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1 Recommendations

People have the right to be involved in discussions and make informed decisions about their care, as described in [your care](#).

[Making decisions using NICE guidelines](#) explains how we use words to show the strength (or certainty) of our recommendations, and has information about prescribing medicines (including off-label use), professional guidelines, standards and laws (including on consent and mental capacity), and safeguarding.

2 **1.1 Support and information for people with tinnitus**

3 **Tinnitus support for people with tinnitus**

4 1.1.1 At all stages of care:

- 5 • discuss with people, and their family members or carers if appropriate,
6 their experience of tinnitus, including its impact and any concerns.
- 7 • agree a management plan with the person, taking into account their
8 needs and preferences, which should include information about tinnitus
9 and opportunities for discussion about different management options.
- 10 • discuss the results of each assessment and their impact on the
11 management plan.

12 To find out why the committee made the recommendation on support for people with
13 tinnitus and how it might affect practice, see [rationale and impact](#).

14 **Information for people with tinnitus**

15 1.1.2 Reassure people with tinnitus, at first point of contact with a healthcare 16 professional, that:

- 17 • it is common and is rarely associated with an underlying physical or
18 mental health problem
- 19 • many people find management strategies to help them live well with
20 tinnitus.

1 1.1.3 Give information about tinnitus at all stages of care. The content should
2 be tailored to the individual needs of the person, and their family members
3 or carers if appropriate, and include information about:

- 4 • what tinnitus is, what might have caused it, what might happen in the
5 future and what can affect it (for example, exposure to loud noise)
- 6 • investigations (see sections 1.2 and 1.3)
- 7 • self-help and coping strategies (for example, self-help books and
8 relaxation strategies)
- 9 • management options (see section 1.4)
- 10 • local and national support groups
- 11 • other sources of information.

12
13 1.1.4 Information should be available in appropriate formats such as verbal
14 consultation, written information, leaflets and online in line with the NICE
15 guideline on [patient experience](#). Take into account accessibility
16 requirements for children, people with hearing loss, cognitive impairment
17 or visual impairment.

18 To find out why the committee made the recommendations on information for people
19 with tinnitus and how they might affect practice, see [rationale and impact](#).

20 **1.2 Assessing tinnitus**

21 **Referring people with tinnitus**

22 1.2.1 Refer people for assessment and management to be seen within a
23 maximum of 24 hours, in line with local pathways, if they have tinnitus
24 associated with any of the following:

- 25 • high risk of suicide
- 26 • sudden onset of significant neurological symptoms or signs (for
27 example, facial weakness)
- 28 • sudden hearing loss (over a period of 3 days or less) in the past 30
29 days (in line with the NICE guideline on [hearing loss](#))

1 1.2.2 Refer people for assessment and management to be seen within 2 weeks,
2 in line with local pathways, if they have tinnitus associated with any of the
3 following:

- 4 • distress affecting mental well-being (including distress that limits their
5 daily activities) despite receiving [tinnitus support](#) at first point of contact
6 with primary or community care services (see recommendation [1.1.1](#))
- 7 • acute uncontrolled vestibular symptoms (for example vertigo)
- 8 • sudden hearing loss (over a period of 3 days or less, more than 30
9 days ago) or rapidly progressing hearing loss (over a period of 4 to 90
10 days) (in line with the NICE guideline on [hearing loss](#)).

11 1.2.3 Refer people to the local tinnitus service, in line with local pathways, if
12 they have any of the following:

- 13 • tinnitus that bothers them despite tinnitus support at first point of
14 contact with primary or community care services (see recommendation
15 [1.1.1](#))
- 16 • persistent [objective tinnitus](#)
- 17 • persistent pulsatile tinnitus
- 18 • persistent unilateral tinnitus
- 19 • tinnitus associated with unilateral or asymmetric hearing loss (in line
20 with the NICE guideline on [hearing loss](#)).

21 To find out why the committee made the recommendations on referring people with
22 tinnitus and how they might affect practice, see [rationale and impact](#).

23 **Initial assessment in secondary care**

24 1.2.4 Consider using the Tinnitus Functional Index for adults to assess how
25 tinnitus affects them.

26 1.2.5 If questionnaires cannot be used (for example, because of language
27 issues or cognitive impairment) consider using other measures such as
28 visual analogue scales.

- 1 1.2.6 Consider using an age- or ability-appropriate measure (such as a visual
2 analogue scale) for children and young people to assess how tinnitus
3 affects them.

To find out why the committee made the recommendations on initial assessment in secondary care and how they might affect practice, see [rationale and impact](#).

4 **Assessing the psychological impact of tinnitus**

- 5 1.2.7 Be alert at all stages of care for symptoms and signs of anxiety or
6 depression in adults with tinnitus and follow the recommendations on
7 identification in the NICE guideline on [common mental health problems](#).
- 8 1.2.8 Consider using the tinnitus questionnaire (TQ) or mini-TQ alongside the
9 Tinnitus Functional Index in adults with tinnitus if further assessment of
10 the psychological effects of tinnitus is needed.
- 11 1.2.9 If there are concerns about depression or anxiety in adults, a healthcare
12 professional competent in mental health assessment should:
- 13 • assess using a questionnaire, such as the ones listed in assessment in
14 the NICE guideline on [common mental health problems](#), or an ability-
15 appropriate measure
 - 16 • consider assessment using the Clinical Outcomes in Routine
17 Evaluation - Outcome Measure
 - 18 • agree an action plan, if needed, in line with the recommendations on
19 assessment in the NICE guideline on common mental health problems.
- 20 1.2.10 Be alert at all stages of care to the behavioural and psychological
21 wellbeing of all children and young people presenting with tinnitus. Talk to
22 them, and their family members or carers if appropriate, about how they
23 feel.
- 24 1.2.11 If there are concerns about depression in children and young people.
25 Follow the recommendations in the NICE guideline on [depression in](#)
26 [children and young people](#).

