Guidelines for GP Referral for Adult Routine MRI

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These Guidelines will be reviewed annually as a minimum
Document Title: Guidelines for GP Referral for Adult Routine MRI

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1 INTRODUCTION AND GENERAL GUIDELINES

These guidelines are only intended for routine investigations requested by General Practice. Issues that are clearly acute or need consultant referral are outside the scope of this guideline. In line with continuous improvements, these guidelines will be subject to ongoing review with referring clinicians.

Please ensure that no patient is referred for an MRI with an absolute contra-indication. Any patient who you feel might fall within one of the ‘caution’ areas needs to have a warning clearly highlighted on the referral. Any safe-guarding issues must also be clearly indicated.

All requests must be made via an appropriate electronic referral system agreed by the CCG. As a minimum referrals should be sent by secure email. Providers are expected to aim to be connected to the e-Referral system (directly or indirectly bookable) or an appropriate electronic referral system at the earliest opportunity.

2 SCOPE OF THE POLICY

2.1 PRIOR TO REFERRAL

Regardless of the pathway available to referring clinicians, any MRI investigation should have an outcome that will affect patient management, and whilst MRI does not carry any radiation risk, it is advised that the following principles are applied to all referrals:

- Has it been done already (perhaps at another site)?
- Is it needed – will management change?
- Is it needed now – could the clinically suspected condition resolve?
- Is this the best test – would another modality be of equal or more clinical benefit?
- Has the problem been explained? (see below)

Direct consultation between GP and Radiologist for every referral would be impractical and time-consuming, and also defeats the benefits of direct access pathways. However, the benefit of this approach for individual cases should not be dismissed. Given the nature of direct access pathways, it is crucial that the MRI referral is considered in the same way as a request for consultation and that relevant clinical information is provided. This is of vital importance to not only ensure the patient derives the benefit of the pathway, but that the analysis of the imaging and subsequent report content actually answers the clinical reason for referral. Clear and relevant clinical information will ensure that the Radiology report not only provides a diagnosis, but can offer appropriate advice as to the most suitable next
step in the patient pathway, such as urgent onward referral to a particular specialty or no further action required.

2.2 CONTRAINDICATIONS TO MRI

Absolute contraindications:

- Pacemaker (also see below for guidance on MRI compatible Pacemakers at MYNHST)
- Intracerebral vascular clips (e.g.: following aneurysm surgery) – policy of both MRI providers is for patients in this group to be scanned at a specialist Neuro centre should haemorrhage occur. Some clips are classified as compatible for MRI, but there have been cases of “safe” clips being deflected in magnetic fields, especially with repeat scanning episodes.
- Neuro-stimulators
- Surgical clips (for 8-12 weeks post operation)
- Cochlear implants
- Implanted drug infusion pumps
- Ocular implants – unless proven not to contain ferrous components
- Penile implants

Cautions:

- Patients must have the ability to be motionless for the duration of the scan.
- Programmable hydrocephalus shunts
- Intra-orbital foreign bodies
- Metallic implants – prosthetic joints, shrapnel etc...
- Artificial limbs, calipers
- Artificial heart valves – many are safe to scan, but must be identified prior to scanning.
- Residual pacemaker wires
- Cardiac stents – delay scanning for 8-12 weeks post insertion.
- Compromised renal function – in cases where contrast agent is required. Please supply a GFR if available.
- Claustrophobia
- Physical patient size – MRI scanners have a weight limit of 125kg and a magnet bore size of approx 60cm. Please liaise with the MRI unit directly if concerned.
- First, second and third trimester of pregnancy needs discussion and should ideally wait until post-partum unless justifiable clinical need due to maternal safety concerns.
- Pacemakers (MRI Compatible) – some MRI compatible pacemakers are now being implanted. If the patient has an MRI compatible pacemaker an MRI is possible at MYNHST but needs clarification with Cardiology. This MUST be indicated in the requesting information.
• Patients who have had surgery – do not scan until 7 weeks post-surgery. If a scan is thought to be required this need discussion with a Consultant Radiologist

2.3 URGENT REFERRALS

REFERRAL FOR MRI MUST NEVER DELAY URGENT OR EMERGENCY REFERRAL FOR SPECIALIST CARE WHEN THIS IS CLINICALLY INDICATED

If there is any suspicion of a cancer the patient should be referred immediately to the Trust on the 2 week wait cancer pathway.

2.4 SPECIFIC INDICATIONS

Direct access referrals for MRI can only be accepted for the conditions listed below or where a consultant radiologist has recommended an MRI as a follow up investigation to another direct access diagnostic test. If unsure whether the request fulfils the requirements please discuss with a consultant radiologist.

In other clinical situations where referral for specialist care is indicated, an MRI will normally be requested by the specialist.

There are also evidence based guidelines on how to best use Radiology resources at [http://www.irefer.org.uk/](http://www.irefer.org.uk/) and where these are accessible they should be used.

