



# Tinnitus overview

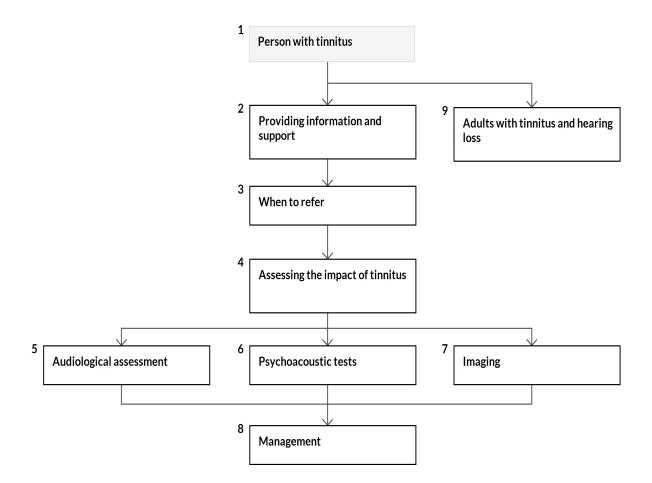
NICE Pathways bring together everything NICE says on a topic in an interactive flowchart. NICE Pathways are interactive and designed to be used online.

They are updated regularly as new NICE guidance is published. To view the latest version of this NICE Pathway see:

http://pathways.nice.org.uk/pathways/tinnitus

NICE Pathway last updated: 10 March 2020

This document contains a single flowchart and uses numbering to link the boxes to the associated recommendations.



**Tinnitus** Page 2 of 15

#### Person with tinnitus

No additional information

2

## **Providing information and support**

#### Information

Reassure the person with tinnitus, at first point of contact with a healthcare professional, that:

- tinnitus is a common condition
- it may resolve by itself
- although it is commonly associated with hearing loss, it is not commonly associated with other underlying physical problems
- there are a variety of management strategies that help many people live well with tinnitus.

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

- what tinnitus is, what might have caused it, what might happen in the future
- what can make tinnitus worse (for example, stress or exposure to loud noise)
- safe listening practices (for example, noise protection)
- the impact of tinnitus (for example, it can affect sleep, see the recommendation about sleep in assessing the impact of tinnitus [See page 6])
- investigations (see <u>audiological assessment [See page 7]</u>, <u>psychoacoustic tests [See page 8]</u> and <u>imaging [See page 8]</u>)
- self-help and coping strategies (for example, self-help books and relaxation strategies)
- management options (see <u>management [See page 9]</u>)
- local and national support groups
- other sources of information.

#### When providing information:

- ensure it is available in appropriate formats such as verbal consultation, written information, leaflets and online in line with the <u>NICE Pathway on patient experience in adult NHS</u> services.
- take into account accessibility requirements for children, and people with hearing loss,

**Tinnitus** Page 3 of 15

cognitive impairment or visual impairment.

See the NICE guideline to find out <u>why we made these recommendations and how they might</u> <u>affect practice</u>.

NICE has written information for the public on tinnitus.

#### **Support**

At all stages of care:

- Discuss with the person with tinnitus, and their family members or carers if appropriate, their experience of tinnitus, including its impact and any concerns.
- Based on any identified needs, agree a management plan with the person, taking into account their preferences. The plan should include information about tinnitus and opportunities for discussion about different management options.
- Discuss with the person the results of any recent assessments and their impact on the management plan.
- With consent from the person or their parent or carer, as appropriate, share the management plan with relevant health, education and social care professionals.

For people with longstanding tinnitus who have delayed accessing care, aim to find out the reason for the delay and why they are accessing care now. This could involve, for example, asking questions about lifestyle factors or changes in health.

See the NICE guideline to find out why we made these recommendations and how they might affect practice.

## 3

#### When to refer

Refer immediately to a crisis mental health management team for assessment people who have tinnitus associated with a high risk of suicide. If needed, provide a safe place while waiting for the assessment.

Refer immediately, in line with the <u>NICE Pathway on suspected neurological conditions</u>, people with tinnitus associated with:

- sudden onset of significant neurological symptoms or signs (for example, facial weakness),
   or
- acute uncontrolled vestibular symptoms (for example, vertigo), or

**Tinnitus** Page 4 of 15

suspected stroke (follow a local stroke referral pathway). For information about diagnosis
and initial management of stroke, see the <u>NICE Pathway on stroke</u>.

Refer people to be seen within 24 hours, in line with <u>assessment and referral in the NICE Pathway on hearing loss</u> if they have tinnitus and have hearing loss that has developed suddenly (over a period of 3 days or less) in the past 30 days.

Recognise that assessment and management of the person's tinnitus may still need to continue following an immediate referral.

Refer people to be seen within 2 weeks for assessment and management if they have tinnitus associated with either of the following:

- Distress affecting mental wellbeing (for example, distress that prevents them carrying out their usual daily activities) even after receiving <u>tinnitus support [See page 12]</u> at first point of contact with a healthcare professional (see the recommendation on support in <u>providing</u> <u>information and support [See page 3]</u>). Refer in line with local pathways.
- Hearing loss that developed suddenly more than 30 days ago or rapidly worsening hearing loss (over a period of 4 to 90 days). Refer in line with <u>assessment and referral in the NICE</u> <u>Pathway on hearing loss</u>.