- 1 1.2.12 Ask people with tinnitus if they have problems sleeping because of the
2 condition. If they do, consider screening with a questionnaire (such as the
3 Insomnia Severity Index). Discuss the results with them and how this
4 might inform their management plan.

5 To find out why the committee made the recommendations on assessing the
6 psychological impact of tinnitus and how they might affect practice, see [rationale and](#)
7 [impact](#).

8 **Assessing how tinnitus affects quality of life**

- 9 1.2.13 Discuss with the person with tinnitus, and their family members or carers if
10 appropriate, how the condition affects their quality of life (home, social,
11 leisure, work and school).

12 To find out why the committee made the recommendation on assessing how tinnitus
13 affects quality of life and how it might affect practice, see [rationale and impact](#).

14 **1.3 Further investigations**

15 **Audiological assessment**

- 16 1.3.1 Offer audiometry to people with tinnitus.
- 17 1.3.2 Consider tympanometry when middle-ear or Eustachian tube dysfunction,
18 or other causes of conductive hearing loss, are suspected.
- 19 1.3.3 Do not offer acoustic reflex testing, uncomfortable loudness
20 levels/loudness discomfort levels (ULL/LDL) tests or otoacoustic
21 emissions tests as part of an investigation of tinnitus unaccompanied by
22 other symptoms and signs.

23 To find out why the committee made the recommendations on audiological
24 assessment and how they might affect practice, see [rationale and impact](#).

25 **Psychoacoustic tests**

- 26 1.3.4 Do not offer psychoacoustic tests to assess tinnitus, for example pitch and
27 loudness matching.

1 To find out why the committee made the recommendation on psychoacoustic tests
2 and how it might affect practice, see [rationale and impact](#).

3 **Imaging**

4 ***Non-pulsatile tinnitus***

5 1.3.5 Offer MRI to people with non-pulsatile tinnitus and any associated
6 neurological, audiological or head and neck signs and symptoms. If they
7 are unable to have MRI, offer contrast-enhanced CT.

8 1.3.6 Where there are no associated neurological, audiological or head and
9 neck signs and symptoms, consider MRI for people with unilateral or
10 asymmetrical non-pulsatile tinnitus. If they are unable to have MRI,
11 consider contrast-enhanced CT.

12 1.3.7 Do not offer imaging to people with symmetrical non-pulsatile tinnitus with
13 no associated neurological, audiological or head and neck signs and
14 symptoms.

15 To find out why the committee made the recommendations on non-pulsatile tinnitus
16 and how they might affect practice, see [rationale and impact](#).

17 ***Pulsatile tinnitus***

18 1.3.8 Offer imaging to people with pulsatile tinnitus.

- 19
- 20 • For people with synchronous pulsatile tinnitus, consider:
 - 21 – MRA or MRI with contrast if clinical examination and audiological
22 assessment are normal, or contrast-enhanced CT if they cannot
23 have MRA or MRI
 - 24 – contrast-enhanced CT if an osseous or middle ear abnormality is
25 suspected (for example, glomus tumour), followed by MRI if further
26 investigation of soft tissue is required.
 - 27 • For people with non-synchronous pulsatile tinnitus (for example caused
28 by palatal myoclonus), consider MRI or contrast-enhanced CT if they
cannot have MRI.

To find out why the committee made the recommendations on pulsatile tinnitus and how they might affect practice, see [rationale and impact](#).

1.4 Managing tinnitus for people referred to tinnitus services

Sound therapy and amplification devices

1.4.1 Offer amplification devices to people with tinnitus who have a hearing loss that affects their ability to communicate. For adults, follow the recommendations on hearing aids in the NICE guideline on [hearing loss](#).

1.4.2 Consider amplification devices for people with tinnitus who have a hearing loss but do not have difficulties communicating.

1.4.3 Do not offer amplification devices to people with tinnitus but no hearing loss.

To find out why the committee made the recommendations on amplification devices and how they might affect practice, see [rationale and impact](#).

Psychological therapies for people with tinnitus-related distress

1.4.4 Consider a stepped approach to treat [tinnitus-related distress](#) in adults whose tinnitus is still causing an impact on their emotional and social well-being, and day-to-day activities, despite having received [tinnitus support](#) in primary, community or secondary care. If a person does not benefit from the first psychological intervention they try or declines an intervention, offer them an intervention from the next step in the following order:

- digital tinnitus-related cognitive behavioural therapy (CBT) provided by a psychologist
- group-based tinnitus-related psychological interventions including mindfulness-based cognitive therapy (delivered by appropriately trained and supervised practitioners), acceptance and commitment therapy (ACT) or CBT (delivered by psychologists)
- individual tinnitus-related CBT (delivered by psychologists).

1 To find out why the committee made the recommendation on psychological therapies
2 for people with tinnitus-related distress and how it might affect practice, see [rationale](#)
3 [and impact](#).

4 **Betahistine**

5 1.4.5 Advise patients that the limited evidence available shows no clinical
6 effectiveness and some harms for the use of betahistine¹ for managing
7 tinnitus. Take this into account when thinking about whether to prescribe
8 it.

