

INTRODUCING AUDIOLOGIST LED REFERRALS FOR MRI SCANS OF THE IAM



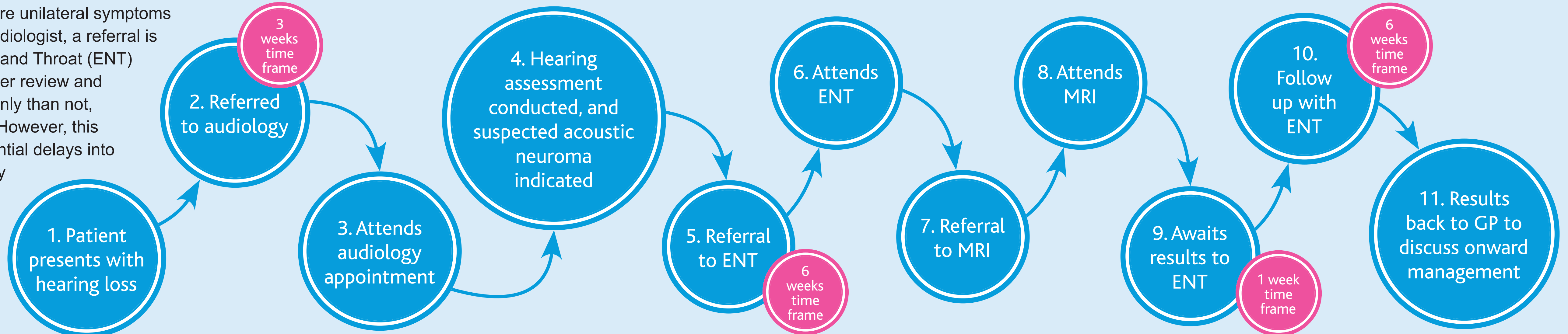
Background

Magnetic resonance imaging (MRI) of the cerebellar pontine angle (CPA) for suspected vestibular schwannoma (acoustic neuroma) is long established and forms part of the NICE guidance on the management and assessment of hearing loss in adults¹.

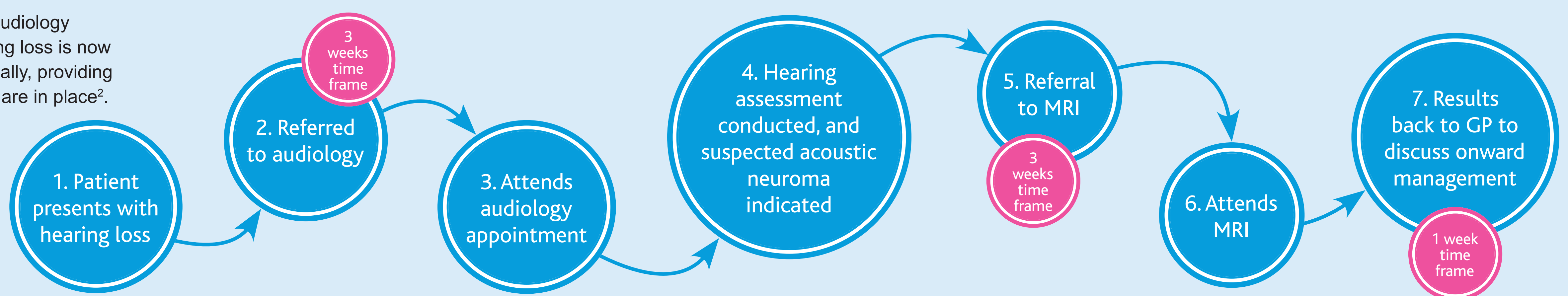
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Traditionally, where unilateral symptoms are found by an audiologist, a referral is made to Ear Nose and Throat (ENT) specialists for further review and then, more commonly than not, a referral for MRI. However, this process adds potential delays into the patient pathway between referral to ENT, on to MRI, and then back to ENT.



