
111 which guide the systematic review of the literature.

112

1.6 Main outcomes

The main outcomes that will be considered when searching for and assessing the evidence are:

1. Health-related quality of life.
2. Positive predictive value of signs and symptoms.
3. Diagnostic accuracy of tests.
4. Adverse events.
5. Appropriate use of hearing aids.
6. Glasgow hearing aid benefit profile.

2 Links with other NICE guidance, NICE quality standards, and NICE Pathways

2.1 NICE guidance

NICE guidance that will be incorporated unchanged in this guideline

Cochlear implants for children and adults with severe to profound deafness (2009) NICE technology appraisal guidance TA166

Auditory brain stem implants (2005) NICE interventional procedure IP108

NICE guidance about the experience of people using NHS services

NICE has produced the following guidance on the experience of people using the NHS. This guideline will not include additional recommendations on these topics unless there are specific issues related to hearing loss:

- Patient experience in adult NHS services (2012) NICE guideline CG138
- Service user experience in adult mental health (2011) NICE guideline CG136
- Medicines adherence (2009) NICE guideline CG76

NICE guidance in development that is closely related to this guideline

NICE is currently developing the following guidance that is closely related to this guideline:

140 • Diagnostic services NICE guideline. Publication expected November 2017.

141 ## *2.2 NICE quality standards*

142 **NICE quality standards that may use this guideline as an evidence**
143 **source when they are being developed**

144 • Hearing loss NICE quality standard. Publication date to be confirmed

145 ## *2.3 NICE Pathways*

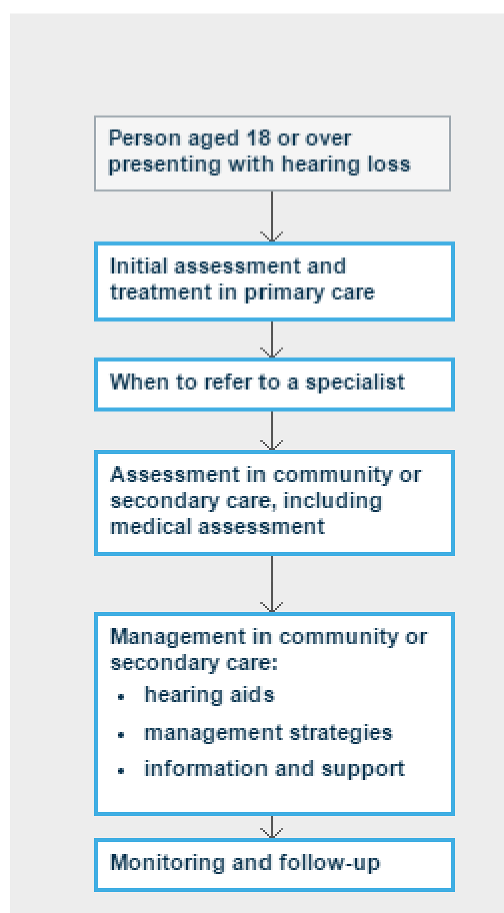
146 NICE Pathways bring together all NICE guidance and associated products on
147 a topic in an interactive flow chart.

148 When this guideline is published, the recommendations will be incorporated
149 into a new pathway on hearing loss. Other relevant guidance will also be
150 added to the pathway, including:

151 Cochlear implants for children and adults with severe to profound deafness
152 (2009) NICE technology appraisal guidance TA166

153 Auditory brain stem implants (2005) NICE interventional procedure IPG108

154 An outline of the new pathway, based on the scope, is included below. It will
155 be adapted and more detail added as the recommendations are written during
156 guideline development.



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158 # 3 Context

159 ## *3.1 Key facts and figures*

160 Hearing loss is a major health issue that affects over 11 million people in the
161 UK. It is estimated that, by 2035, there will be more than 15.6 million people
162 with hearing loss in the UK – a fifth of the population. According to the World
163 Health Organization (WHO), by 2030 hearing loss will be in the top 10 disease
164 burdens in the UK, above diabetes and cataracts.

165 It is estimated that, in 2013, the UK economy lost more than £24.8 billion in
166 potential output because people with hearing loss were unable to work.
167 Research shows that hearing loss doubles the risk of developing depression
168 and increases the risk of anxiety and other mental health issues, and it is
169 thought that hearing aids may reduce these risks. There is also evidence that

170 people with hearing loss have a higher risk of dementia: this risk is 3 times
171 higher in moderate hearing loss and 5 times higher in severe hearing loss.

172 On average there is a 10-year delay in people seeking help for their hearing
173 loss, and 45% of people who do report hearing loss to their GP are not
174 referred to NHS hearing services.

175 In 2015, NHS England developed the Action plan on hearing loss to produce
176 and enforce national commissioning guidance, aiming to ensure that
177 consistent, high-quality services are available, and to intervene if services do
178 not improve.

179 *3.2 Current practice*

180 The investigation and management pathways for people with hearing loss
181 vary, and many people face delays in treatment and inappropriate
182 management. The main referral pathway for an adult with hearing loss who
183 meets the national ‘direct referral’ criteria set out by the British Academy of
184 Audiology is direct from GP to audiology services. For those who do not meet
185 these criteria, referral is directly to ENT or audiovestibular medicine.

186 Difficulties in hearing can arise from simple problems, such as occlusive ear
187 wax which can be treated in primary care, through to potentially life-
188 threatening conditions, such as autoimmune disease which needs specialist
189 medical care. Currently in primary care, the identification of treatable causes
190 of hearing loss such as occlusive ear wax and infections is not robust, leading
191 to some people waiting a long time to see a specialist when they could have
192 been treated successfully in primary care.

193 Assessment includes history taking, otoscopy, pure tone audiometry and
194 tympanometry. It may also include clinic-based assessment of ability to
195 understand speech in a noisy environment, and self-report measures related
196 to disability.

197 Audiology services are provided in a number of NHS settings. In some parts
198 of England this is through the ‘any qualified provider’ (AQP) scheme, which

199 means people have a choice of service providers ranging from traditional
200 audiology services to new high street providers.

201 Management pathways vary locally once hearing loss is identified. In general,
202 if hearing aids are recommended, people are offered 1 for each ear unless
203 there are reasons that this is inappropriate. However, in some areas people
204 are not offered NHS hearing aids when they might conceivably benefit, while
205 others are offered 1 hearing aid when they need 2, or given 2 when they have
206 difficulty maintaining the use of 1. Some people are given hearing aids when
207 strategies to improve hearing and listening would be more useful. In many
208 cases hearing aids are tried but discontinued because the person has not had
209 the support they need to use them.

210 These variations on assessment and management pathways for hearing loss
211 can have a major impact, adversely affecting people's prognosis, and
212 contributing to the overall financial burden of hearing loss. Identifying the
213 correct route of referral and optimal management pathway for people with
214 hearing loss is therefore very important.

215 *3.3 Policy, legislation, regulation and commissioning*

216 Policy

217 Any qualified provider (AQP) scheme Some routine and non-complex
218 audiological care is provided by the private and independent sector in England
219 under the 'any qualified provider' scheme, whereby any service can offer
220 hearing testing and provide hearing aids if it meets the criteria. Providers now
221 include high street chains as well as local audiology departments. The
222 guideline will be relevant to all providers of adult hearing services in England.

223 Legislation, regulation and guidance

224 Action plan on hearing loss NHS England and Department of Health, 2015

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226

4 Further information

This is the draft scope for consultation with registered stakeholders. The consultation dates are 29 March to 26 April 2016.

The guideline is expected to be published in May 2018.

You can follow progress of the guideline.

Our website has information about how NICE guidelines are developed.

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