9 To find out why the committee made the recommendation on betahistine and how it
10 might affect practice, see [rationale and impact](#).

11 **Combining therapies**

12 The committee were unable to make recommendations for practice in this area. They
13 made a [recommendation for research](#).

To find out why the committee were unable to make recommendations on combining
therapies see [rationale](#).

14 **Neuromodulation**

15 The committee were unable to make recommendations for practice in this area. They
16 made a [recommendation for research](#).

To find out why the committee were unable to make recommendations on
neuromodulation see [rationale](#).

¹ At the time of publication [(month, year) to be added at publication], betahistine only had a UK marketing authorisation for the treatment of vertigo, tinnitus and hearing loss associated with Ménière's disease. It did not have a UK marketing authorisation for tinnitus not caused by this disease. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council's [Prescribing guidance: prescribing unlicensed medicines](#) for further information.

1 ***Terms used in this guideline***

2 **Objective tinnitus**

3 Tinnitus that occurs as a result of noise generated in the ear that can be detected by
4 the examiner. It is less common than subjective tinnitus.

5 **Tinnitus-related distress**

6 Tinnitus that is causing an impact on emotional and social wellbeing and day-to-day
7 activities.

8 **Tinnitus support**

9 A term used to describe a session that includes a two-way process of information-
10 giving and discussion to develop a mutual understanding of the difficulties and goals
11 of the person with tinnitus. This discussion occurs between the person with tinnitus,
12 and their family members or carers if appropriate, and healthcare professional. A
13 management plan is also developed and the person is supported to continue with the
14 plan or modify it as necessary. This is sometimes known as tinnitus counselling.

15 **Recommendations for research**

16 The guideline committee has made the following recommendations for research.

17 ***Key recommendations for research***

18 **1 Cognitive behavioural therapy (CBT) for adults with tinnitus delivered by
19 appropriately trained healthcare professionals other than psychologists**

20 What is the clinical and cost effectiveness of CBT for adults with tinnitus delivered by
21 appropriately trained healthcare professionals other than psychologists (for example,
22 audiologists)?

23 To find out why the committee made the research recommendation on CBT for
24 adults delivered by appropriately trained healthcare professionals see [rationale and
25 impact](#).

1 **2 Combination management strategy: sound therapy and tinnitus support**

2 What is the clinical and cost effectiveness of a combination management strategy
3 consisting of sound therapy and tinnitus support?

4 To find out why the committee made the research recommendation on combination
5 management strategy see [rationale](#).

6 **3 Methods for assessing tinnitus in primary care settings**

7 What is the optimal method for assessing tinnitus in primary care (including
8 consultation questions, physical examinations and questionnaires)?

9 To find out why the committee made the research recommendation on assessing
10 tinnitus in primary care see [rationale and impact](#).

11 **4 Neuromodulation**

12 What is the clinical, cost effectiveness and safety of neuromodulation interventions
13 for treating tinnitus in adults?

14 To find out why the committee made the research recommendation on
15 neuromodulation interventions see [rationale](#).

16 **5 Psychological therapies for children and young people**

17 What is the clinical and cost effectiveness of psychological therapies for children and
18 young people who have tinnitus-related distress?

19 To find out why the committee made the research recommendation on psychological
20 therapies for children and young people see [rationale and impact](#).

1 ***Other recommendations for research***

2 **Tinnitus questionnaires for children and young people**

3 What is the most clinically and cost-effective tinnitus questionnaire to assess tinnitus
4 in children and young people?

5 **Tinnitus questionnaires in people with learning disability or cognitive
6 impairment**

7 What is the most clinically and cost-effective tinnitus questionnaire to assess tinnitus
8 in people with learning disability or cognitive impairment?

9 **Relaxation strategies for children, young people and adults**

10 Are relaxation strategies clinically and cost effective for the management of tinnitus
11 for children, young people and adults?

12 **Rationale and impact**

13 These sections briefly explain why the committee made the recommendations and
14 how they might affect practice. They link to details of the evidence and a full
15 description of the committee's discussion.

16 ***Support for people with tinnitus***

17 Recommendation [1.1.1](#)

18 **Why the committee made the recommendation**

19 'Tinnitus support' was defined by the committee as a two-way process of
20 information-giving and discussion to develop a mutual understanding of the
21 difficulties and goals of the person with tinnitus. The evidence showed that similar
22 interventions such as 'education counselling' gave some benefit in improving
23 outcomes for people with tinnitus. Although the evidence was limited, the committee
24 agreed that providing support to people with tinnitus and their family members or
25 carers is essential, ensuring that the person's needs and preferences are taken into
26 account. The committee also agreed that there should be a discussion between the
27 healthcare professional and person with tinnitus about the results of each

1 assessment and their impact on their management plan. The committee noted that
2 any information given should be accompanied by an opportunity for the person to
3 ask questions and actively participate in the development of a management plan with
4 their healthcare professionals.

5 The committee acknowledged that in current practice the term ‘tinnitus counselling’ is
6 used to describe a management strategy that may include elements of ‘tinnitus
7 support’. The committee decided to not use the term ‘tinnitus counselling’ to describe
8 this management strategy as there is inconsistency in how the term is used in
9 current practice. For some healthcare professionals it can be a brief clinician-led talk
10 with the intent to reassure that there is no significant pathology. Alternatively, it can
11 be a longer interactive session focusing on the worries and concerns of the person
12 with tinnitus. The committee’s intention is for a standardised and improved level of
13 care to be available to people with tinnitus, across the country, from the first point of
14 contact with the healthcare system.