Direct referral to MRI scan from audiology departments with suspected hearing loss is now becoming standard practice nationally, providing appropriate training and pathways are in place². This has the potential to shorten diagnostic pathways for patients and avoid unnecessary ENT referrals, and further support patient management within the community setting without having to add to demand for already stretched hospital services.



The use of non-medical referrers for radiology investigation is becoming a more common method as part of delivering new and innovative service models. Audiologist led MRI direct referrals bring a variety of benefits to the healthcare system – table 1.

Clinical benefits	Operational benefits	Financial benefits
<ul style="list-style-type: none"> reduced patient anxiety shorter rehabilitation time quicker interventions improved patient experience better reporting for GP – audio-imaging outcome 	<ul style="list-style-type: none"> shorter waiting times better appointment utilisation less referrals made to hospital direct access to MRI 	<ul style="list-style-type: none"> elimination of two medical professionals (ENT and GP) unless relevant abnormal results are detected save ENT time cost effective to CCGs

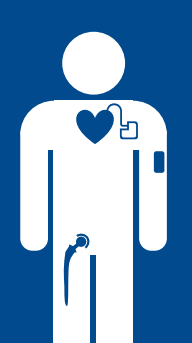
Table 1: perceived benefits of audiology led referrals

Training

To support referral appropriateness and management of outcomes to assure patient safety, an internal standard operating procedure was compiled which was underpinned by some essential training. Training was developed and delivered internally by the clinical leads for audiology and MRI.

- An appreciation of the pathophysiology of Vestibular Schwannoma
- Awareness of how MRI works and its related safety considerations when referring patients
- Understand the management of risk through the referral process
- Understand how the referral pathway works and the clinical indications for scan
- Recognise common terminology used in radiological reports
- Understand the management of report outcomes and onwards referral processes
- Understand the required documentation and audit to ensure safe practice

Table 2: Intended Learning Outcomes



SAFETY

- Does the patient have any biomedical implant in situ?
- Does the patient have any medical devices attached to their body?



TOLERANCE

- Does the patient have sensitivity to loud noises or a pre-existing hearing condition, such as tinnitus?
- Can the patient lie relatively flat for extended periods of time?
- Does the patient suffer from scan related anxiety or possible claustrophobia?



OBSERVATIONS

- Is sufficient clinical information provided on the referral form?
- A recent eGFR blood test result may be required for some patients.



PHYSICAL CONDITION

- Does the patient speak sufficient English to understand, or is an interpreter needed?
- Can your patient actually lie flat – are they kyphotic?
- Is the patient significantly large and overweight?
- How mobile is the patient – are they in a wheelchair?
- For female patients of child bearing age – any chance of pregnancy?

Figure 1: Internal referral guidance for MRI: STOP³

Referral criteria

Sensory Hearing Loss (Circle as appropriate)	Tinnitus (Circle as appropriate)
>15dB over 2 or more consecutive frequencies at octave intervals between 250Hz to 8Khz.	Non-pulsating tinnitus.
Yes / No Right / Left Asymmetric / Unilateral	Yes / No Right / Left / Central

Managing Report Outcomes

With only a small proportion of MRI scans showing a positive finding for acoustic neuroma, perhaps more important in the training was awareness and understanding around incidental findings that would show on an MRI. These are commonly unrelated to the clinical presentation and may or may not warrant further investigation³.

Therefore, time was spent explaining the structure and content of radiological reports to the non-medical referrers so that it was clear what onward management for the patient was required, in particular where unrelated findings were noted.

