AUDIOLOGY – SOP: Aud15
Non-medical referrals from Adult Audiology for MRI following Direct Referrals from GPs

Policy Number:	Aud15 v1.0	Supersedes:	NA	Classification	Clinical

Version No		Approved by:	Date of Approval:	Date made Active:	Review Date:
V1.0		• Audiology Senior Team • ENT Consultant body • Radiology Safety Committee (approved 24.04.2021)	April 2021	October 2022 (*following Entitlement letters)*	April 2022

Brief Summary of Document:	The document provides guidance for Audiologists working for Hywel Dda University Health Board (HDUHB) when undertaking Direct Referral, Re-assessment appointments or Tinnitus assessments.
Scope:	This standard operating procedure (SOP) applies to all qualified Audiology healthcare professionals (substantive and fixed-term staff, trainee or locum) involved in conducting Direct Referral, Re-assessment appointments and Tinnitus assessments. This document is required in order to reduce the risks associated with missed onward referrals by standardising best practice for all practitioners to follow. Inclusions: Adult population Exclusions: Children under 18 years of age Competency - Staff are required to ensure that they are competent to perform the appointment type and should not exceed their scope of practice. Compliance is monitored though: • Professional body qualifications • Clinical observations / peer reviews • Clinical reflection • HDUHB e-learning modules

To be read in conjunction with:	**HDUHB Policies:** 008 - Consent to Examination of Treatment Policy 149 – Hand Hygiene Policy 232 - Control of the Environment/Environmental Cleanliness Policy 354 - Standard Infection Prevention and Control Precautions (SICPs) Policy 374 - Mental Capacity Act 2005 Policy 467 - Medical Device Management Policy Any documentation relating to working during the COVID-19 era **British Academy of Audiology practice guidance:** • Guidance for Primary Care: Direct referral of adults with hearing difficulty to Audiology services. (*Review: November 2021)* • Guidance for Audiologists: Onward referral of adults with hearing difficulty directly referred to Audiology services. *(Review: November 2121)* • Guidance on identifying non-routine cases of hearing loss in adults. *(Review: pending).* **British Society of Audiology recommended procedures:** • Pure-tone air-conduction and bone-conduction thresholds audiometry with and without masking. *(Review August 2023)* • Common principles of rehabilitation for adults in Audiology service. *(Review: October 2121)* **Other:** • Audiology SOP: Aud2 - Direct Referrals • Audiology SOP: Aud6 – Re-assessments • ENTUK Guidelines for changes in ENT during COVID-19 Pandemic (March 2020) • NICE - Hearing loss in adults: assessment and management (June 2018) • Audiologist-led screening of acoustic neuromas in patients with asymmetrical sensorineural hearing loss and/or unilateral tinnitus: our experience in 1126 patients. Y Abbas, G Smith & A Trinidade. The Journal of Laryngology and Otology (2018) • Incidence of vestibular schwannoma and incidental findings on the magnetic resonance imaging and computed tomography scans of patients from a direct referral audiology clinic. W Wong & R Capper. J Laryngol Otol 2012;126:658–62.

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Owning Committee/ Group	The Senior Audiology Team (SAT) – Adults

Location:	S:drive

Reviews and updates		
Version no:	Summary of Amendments:	Date Approved:

1.0	New Policy	24.04.21 - Radiology
1.1	Wording amended through policy for clarity	03.10.2022

1. Aim:
This document provides information for all clinical staff of HDUHB Audiology Services. The document is intended to provide guidance for clinical staff when undertaking Direct Referrals, Re-assessments or Tinnitus appointment which result in the patient requiring further investigations to exclude the presence of an acoustic neuroma or other pathology within the cerebellopontine angle

2. Background:
Acoustic neuromas (Vestibular Schwannomas) are benign Schwann cell tumours that typically arise from the vestibular portion of the eighth cranial nerve. The acoustic neuroma is the most common tumour of the cerebellopontine angle. The most common symptoms of an acoustic neuroma, or other pathology within the cerebellopontine angle, are:

1) Asymmetrical sensorineural hearing loss (SNHL) (90%)
2) Unilateral tinnitus (70%)

However, other symptoms include:

- Dizziness
- Facial weakness, numbness or tingling on one side of the face
- Aural fullness

Traditionally patients seen directly in Audiology who presented with unilateral auditory symptoms were referred to the ENT Department to discuss the option of an MRI scan to exclude the remote possibility of an acoustic neuroma. A magnetic resonance imaging (MRI) scan of the internal auditory meatus (IAM) is the diagnostic 'gold standard' investigation. Quoted figures in the literature give a worldwide prevalence of 0.02–4.3 per cent and an incidence of approximately 20 million per year.