15 The committee also looked at evidence on relaxation strategies, although the
16 amount of evidence was limited. They noted that the use of relaxation strategies for
17 managing tinnitus is widespread but the strategies are insufficiently researched.
18 Consequently, a research recommendation to assess relaxation strategies for the
19 management of tinnitus for children, young people and adults was made.

20 **How the recommendation might affect practice**

21 There is variation in how support for people with tinnitus is defined, what it should
22 include and when it is delivered. Implementing this recommendation should reduce
23 this variation.

24 Full details of the evidence and the committee’s discussion are in [evidence review A:
25 tinnitus support](#).

26 [Return to recommendations](#)

27 ***Information for people with tinnitus***

28 Recommendations [1.1.2-1.1.4](#)

1 **Why the committee made the recommendations**

2 There was limited evidence on what information should be provided to people with
3 tinnitus, their family members or carers. However, the committee noted that patient
4 information is an essential element of patient care in the NHS and should be
5 provided at first point of contact with a healthcare professional. The information
6 about tinnitus should be tailored to individual needs to ensure that it is suitable and
7 effective in informing the management plan for the person with tinnitus. The
8 committee agreed it is important to reassure people that tinnitus is common, that it is
9 rarely associated with an underlying physical or mental health problem and that
10 many people find management strategies to help them live well with tinnitus.
11 Appropriate information provided in a timely manner to people first presenting with
12 tinnitus will reduce distress and the likelihood of symptoms becoming debilitating.

13 **How the recommendations might affect practice**

14 There is variation in the level of information provided to people with tinnitus, and in
15 the content and format of the information. Implementing the recommendations
16 should reduce this variation.

17 Full details of the evidence and the committee's discussion are in [evidence review B:
18 patient information](#).

19 [Return to recommendations](#)

20 ***Referring people with tinnitus***

21 Recommendations [1.2.1-1.2.3](#)

22 **Why the committee made the recommendations**

23 No evidence was identified on which symptoms and features should warrant
24 investigation or management. In the absence of evidence, the committee agreed that
25 after clinical history and physical examinations, there are various symptoms and
26 features associated with tinnitus that should prompt immediate (seen within 24
27 hours), urgent (seen within 2 weeks) or non-urgent referral. The categorisation of
28 these symptoms and features is dependent on the potential consequence of not
29 referring. For example, people who present to primary care with tinnitus and
30 symptoms and features that include a high risk of suicide or sudden onset of

1 neurological symptoms should be seen immediately, as not referring can be life-
2 threatening and increase morbidity. Urgent referrals should be made to ensure that
3 underlying neurological causes are diagnosed and that individuals may benefit from
4 successful treatment if provided within the shorter timeframe. The categories of
5 urgency and the timings are aligned with those in the NICE guideline on hearing
6 loss. Although the NICE guideline on hearing loss applies only to adults, these
7 referral recommendations also apply to children and young people.

8 The committee agreed that the impact of tinnitus on a person's wellbeing and mental
9 health is a critical component of any assessment of symptoms and features in
10 primary care. Support for people with tinnitus after assessing symptoms and features
11 can help reduce the impact of tinnitus on mental health. If mental health concerns
12 persist after this, referrals should be made.

13 **How the recommendations might affect practice**

14 These recommendations do not aim to change the number of referrals made but
15 rather encourage more timely referrals. Some people may need to be seen sooner
16 and services may need to change their protocols to accommodate urgent referrals.
17 These timely referrals will improve patient safety and the appropriate implementation
18 of treatment and/or tinnitus management strategies. Timely and appropriate
19 intervention will reduce distress and repeated requests or referrals for tinnitus
20 support.

21 Full details of the evidence and the committee's discussion are in [evidence reviews](#)
22 [C-D: symptoms and features for urgent and non-urgent referral](#).

23 [Return to recommendations](#)

24 ***Initial assessment in secondary care***

25 Recommendations [1.2.4-1.2.6](#)

26 **Why the committee made the recommendations**

27 No evidence was identified on the clinical effectiveness of questionnaires used to
28 assess the impact of tinnitus on a person. Although questionnaires are not a
29 substitute for a detailed clinical history, the committee noted the importance of using

1 questionnaires and age-appropriate measures in secondary care for assessment,
2 including any benefit of interventions. Questionnaires can provide a structured format
3 for identifying and subjectively rating difficulties that a person with tinnitus may have.
4 This can help to signpost areas in need of intervention and measure change after the
5 intervention. It can be useful both on an individual level to identify appropriate
6 intervention and on a service level to ensure that appropriate resources are
7 available.

8 A range of questionnaires are currently used to assess the impact of tinnitus in
9 services across England. However, the questionnaires are designed to look at
10 specific groups of people with tinnitus or specific problems associated with tinnitus.
11 Therefore their components may not reflect the range of needs of everyone with
12 tinnitus. In addition, most of the questionnaires are not designed to take account of
13 change after intervention.

14 In the absence of evidence, the committee agreed that the most appropriate
15 questionnaire that should be considered is the Tinnitus Functional Index. This
16 provides the broadest assessment of the impact of tinnitus and incorporates a variety
17 of components. It was also specifically designed to measure change.