In line with RCR guidance⁴, the usual format should include;

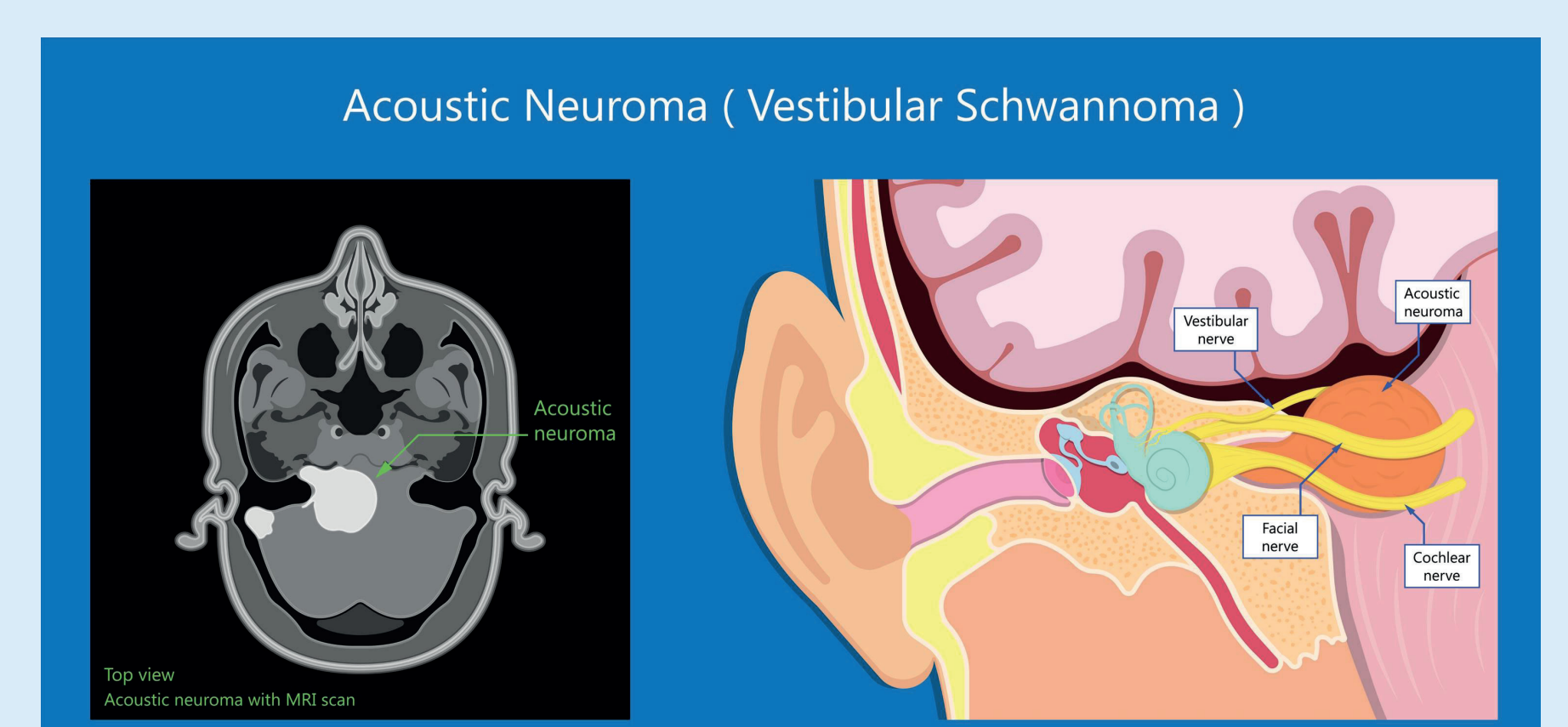
- Clinical details
- Description of findings
- Conclusion or summary of findings
- Advice on next steps for management

'The report should be actionable and should therefore convey a knowledgeable and reasoned assessment of the examination and its contribution to the overall management of the patient.'

Conclusion

As the new pathway beds in a review of all patients referred by audiologists will be conducted to look at its effectiveness in their management, as well as review suitability for referral and ensure correct management of patients from their radiological findings.

It is hoped that implementation of the new pathway will demonstrate the benefits outlined and lead to wider implementation across community-based sites supporting workload for clinical commissioning groups.



References

- NICE (2018) Hearing Loss in Adults: Assessment and Management.
- British Association of Audiology (2019) Guidance on Referral for MRI by Audiologists
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