The Newcastle upon Tyne Hospitals
NHS Foundation Trust

Experience in Audiology with a patient informed choice pathway for MRI requests

Phil Lindsey (Audiology), Kerri McArdle (Audiology), David Hamilton (ENT,) Nick Dawe (ENT), Joanne Dixon (Radiology)

Background/summary

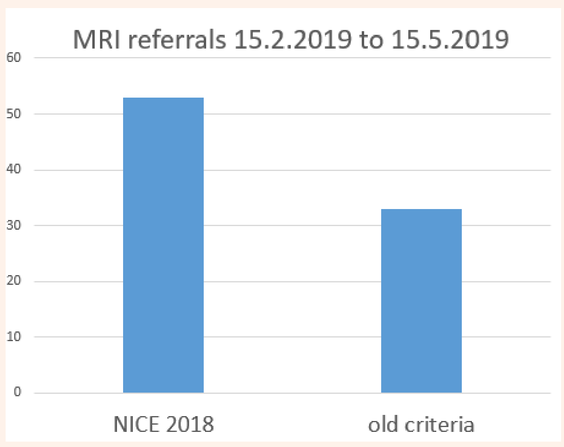
- The NICE 2019 guidance for managing hearing adult hearing loss tightened up criteria for MRI referrals and the consequent increase in referral rate was raised as a concern by Radiology. Audit indicated a striking 60% increase in Audiology referral numbers.
- Discussions between Audiology and ENT came to a consensus that MRI requests were suitable for an informed choice pathway . The MRI scan is looking for a rare condition which even when found most often leads to conservative management. The scan can show up incidental findings, most commonly age related brain changes which the patient might not necessarily want to know about.

(If it was your family member what would you want?)

- Patient information to facilitate an informed choice pathway was developed jointly with input from Radiology and with patient feedback.
- Radiology have been very supportive and the pathway aligns well with their national 'Get It Right First time' (GIRFT) initiative. ENT/Audiology requests make up the largest number for any directorate within this Trust. Using an informed choice pathway ensures that patients who proceed to a scan actually really understand and want it. This frees up finite scanning resources for other patients/ conditions.

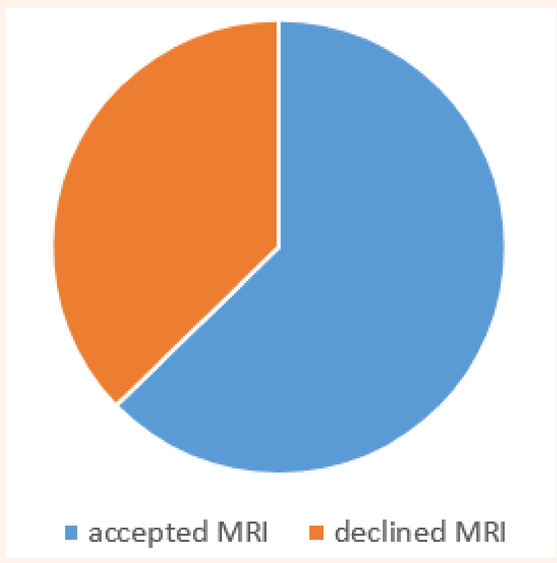
Historic Increasing MRI referrals

- The 2018 NICE guideline for managing adult hearing loss tightened up the criteria for cochlear asymmetry to >=15dB at any two adjacent test frequencies (0.5, 1, 2, 4 and in addition including 8kHz)
- Over 3 months all Audiology MRI referrals using the NICE criteria were reviewed against the previous more lax criteria (>=20dBHL at two adjacent frequencies) There was a 60% increase!