18 The committee noted that questionnaires are not commonly used in primary care
19 and there is also variation in how tinnitus is assessed in primary care. They thought it
20 important that [research](#) is conducted to examine the optimal method for assessing
21 tinnitus in primary care settings as primary care is a gatekeeper for the further
22 management for tinnitus.

23 The committee agreed that it is crucial for healthcare professionals to discuss the
24 results of assessments with the person. When answers to component questions are
25 discussed with them, rather than solely focusing on overall scores, it can help people
26 to fully engage with the management of their condition. In addition, using
27 assessment methods such as questionnaires before and after an intervention can
28 further inform management plans.

29 **How the recommendations might affect practice**

30 There is variation in the methods used in the UK to assess the impact of tinnitus,
31 particularly with the use of different tinnitus questionnaires. The implementation of a

1 common questionnaire to assess tinnitus will lead to the standardisation of care
2 across the UK and encourage best practice. It will also improve individual care if the
3 components of the questionnaire are used meaningfully as part of the discussion
4 about tinnitus and to signpost towards appropriate support. There are no anticipated
5 cost implications for implementing these recommendations.

6 Full details of the evidence and the committee's discussion are in [evidence review E:
7 questionnaires to assess tinnitus](#).

8 [Return to recommendations](#)

9 ***Assessing the psychological impact of tinnitus***

10 Recommendations [1.2.7-1.2.12](#)

11 **Why the committee made the recommendations**

12 No evidence was identified that evaluated the clinical or cost effectiveness of
13 questionnaires to assess the psychological impact of tinnitus. Tinnitus can cause
14 depression or anxiety and can be exacerbated by depression or anxiety, leading to
15 distress. This depression or anxiety sometimes needs to be treated before the
16 person can begin to cope with tinnitus, to lessen the distress. Therefore asking
17 everyone if they feel anxious or depressed is important in addition to asking about
18 tinnitus. In the absence of evidence, the committee agreed that the commonly used
19 TQ and mini-TQ are appropriate questionnaires to use to further assess the
20 psychological impact of tinnitus. The committee agreed that healthcare professionals
21 should be alert to symptoms and signs of depression and anxiety, asking prompting
22 questions as recommended in the NICE guideline on [common mental health
23 problems](#). Although the guideline is not specific to people with tinnitus, the committee
24 agreed to refer to this guideline in the absence of any evidence for questionnaires
25 that can be used to assess the psychological impact of tinnitus. The questionnaires
26 recommended in the NICE guideline on [common mental health problems](#) are mainly
27 used in mental health settings but they can also be used within other secondary care
28 services such as audiology. The committee agreed that although no evidence was
29 identified that assessed the use of CORE-OM it is particularly useful for assessing
30 the psychological impact of tinnitus, where indications of depression and anxiety may
31 be more subtle.

1 Depression in children and young people should be assessed and managed in line
2 with the NICE guideline on [depression in children and young people](#).

3 Insomnia is common in people with tinnitus. Therefore the committee recommended
4 that an assessment using a questionnaire such as the Insomnia Severity Index
5 would be useful when developing a management plan.

6 **How the recommendations might affect practice**

7 The recommendations will standardise clinical practice in the UK and enhance
8 patient safety. They will also increase the number of people with tinnitus who have
9 assessments of their psychological well-being. Consequently, more people with
10 depression and anxiety will have appropriate management of their condition. There
11 are no anticipated cost implications for the implementation of these
12 recommendations because these questionnaires are expected to be completed
13 before a person with tinnitus enters the consultation room and interacts with the
14 relevant clinician.

15 Full details of the evidence and the committee's discussion are in [evidence review F:
16 assessing psychological impact](#).

17 [Return to recommendations](#)

18 ***Assessing how tinnitus affects quality of life***

19 Recommendation [1.2.13](#)

20 **Why the committee made the recommendation**

21 No evidence was identified that evaluated the clinical effectiveness of questionnaires
22 and interviews to assess quality of life in people with tinnitus. Questionnaires such as
23 the TFI, which provide an overall assessment of tinnitus, include domains that
24 assess the impact of tinnitus on quality of life (for example, enjoyment of social
25 activities and relationships with family and friends). The committee took this into
26 account, together with the fact that quality of life questionnaires are not commonly
27 used in current practice, and agreed that it was not necessary to recommend an
28 additional questionnaire.

1 However, in clinical practice it is often when quality of life is affected that people with
2 tinnitus seek help. The committee agreed that as part of tinnitus support and clinical
3 history taking, a discussion with the person is more useful than a questionnaire for
4 understanding their experiences with tinnitus and its impact on their quality of life in
5 different settings such as home, social, leisure, work and school. The findings should
6 be discussed and how this might inform their management plan.

7 **How the recommendation might affect practice**

8 The recommendation will standardise clinical practice and encourage best practice.
9 Additionally, it will help to increase the recognition of tinnitus-related difficulties and
10 improve subsequent tinnitus management. There are no anticipated cost implications
11 for implementing this recommendation.

12 Full details of the evidence and the committee's discussion are in [evidence review G:
13 assessing quality of life](#).

14 [Return to recommendations](#)

15 ***Audiological assessment***

16 Recommendations [1.3.1-1.3.3](#)

17 **Why the committee made the recommendations**

18 No clinical evidence was identified on audiological assessments for people with
19 tinnitus. Some people with tinnitus may not be aware of having hearing loss. The
20 hearing loss may have been gradual and they may even attribute their hearing
21 difficulties to their tinnitus. Therefore, the committee strongly believed that everyone
22 referred to audiological, ear, nose and throat or audiovestibular medicine services
23 should receive audiometry as a minimum to establish any hearing problems and to
24 inform a management plan. Effective management of a hearing loss can reduce the
25 audibility and impact of the tinnitus. The committee agreed that when middle-ear or
26 Eustachian tube dysfunction or other causes of a conductive hearing loss are
27 suspected, tympanometry should be performed.