Refer people for tinnitus assessment and management in line with local pathways if they have any of the following:

- tinnitus that bothers them despite having received tinnitus support at first point of contact with a healthcare professional (see the recommendation on support in <u>providing information and support [See page 3]</u>).
- persistent objective tinnitus
- tinnitus associated with unilateral or asymmetric hearing loss.

Consider referring people for tinnitus assessment and management in line with local pathways if they have any of the following, in line with <u>assessment and referral in the NICE Pathway on hearing loss</u>:

- persistent pulsatile tinnitus
- persistent unilateral tinnitus

NICE has published a clinical knowledge summary on <u>tinnitus</u>. This practical resource is for primary care professionals (it is not formal NICE guidance).

**Tinnitus** Page 5 of 15

#### Rationale and impact

See the NICE guideline to find out <u>why we made these recommendations and how they might</u> <u>affect practice</u>.



## **Assessing the impact of tinnitus**

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

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

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

See the NICE guideline to find out <u>why we made these recommendations and how they might</u> affect practice.

#### Assessing how tinnitus affects quality of life

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

See the NICE guideline to find out <u>why we made this recommendation and how it might affect</u> <u>practice</u>.

#### Assessing how tinnitus affects sleep

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

See the NICE guideline to find out why we made this recommendation and how it might affect practice.

#### Assessing psychological impact

#### **Adults**

Be alert at all stages of care to the impact of tinnitus on mental health and wellbeing in adults. If

**Tinnitus** Page 6 of 15

there are concerns, follow the recommendations in the <u>NICE Pathway on common mental</u> health disorders in primary care.

Consider using the TQ or mini-TQ alongside the Tinnitus Functional Index in adults with tinnitus if further assessment of the psychological effects of tinnitus is needed.

If there are concerns about depression or anxiety in adults, a healthcare professional competent in mental health assessment should:

- carry out an assessment using a questionnaire, (for example, those in the recommendations on <u>assessment in the NICE Pathway on common mental health disorders in primary care</u>), or an ability-appropriate measure
- consider assessment using the Clinical Outcomes in Routine Evaluation Outcome Measure
- agree an action plan, if needed, in line with the recommendations on <u>assessment in the NICE Pathway on common mental health disorders in primary care</u>.

See the NICE guideline to find out <u>why we made these recommendations and how they might</u> <u>affect practice</u>.

#### Children and young people

Be alert at all stages of care to the behavioural and psychological wellbeing of all children and young people presenting with tinnitus. Talk to them, and their family members or carers if appropriate, about how they feel.

If there are concerns about depression in children and young people, follow the recommendations in the <u>NICE Pathway on depression in children and young people</u>.

See the NICE guideline to find out <u>why we made these recommendations and how they might</u> <u>affect practice</u>.

## 5

## **Audiological assessment**

Offer an audiological assessment to people with tinnitus. For recommendations on assessing and managing hearing loss in adults, see the <u>NICE Pathway on hearing loss</u>.

Consider tympanometry when middle-ear or Eustachian tube dysfunction, or other causes of conductive hearing loss contributing to tinnitus, are suspected.

**Tinnitus** Page 7 of 15

Do not offer acoustic reflex testing or ULL/LDL testing as part of an investigation of tinnitus.

Do not offer otoacoustic emissions tests as part of an investigation of tinnitus unless the tinnitus is accompanied by other symptoms and signs.

#### Rationale and impact

See the NICE guideline to find out <u>why we made these recommendations and how they might</u> affect practice.



## **Psychoacoustic tests**

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

See the NICE guideline to find out <u>why we made this recommendation and how it might affect</u> practice.



## **Imaging**

#### Non-pulsatile tinnitus

Offer MRI of IAM to people with non-pulsatile tinnitus who have associated neurological, otological or head and neck signs and symptoms. If they are unable to have MRI (IAM), offer contrast-enhanced CT (IAM).

Consider MRI (IAM) for people with unilateral or asymmetrical non-pulsatile tinnitus who have no associated neurological, audiological, otological or head and neck signs and symptoms. If they are unable to have MRI (IAM), consider contrast-enhanced CT (IAM).

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

See the NICE guideline to find out <u>why we made these recommendations and how they might</u> <u>affect practice</u>.

#### **Pulsatile tinnitus**

Offer imaging to people with pulsatile tinnitus.

**Tinnitus** Page 8 of 15

- For people with synchronous pulsatile tinnitus, consider:
  - magnetic resonance angiogram or MRI of head, neck, temporal bone and IAM if clinical examination and audiological assessment are normal, or contrastenhanced CT of head, neck, temporal bone and IAM if they cannot have magnetic resonance angiogram or MRI
  - contrast-enhanced CT of temporal bone if an osseous or middle-ear abnormality is suspected (for example, glomus tumour), followed by MRI if further investigation of soft tissue is required.
- For people with non-synchronous pulsatile tinnitus (for example, caused by palatal myoclonus) consider MRI of the head, or if they cannot have MRI, contrast-enhanced CT of the head.