In 2009/2010 a Welsh Government Focus on ENT Forum was set up to discuss ways to make the pathways within ENT more efficient. ENT Consultants, Audiologists, ENT nurses, Radiologists and Hospital Managers developed and agreed a new "Adult Hearing Loss Pathway". Included in the pathway was non-medical direct referral of patients for MRI scanning by Audiologists. Following a study by Wong and Capper, the audiology-led screening of patients was found to be a safe practice.

This protocol is required in order for Audiology to refer patients with unilateral or asymmetric auditory symptoms directly to Radiology for MRI scans, rather than referring first to ENT services. This will contribute to reducing the extra waiting time on the ENT waiting list and the overall footfall within ENT. There would be no change in the numbers of referrals as currently patients in this category are already referred for MRI scans from ENT outpatient clinics.

3. Scope:
Any Band 5 (or above) Audiologist can submit a request to a Band 7 (or above) for an MRI. Currently approved staff are Jane Deans. Andrew Grant and Nigel Davies. The Band 7 (or above) Audiologist have been trained and assessed as competent to request approval for the radiological procedures stated in this SOP. Those staff acting under this protocol will be Band 7 or above and registered with the Registration Council for Clinical Physiologists (RCCP) or the Health and Care Professions Council (HCPC).

3.1 Training:
Staff need to have completed for following e-IRMER modules on ESR

- 000 e- IRMER Module 00 – Guide and Tools.
- 000 e- IRMER Module 01 - Fundamental Physics of Radiation.
- 000 e-IRMER Module 03 – Legal Requirements.
- 000 Image Interpretation: Technology: Magnetic Resonance Imaging

Staff must then submit their certificates and an application for 'non-medical referral status' to Radiology and be in receipt of an 'entitlement letter'.

4. Medico-Legal Responsibility:

The medico-legal responsibility for the delegation of Audiologists requesting MRI IAM investigations lies with the HDUHB ENT service.

Audiologists must work within the SOP that has been agreed with the ENT and Radiology Teams and within their own scope of professional conduct.

5. Script to follow when discussing the need for an MRI scan:

The following is suggested as a basic script for staff to use when discussing the need for an MRI with a patient:

"As there is a difference between your ears, we would like to investigate this further by referring you for an MRI scan of your ears. The MRI scan will look at your hearing nerve to see if there is any reason for your symptoms. The MRI scan appointment slot is typically 30 minutes in duration. This is part of our protocol, would you be happy for me to refer you?"

Should your patient ask what the scan is looking for, consider saying:

"The scan is looking for a small benign tumour (this is not cancerous) along your hearing nerve. These are very slow growing and quite rare with it occurring less than 1% in the population who present with symptoms similar to yours."

6. Referral Process:

- Any patient who is referred for an MRI must have tympanometry preformed and the results clearly documented in AuditBase.
- Patients who are identified as requiring an MRI scan of their IAMs as part of their assessment will be referred to Radiology via a request form completed by a non-medical referring Band 7+ Audiologist.
- All areas of the request form must be completed fully and accurately by the Band 7+ Audiologist.
- It is the original Audiologist's responsibility to ensure patient's AuditBase journal is a true reflection of the appointment, and that an appointment report is sent to the GP (cc'ed to the patient if requested) and the patient's Individual Management Plan (IMP) records that a MRI has been requested.
- Should the patient make an informed decision to decline an MRI referral this must be recorded in AuditBase and in the appointment report to the patient (cc'ed to the GP) and the patient's IMP.
- The patient will attend their nearest Radiology department once an appointment has been made via the Radiology booking service (RADIS). This process also records the booking on Welsh PAS.
- The non-medical referring Audiologist must inform the patient of any changes of pathway via telephone or letter. This must be documented in AuditBase.

7. Patient Inclusion / Exclusion criteria for MRI:

MRI IAM may only be requested when the clinical condition meets the following criteria and the result of either a positive or negative scan will alter the patient management.