28 Acoustic reflex testing and uncomfortable loudness levels/loudness discomfort levels
29 (ULL/LDL) tests were thought to be unnecessary, unpleasant and potentially harmful.

1 They may exacerbate a person's tinnitus and increase distress. The results of these
2 tests would not affect a person's management plan as the main focus of tinnitus
3 management is to lessen the distress associated with tinnitus. In addition, although
4 otoacoustic emissions tests may not be unpleasant or harmful, likewise the results
5 are unlikely to affect a person's management plan.

6 **How the recommendations might affect practice**

7 The committee thought that there would be little impact on practice as most
8 healthcare professionals routinely use audiometry to establish hearing thresholds in
9 people with tinnitus. Therefore there would be no additional resource impact as a
10 result of this recommendation. Many also currently use tympanometry when needed,
11 so this will not change current practice for most. Some centres may be using
12 acoustic reflexes, ULL/LDL tests and otoacoustic emissions routinely, and therefore
13 stopping these may be a change to their practice and could result in modest cost
14 savings.

15 Full details of the evidence and the committee's discussion are in [evidence review H:
16 audiological assessment](#).

17 [Return to recommendations](#)

18 ***Psychoacoustic tests***

19 Recommendation [1.3.4](#)

20 **Why the committee made the recommendation**

21 No clinical evidence was identified on psychoacoustic tests, for example pitch and
22 loudness matching, for people with tinnitus. The committee thought that undertaking
23 psychoacoustic testing in addition to audiometry may increase distress for some and
24 encourage people to focus on their tinnitus more. Continued focus on tinnitus can
25 prevent a person from habituating to it. Many management strategies involve taking
26 away the focus from tinnitus, and so psychoacoustic testing may counteract their
27 effectiveness. Psychoacoustic testing is mainly used as a tool in research rather than
28 in clinical practice as the outcome of the test has no influence on the routine
29 management of tinnitus. In addition, this testing was thought to carry an additional

1 cost in terms of staff time, with little or no additional benefit, and even the potential
2 for some harm. Therefore the committee agreed that it should not be used.

3 **How the recommendation might affect practice**

4 The recommendation reflects current best practice where psychoacoustic measures
5 are not commonly used. However, as some departments may be using this test,
6 implementing the recommendation will mean that some staff time, otherwise spent
7 on the tests, will be freed up.

8 These tests are not commonly used for children and therefore there is no change in
9 current practice for paediatric services.

10 Full details of the evidence and the committee's discussion are in [evidence review 1:](#)
11 [psychoacoustic measures](#).

12 [Return to recommendations](#)

13 ***Imaging to investigate the cause of non-pulsatile tinnitus***

14 Recommendations [1.3.5-1.3.7](#)

15 **Why the committee made the recommendations**

16 No evidence was identified on imaging to investigate the cause of non-pulsatile
17 tinnitus. But the committee agreed that scanning people with non-pulsatile tinnitus
18 that is accompanied by neurological, audiological or head and neck signs and
19 symptoms is best clinical practice. It is also important to rule out significant and
20 potentially life-threatening central pathology, such as vestibular schwannoma
21 compressing adjacent structures or brain tumours. Additionally, imaging people with
22 non-pulsatile tinnitus can rule out vascular arteriovenous malformations, which could
23 also be life-threatening. Imaging should also be considered where there is unilateral
24 or asymmetrical non-pulsatile tinnitus without accompanying signs and symptoms,
25 as it is more likely to be associated with an underlying significant pathology. The
26 committee agreed that no imaging should be conducted for bilateral non-pulsatile
27 tinnitus in the absence of any associate signs and features because the incidence of
28 underlying pathology is very low.

1 MRI is more clinically effective at showing soft tissue structures and pathology than
2 contrast-enhanced CT. In addition, CT scanning is associated with more harm than
3 MRI because of the radiation dose and the potential for adverse reaction to the
4 contrast media. Therefore the committee recommended MRI as the first choice.

5 **How the recommendations might affect practice**

6 The view of the committee was that in current practice, people with non-pulsatile
7 unilateral tinnitus were in some cases being over tested (particularly for isolated
8 bilateral non-pulsatile tinnitus), without proper assessment of neurological signs and
9 symptoms beforehand. These recommendations will help to standardise clinical
10 practice and encourage good clinical practice. They will also reassure clinicians and
11 people with tinnitus that a scan may not always be necessary. There is the potential
12 for some cost savings as the volume of unnecessary imaging is reduced.

13 Full details of the evidence and the committee's discussion are in [evidence review J:
14 imaging to investigate the cause of non-pulsatile tinnitus](#).

15 [Return to recommendations](#)

16 ***Imaging to investigate the cause of pulsatile tinnitus***

17 Recommendation [1.3.8](#)

18 **Why the committee made the recommendations**

19 No evidence was identified on imaging to investigate the cause of pulsatile tinnitus,
20 so the committee used their knowledge and expertise to make a recommendation.
21 Scans are recommended on the basis of clinical manifestations and the ability of the
22 scanning method to accurately detect pathology. Pulsatile tinnitus can have several
23 different causes, some of which are serious. Possible causes include irregular blood
24 vessels, high blood pressure, raised intracranial pressure, anaemia, atherosclerosis,
25 paragangliomas, osseous pathology and glomus tumours. The underlying cause of
26 the pulsatile tinnitus can be targeted for treatment, depending on the results of the
27 scans.