See the NICE guideline to find out <u>why we made this recommendation and how it might affect</u> <u>practice</u>.

8

## Management

Also see providing information and support [See page 3].

#### **Amplification devices**

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 <u>management in audiology services and secondary care in the NICE Pathway on hearing loss</u>.

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

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

See the NICE guideline to find out <u>why we made these recommendations and how they might</u> <u>affect practice</u>.

#### Sound therapy

We were unable to make recommendations for practice in this area.

See the NICE guideline to find out <u>why we were unable to make recommendations on sound therapy</u>.

**Tinnitus** Page 9 of 15

#### Psychological therapies for tinnitus-related distress

Consider a stepped approach to treat tinnitus-related distress in adults whose tinnitus is still causing an impact on their emotional and social wellbeing, and day-to-day activities, despite having received tinnitus support [See page 12]. If a person does not benefit from the first psychological intervention they try or declines an intervention, offer an intervention from the next step in the following order:

- digital tinnitus-related cognitive behavioural therapy [See page 12] provided by psychologists
- group-based tinnitus-related psychological interventions including mindfulness-based cognitive therapy (delivered by appropriately trained and supervised practitioners), ACT or CBT (delivered by psychologists)
- individual tinnitus-related CBT (delivered by psychologists).

See the NICE guideline to find out <u>why we made this recommendation and how it might affect practice</u>.

#### **Betahistine**

Do not offer betahistine to treat tinnitus.

See the NICE guideline to find out <u>why we made this recommendation and how it might affect</u> <u>practice</u>.

#### Combining therapies

We were unable to make recommendations for practice in this area.

See the NICE guideline to find out <u>why we were unable to make recommendations on</u> combining therapies.

#### Neuromodulation

We were unable to make recommendations for practice in this area.

See the NICE guideline to find out why we were unable to make recommendations on neuromodulation.

NICE has published a medtech innovation briefing on <u>Acoustic CR Neuromodulation for adults</u> with chronic subjective tonal tinnitus.

**Tinnitus** Page 10 of 15

9

## Adults with tinnitus and hearing loss

Tinnitus and hearing loss can co-exist. For adults with tinnitus and hearing loss this NICE Pathway should be read together with the <u>NICE Pathway on hearing loss</u>.

**Tinnitus** Page 11 of 15

Digital CBT is a form of CBT delivered using digital technology, such as a computer, tablet or phone. Common components of digital tinnitus-related CBT are similar to those used in face-to-face CBT (for example, positive imagery and learning to identify and challenge unhelpful thoughts). People using digital CBT are more likely to have less direct contact with healthcare professionals during the intervention compared with face-to-face interventions.

Tinnitus support is a term used to describe a session that includes a two-way process of information-giving and discussion to help the healthcare professional understand the difficulties and goals of the person with tinnitus. This discussion occurs between the person with tinnitus, and their family members or carers if appropriate, and the healthcare professional. A management plan is also jointly developed and the person is supported to continue with the plan or modify it as necessary. This process is sometimes known as tinnitus counselling.

## **Glossary**

#### **ACT**

acceptance and commitment therapy

#### **CBT**

cognitive behavioural therapy

#### IAM

internal auditory meati

#### LDL

loudness discomfort levels

#### objective tinnitus

(tinnitus that occurs as a result of noise generated in the ear that can be detected by the examiner; it is less common than subjective tinnitus)

#### refer immediately

(to be seen by the specialist service within a few hours, or even more quickly if necessary)

**Tinnitus** Page 12 of 15

#### tinnitus-related distress

(tinnitus that is having an impact on emotional and social wellbeing and day-to-day activities)

#### TQ

tinnitus questionnaire

#### ULL

uncomfortable loudness levels

#### **Sources**

Tinnitus: assessment and management (2020) NICE guideline NG155

## Your responsibility

#### Guidelines

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable

**Tinnitus** Page 13 of 15

health and care system and should <u>assess and reduce the environmental impact of implementing NICE recommendations</u> wherever possible.

#### **Technology appraisals**

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, health professionals are expected to take these recommendations fully into account, alongside the individual needs, preferences and values of their patients. The application of the recommendations in this interactive flowchart is at the discretion of health professionals and their individual patients and do not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

Commissioners and/or providers have a responsibility to provide the funding required to enable the recommendations to be applied when individual health professionals and their patients wish to use it, in accordance with the NHS Constitution. They should do so in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should <u>assess and reduce the environmental impact of implementing NICE recommendations</u> wherever possible.

# Medical technologies guidance, diagnostics guidance and interventional procedures guidance

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, healthcare professionals are expected to take these recommendations fully into account. However, the interactive flowchart does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Commissioners and/or providers have a responsibility to implement the recommendations, in their local context, in light of their duties to have due regard to the need to eliminate unlawful

**Tinnitus** Page 14 of 15

discrimination, advance equality of opportunity, and foster good relations. Nothing in this interactive flowchart should be interpreted in a way that would be inconsistent with compliance with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should <u>assess and reduce the environmental impact of implementing NICE recommendations</u> wherever possible.

**Tinnitus** Page 15 of 15