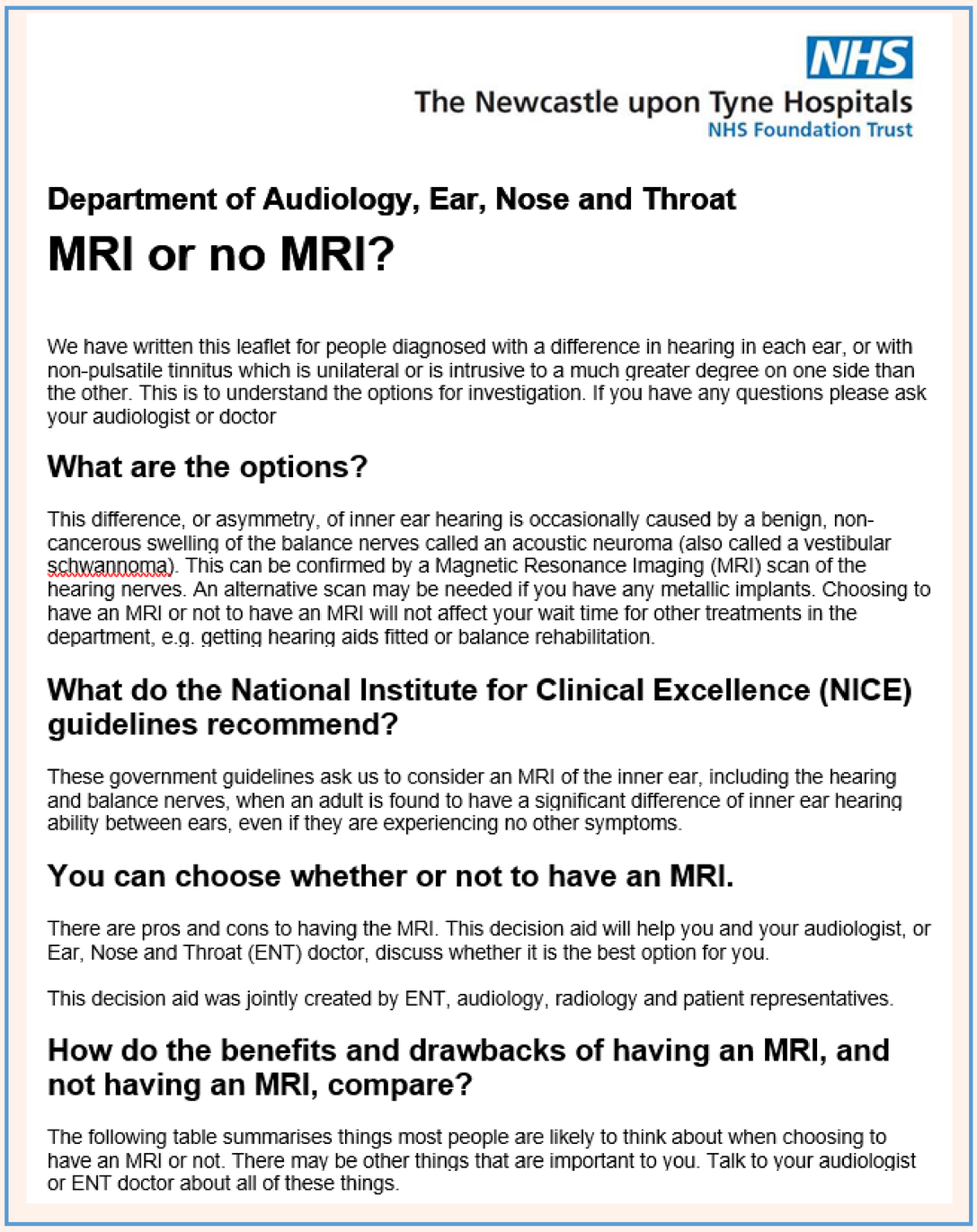
Referral numbers for MRI following introduction of the patient informed choice pathway

- Over an 18 month period 523 patients with asymmetrical SNHL followed the pathway and 185 patients declined the scan (35%).
- Over a 12 month period 253 patients with unilateral non-pulsatile tinnitus followed the pathway and 86 patients declined the scan (34%).



Developing the patient information

- Initial draft based on other NHS informed choice information (managing skin melanoma)
- Discussion and feedback incorporated from ENT, Audiology and Radiology colleagues
- Feedback sought from patients by questionnaire



The Newcastle upon Tyne Hospitals
NHS Foundation Trust

Department of Audiology, Ear, Nose and Throat

MRI or no MRI?

We have written this leaflet for people diagnosed with a difference in hearing in each ear, or with non-pulsatile tinnitus which is unilateral or is intrusive to a much greater degree on one side than the other. This is to understand the options for investigation. If you have any questions please ask your audiologist or doctor

What are the options?

This difference, or asymmetry, of inner ear hearing is occasionally caused by a benign, non-cancerous swelling of the balance nerves called an acoustic neuroma (also called a vestibular schwannoma). This can be confirmed by a Magnetic Resonance Imaging (MRI) scan of the hearing nerves. An alternative scan may be needed if you have any metallic implants. Choosing to have an MRI or not to have an MRI will not affect your wait time for other treatments in the department, e.g. getting hearing aids fitted or balance rehabilitation.

What do the National Institute for Clinical Excellence (NICE) guidelines recommend?

These government guidelines ask us to consider an MRI of the inner ear, including the hearing and balance nerves, when an adult is found to have a significant difference of inner ear hearing ability between ears, even if they are experiencing no other symptoms.

You can choose whether or not to have an MRI.

There are pros and cons to having the MRI. This decision aid will help you and your audiologist, or Ear, Nose and Throat (ENT) doctor, discuss whether it is the best option for you.

This decision aid was jointly created by ENT, audiology, radiology and patient representatives.

How do the benefits and drawbacks of having an MRI, and not having an MRI, compare?

The following table summarises things most people are likely to think about when choosing to have an MRI or not. There may be other things that are important to you. Talk to your audiologist or ENT doctor about all of these things.

Audiologist Script:

- The hearing test results show a difference between your two ears which meets the criteria for referral for an MRI scan to investigate what may be causing the difference in hearing
- There are advantages as well as disadvantages to having an MRI scan investigation. We therefore are not automatically arranging a scan but instead are asking you to consider whether you really want it
- We are giving you some written information about the pros and cons of having a scan to take home and consider, and you might want to discuss this with other family members.

Patient feedback on first draft

- 'I think people are quite frightened of having an MRI and it might be worth pointing out that there is someone with them all the time'
- 'I do not understand the phrase *asymmetrical hearing loss*'
- 'Information provided seems clear and concise - this information would have led me to not have the scan'

Patient feedback on the pathway

- 9/9 stated they preferred the informed choice pathway compared to the clinician deciding on their behalf
- 8/9 stated that the written information was clear
- 4/9 stated that they liked to have both the written information and verbal advice. 4/9 preferred written information only and 1/9 preferred verbal information.