28 MRI is more clinically effective at showing soft tissue structures and pathology than
29 contrast-enhanced CT. The committee had a preference for magnetic resonance

1 angiography (MRA) or MRI over contrast-enhanced CT. This is because of risks from
2 the radiation dose and the potential for adverse reaction to the contrast media.
3 Contrast-enhanced CT scanning is recommended for people who are unable to have
4 or tolerate MRA or MRI.

5 **How the recommendations might affect practice**

6 Current practice for investigating pulsatile synchronous tinnitus is imaging of the
7 ears, head and neck. But there is no consensus about whether an MRI/MRA or a CT
8 scan with contrast is best. These recommendations aim to standardise and improve
9 current practice.

10 When investigating non-synchronous pulsatile tinnitus, it is current practice to
11 perform an MRI where other conditions, such as palatal myoclonus, are suspected to
12 be the cause of tinnitus after clinical history and physical examinations.

13 By directing clinicians to the most appropriate scanning method, there is a potential
14 for some cost savings by reducing the unnecessary use of more expensive imaging
15 techniques.

16 Full details of the evidence and the committee's discussion are in [evidence review K:
17 imaging to investigate the cause of pulsatile tinnitus](#).

18 [Return to recommendations](#)

19 ***Sound therapy and amplification devices***

20 Recommendations [1.4.1-1.4.3](#)

21 **Why the committee made the recommendations**

22 There was limited evidence on using amplification devices and sound therapies for
23 managing tinnitus. However, the committee agreed that adults with tinnitus and a
24 hearing loss that affects their ability to communicate and hear should be offered an
25 amplification device in line with the NICE guideline on hearing loss. They agreed that
26 in similar circumstances children and young people should also be offered an
27 amplification device. There was no evidence to support the use of amplification
28 devices for people with tinnitus and a hearing loss that does not cause difficulties

1 communicating. But given that enhancing auditory input may improve the person's
2 perception of tinnitus, the committee recommended that amplification devices be
3 considered. The committee recommended that people without a hearing loss should
4 not be offered amplification devices as it was unlikely that the person would notice
5 any difference in tinnitus symptoms.

6 There are many types of sound therapies used by people with tinnitus. There is,
7 however, limited evidence available that assesses the clinical and cost effectiveness
8 of these interventions as sole interventions. The committee agreed that there is
9 insufficient evidence to recommend one type of sound therapy over another. They
10 made a research recommendation on sound therapy in combination with tinnitus
11 support.

12 **How the recommendations might affect practice**

13 Offering amplification devices to people with tinnitus and hearing loss that affects
14 their ability to communicate is in line with current practice and many organisations
15 will not need to change practice.

16 There is variation in practice around the use of amplification devices for people with
17 tinnitus and hearing loss that does not cause difficulties in communicating, and some
18 change in practice may be needed. Organisations may need to adapt their protocols
19 to match the recommendations. Rarely people are offered hearing aids for tinnitus
20 when they do not have a hearing loss. Amplification devices should not be offered in
21 these situations and a small cost saving may be made.

22 Full details of the evidence and the committee's discussion are in [evidence review](#)
23 [M: sound therapy and amplification devices](#).

24 [Return to recommendations](#)

25 ***Psychological therapies for people with tinnitus-related distress***

26 Recommendation [1.4.4](#)

27 **Why the committee made the recommendation**

28 The evidence suggests that CBT, mindfulness-based CBT and ACT are effective
29 interventions for managing tinnitus related distress. CBT can be delivered in different

1 formats such as digital (for example, internet based), group and individual face-to-
2 face sessions. Economic modelling suggested that it would be less costly to use
3 digital or group therapy first-line with individual therapy only in a select group of
4 people. The most cost-effective strategy is to offer digital CBT first, then group-based
5 CBT and finally individual CBT where a person does not benefit from or declines the
6 first- or second-line options. Mindfulness based cognitive therapy should be
7 delivered by appropriately trained and supervised practitioners. CBT and ACT should
8 be delivered by psychologists because this is considered important for achieving
9 good patient outcomes. Taking into account the clinical and economic evidence,
10 together with a lack of direct evidence of cost effectiveness, the committee agreed
11 that a stepped approach for adults with tinnitus-related distress could be considered.
12 The committee noted that no evidence was identified that evaluated psychological
13 therapies in children and young people. Access to psychological therapies for
14 children and young people with tinnitus is currently limited. The committee agreed
15 that further research is needed and a [research recommendation](#) was made.

16 **How the recommendation might affect practice**

17 In some regions of the UK there is limited access to psychological therapies for
18 people with tinnitus, with few healthcare professionals trained in delivering them. The
19 committee noted that implementing the recommended psychological therapies will
20 lead to a significant change in practice in regions where access is limited. However,
21 to aid providers in widening access to psychological therapies for people with
22 tinnitus, the committee have recommended digital CBT be considered as a first-line
23 intervention. This intervention would allow people with tinnitus to receive their
24 treatment faster and thereby help to reduce waiting lists. The committee noted it
25 could also improve participation as people could complete the intervention according
26 to their lifestyle as opposed to having to travel at a designated time. Digital CBT is
27 currently only available in research, with evidence suggesting that it is clinically
28 effective. Given that the economic analysis suggested that it is one of the more cost-
29 effective methods of providing psychological therapies for people with tinnitus, digital
30 CBT has been recommended. It is expected that some providers will take the
31 initiative to adapt existing digital CBT tools available for other conditions.