Patients must be involved in the adult hearing loss pathway and fulfil the criteria for unilateral auditory symptoms:

7.1: Inclusion:

- Unilateral or asymmetrical hearing loss as indicated by a difference in the left and right bone conduction thresholds of 15dB or greater at two of the following frequencies over 500, 1000, 2000 and 4000 Hz.
- Unilateral non pulsatile tinnitus within the last 90 days which lasts longer than 5 minutes at a time.
- If a previous audiogram is available (i.e. from a private provider or different NHS Audiology department)– a deterioration in hearing is noted. When compared to an existing audiogram taken in the last 24 months, a deterioration of 15dB or more in air conduction threshold readings at two or more of the following frequencies: 500, 1000, 2000 or 4000 Hz is recorded

7.2: Exclusion criteria

- Patients with pulsatile tinnitus or the Meniere's symptom triad. These patients should be referred to an ENT Doctor for assessment as per SOP: Aud:1

8. MRI Referral Considerations:

Pacemakers

- Some pacemakers are suitable for MRI investigation. Patients with pacemakers must be informed that they may not be suitable for an MRI scan. These patients will be discuss with an ENT Consultant prior to a Radiology request being completed.

Claustrophobia/ Patients' weight

- Patients who are claustrophobic or have a large body mass index should be referred as normal and highlighted on the referral form.
- There is a larger MRI scanner available, which may be used for these patients (discretion of Radiology triage).
- In some cases a CT scan will performed as an alternative to MRI (discretion of Radiology). Audiology cannot refer or request a CT scan.

Pregnancy

- Patients who are pregnant should be referred as normal and highlighted on the referral form.
- Patients who are under 12 weeks pregnant will have to wait until the second trimester for any MRI investigation.
- The potential risks of scanning while pregnant will be discussed by Radiology.
- Any patients, who cannot be scanned while pregnant, will have the procedure once the baby is born. Radiology will advise the patient of this and keep the referral request until the appropriate month.

Contraindications

- All patients who are referred for an MRI will be required to complete a MRI safety questionnaire. This will be posted out to patients with the appointment letter. It will also be reviewed when the patient attends for their MRI.
- Should a patient answer 'yes' to any questions they are required to contact the Scanning Department as they may not be suitable for the MRI scan.
- The Radiographer will ultimately decide whether the patient may proceed with the MRI investigations or not.
- If the Radiographer feels the patient cannot proceed with the MRI this will be recorded on Welsh PAS and the request form returned to the Head of Audiology with the given reason.

Audiology will then refer onto ENT stating that the patient is not suitable for MRI investigations and why.

9. Results: *(see process flowchart)*

- All results will be sent to the Head of Audiology.
- If results are normal (i.e. not additional incidental findings) the Head of Audiology will send a standard letter to the patient (cc GP) to advise that the MRI scan showed no evidence of an acoustic neuroma.
- If scanning indicates any abnormal/incidental findings the Head of Audiology will discuss the results with an ENT Consultant who will be responsible for ensuring that any scans which indicate otological findings are acted upon.
- Any scans that show non-otological incidental findings will be communicated back to the patient's GP for appropriate further management.
- For each patient who has been referred the monitoring spreadsheet will be updated by the Head of Service.

Patients who fail to attend for their MRI will be recorded as 'did not attend' on Welsh PAS. This will automatically generate a non-attendance letter which will be sent to the GP.

10. Audit:

Audit is an essential part of evaluation of roles not previously undertaken by any professional.
The purpose of audits carried out will be to check that:

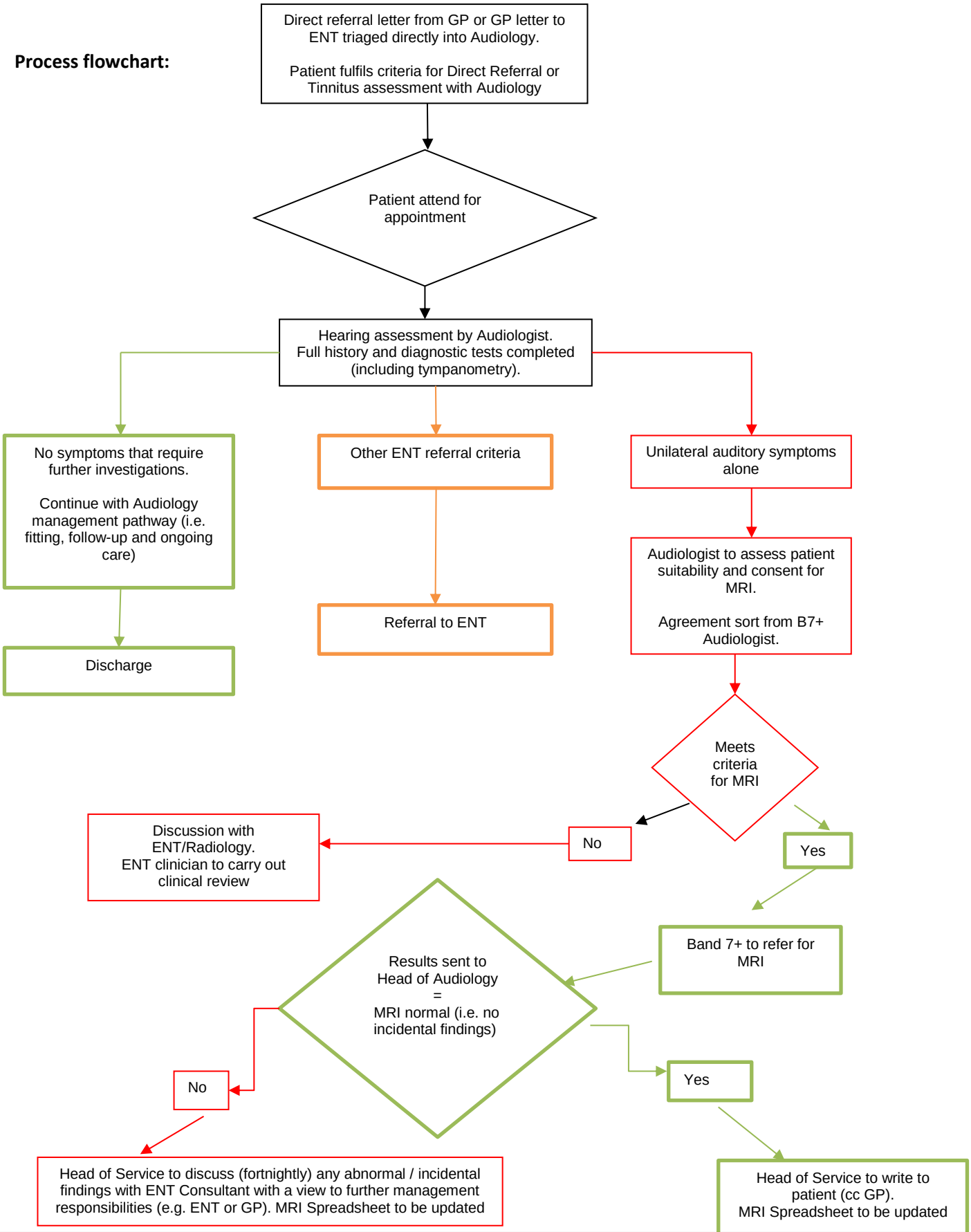
- Audiology staff are adhering to the MRI SOP
- Patients referred fulfil the BAA/NICE criteria for referral for MRI
- GPs are notified by letter of the discussion and decision to refer for MRI scan
- Patients and GPs are notified of scan results by letter in cases of no acoustic neuroma
- Patients with acoustic neuroma are seen by ENT

A record of requests made should be kept by Audiology and a sample of the request form and patient outcome should be evaluated to ascertain any problems with the referral process.
Results of the audit should be presented to the appropriate forums.

11. Dissemination/Circulation/Archiving

This document will be kept on the S:/drive under protocols

Process flowchart:



Unilateral Auditory symptoms:
Unilateral or asymmetrical hearing loss as indicated by a difference in the left and right **bone conduction** thresholds of 15dB or greater at **two** of the following frequencies over 500, 1000, 2000 and 4000 Hz.
Unilateral non pulsatile tinnitus within the last 90 days which lasts longer than 5 minutes at a time.
Ref: British Academy of Audiology Service Quality Committee, Referral Guidelines to Audiology for Adults with Hearing Difficulty v 7.0 22/09/07

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