1 The recommendation could result in cost savings for services that are currently
2 offering individual-based psychological therapies as a first-line psychological
3 treatment for tinnitus. This is because of the committee's view that these expensive
4 interventions should only be used when other methods (digital CBT and group based
5 interventions) have been exhausted. Therefore, although some providers may incur
6 additional expenditure as a result of implementing these recommendations, this
7 would be offset by those providers who achieve cost-savings. This would result in an
8 overall cost-neutral resource impact. Furthermore, the committee recommended a
9 number of different group-based psychological strategies as there is no clear
10 evidence that one psychological intervention is more clinically effective than another.
11 Providers can therefore adopt those interventions that are easiest to implement
12 based on their existing staff and skills, and this would further minimise the resource
13 impact.

14 As there is limited access to psychology services, the committee recommended that
15 [research](#) is needed to assess the effectiveness of CBT delivered to people with
16 tinnitus by appropriately trained and supervised healthcare practitioners other than
17 psychologists (for example, audiologists). This research could further help to widen
18 access to psychological services as more clinicians would be available to provide the
19 interventions listed in this recommendation.

20 Full details of the evidence and the committee's discussion are in [evidence review L:
21 psychological therapies](#).

22 [Return to recommendations](#)

23 ***Betahistine***

24 Recommendations [1.4.5](#)

1 **Why the committee made the recommendation**

2 The committee noted that some people are occasionally prescribed betahistine for
3 the treatment of tinnitus. The evidence however suggests that betahistine does not
4 improve tinnitus symptoms and there is evidence of adverse effects. The committee
5 agreed that clinicians should advise people with tinnitus of this when discussing
6 management options.

7 **How the recommendation might affect practice**

8 Currently betahistine is prescribed to treat tinnitus. A discussion between the
9 clinician and the person with tinnitus to explain the available evidence and possible
10 adverse effects may lead to a reduction in the number of prescriptions. Therefore,
11 implementing this recommendation could lead to cost savings.

12 Full details of the evidence and the committee's discussion are in [evidence review N:
13 betahistine](#).

14 [Return to recommendations](#)

15 ***Combining therapies***

16 **Why the committee were unable to make recommendations**

17 The evidence for combination strategies was generally low quality but indicated to
18 the committee that tinnitus support alongside other management strategies was
19 important. No recommendations on particular combinations of tinnitus management
20 strategies were made. However, the recommendations on tinnitus support and
21 management in this guideline specify that everyone should receive tinnitus support
22 along with whatever strategy (for example, amplification devices and psychological
23 therapies) has been chosen in their management plan.

24 The committee noted that there is limited evidence available for the use of sound
25 therapy with tinnitus support and made a [research recommendation](#) on this
26 combination of strategies.

27 The committee recognised that tinnitus retraining therapy (TRT) is a specific
28 combination management strategy used in various forms in current practice,

1 generally in different formats to those described in the literature. They decided to not
2 explicitly recommend TRT because, when it is delivered according to the original
3 study, it is highly directive. They agreed that the original form of TRT does not allow
4 people to be actively engaged in the development of their management plan.

5 Full details of the evidence and the committee's discussion are in [evidence review P:
6 combinations of management strategies](#).

7 **Neuromodulation**

8 **Why the committee were unable to make recommendations**

9 There is great variation in neuromodulation approaches reported for tinnitus.
10 Insufficient robust evidence meant that the committee were unable to make any
11 practice recommendations on the use of neuromodulation therapies. They made a
12 [recommendation for research](#) in this area, and noted that evidence of the safety of
13 these techniques for use in children and young people was needed before
14 conducting extensive research of efficacy.

15 Full details of the evidence and the committee's discussion are in [evidence review O:
16 neuromodulation](#).

17 **Context**

18 Tinnitus is a common condition. In [Commissioning services for people with hearing
19 loss](#) (2016) NHS England estimates between 10% and 15% of adults will have
20 tinnitus, and 3% of adults will go on to require a clinical intervention for their tinnitus.

21 Tinnitus is the perception of sounds in the ears or head that do not come from an
22 outside source. It can be associated with difficulty in concentrating and listening, and
23 for some people it can be extremely distressing and have a significant impact on
24 their mental wellbeing, family, work and social life. Tinnitus is a heterogeneous
25 condition that affects people differently both in its severity and its impact.

26 Management of tinnitus is therefore usually tailored according to the person's
27 symptoms. Although there is no single effective treatment for tinnitus, there is a
28 variety of approaches that may help people manage their tinnitus or the impact of
29 their tinnitus.

1 Currently tinnitus services across the UK vary in how accessible they are and the
2 level of support offered. There is a lack of standardisation in assessment, referral
3 and management approaches. This includes assessment of conditions underlying
4 the tinnitus that need prompt, or even urgent, investigation and treatment by
5 specialist services.

6 This guideline aims to improve care for people with tinnitus by providing advice to
7 healthcare professionals on the assessment, investigation and management of
8 tinnitus. It also offers advice on supporting people who are distressed by tinnitus and
9 on when to refer for specialist assessment and management.

10 **Finding more information and resources**

11 To find out what NICE has said on topics related to this guideline, see our web page
12 on [ear, nose and throat conditions](#).

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