If you cannot access the evidence based guidelines referred to in the link above, please refer to the table below which sets out the current recommended list of indications for GP direct access MRI requests. The list is open to continual review and refinement to reflect changes in management, pathway structure, and the availability of local radiological expertise.

<table>
<thead>
<tr>
<th>Body Area</th>
<th>Typical Clinical Indications</th>
<th>Benefit of MRI</th>
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<tbody>
<tr>
<td>Cervical, Thoracic and Lumbar Spine</td>
<td>• Acute neck pain.</td>
<td>• Detailed assessment of cord and discs</td>
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<tr>
<td></td>
<td>• Positive neurological signs</td>
<td>• Accurately demonstrates canal stenosis, prolapsed IV disc, cauda equina pathology, nerve root compression, MS lesions.</td>
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<tr>
<td></td>
<td>• Acute mid-back pain (no trauma)</td>
<td></td>
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<tr>
<td></td>
<td>• Acute/chronic low back pain</td>
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<tr>
<td></td>
<td>• Signs/symptoms of MS.</td>
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<tr>
<td>Head (including Internal Auditory Meatus)</td>
<td>• Chronic headache of increasing frequency, affecting sleep, affecting coordination, dizziness, exacerbated by coughing, sneezing.</td>
<td>• Increased sensitivity for small lesions compared to CT</td>
</tr>
<tr>
<td></td>
<td>• Signs of MS</td>
<td>• Minimal artefact and IAM/Cerebello-Pontine angle imaging not affected by artefact from temporal bones.</td>
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<tr>
<td></td>
<td>• Signs of Intracranial tumour</td>
<td>• No radiation safety concern</td>
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<td></td>
<td>• Visual disturbance</td>
<td>• Vascular system can be imaged without IV contrast</td>
</tr>
<tr>
<td></td>
<td>• Sensorineural hearing loss (IAMS)</td>
<td></td>
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<tr>
<td></td>
<td>• Vertigo (IAMS)</td>
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### Extremities – Hand/Wrist, Foot/Ankle
- Suspected TFC tear
- Arthropathy – initial presentation
- Sensitivity for inflammatory change, ligamentous disruption
- Can demonstrate fairly early articular cartilage changes, erosion

### Shoulder
- Suspected rotator cuff tear
- Signs of impingement
- Detailed assessment of rotator cuff components and surrounding structures.
- Good quality MR scan can identify labral lesions, though MR Arthrography preferred choice

### Knee
- Signs of meniscal tear / loose body
- Signs of ligament tear or disruption
- Suspected osteochondral lesions
- Persistent general undiagnosed knee pain.
- Accurate and detailed assessment of joint and surrounding structures,
  - Sensitive for meniscus, articular cartilage and ligaments
  - Sensitive for bone bruising “micro-fractures”

### Pelvis/Hips
- Generalised hip pain with negative X-ray
- Hip pain suspicious of AVN
- Sports related symptoms – “Sportsman’s Groin”
- Similar clinical benefits as for the knee

Examinations not listed above are still open to GP referral, but it is advised that the referring GP enters into a dialogue with a Consultant Radiologist in these instances prior to generating a referral. Radiologists will particularly welcome discussion with GPs over requests that enable them to better investigate their patients within the primary care setting.

Consultant Radiologists are very happy to discuss specific cases as required, particularly where complex imaging is required, and will support all clinically relevant tests, often being able to ensure the patient not only has access to a test, but within the clinically appropriate timeframe.

### Upright MRI

There is separate guidance for referrals into Upright MRI. This is not routinely commissioned by NHS Wakefield CCG but can be in exceptional cases. These are where patients are too heavy for conventional MRI, have claustrophobia (not managed by sedation) or who are in too much pain to lie still. This guidance can be found at [https://www.wakefieldccg.nhs.uk/fileadmin/site_setup/contentUploads/Corporate_documents/Policies/Use%20of%20an%20Upright%20Standing%20or%20Positional%20MRI%20Scanner%20v6.pdf](https://www.wakefieldccg.nhs.uk/fileadmin/site_setup/contentUploads/Corporate_documents/Policies/Use%20of%20an%20Upright%20Standing%20or%20Positional%20MRI%20Scanner%20v6.pdf)

### 2.5 HOW TO REFER

E-referral is the preferred route of referral once publishing and commissioning of the service is completed for Wakefield CCG member practices. ICE is also available for referrals to the Trust.
Patients should be offered the earliest available appointment by the acute and community providers. As a minimum standard, patients are expected to receive their diagnostic procedure within a maximum of 10 working days of acceptance of referral and an absolute maximum of 20 working days.

The most current list of hospital and community providers in the Wakefield District (as at February 2016) are:

- Mid-Yorkshire Hospitals NHS Trust
- Mediscan Ltd
- Phoenix Health Solutions (at the White Rose Surgery)
- SG Radiology

2.6 REFERRAL VETTING

All MRI referrals, whether generated from Primary or Secondary care are subject to clinical vetting by appropriately trained MRI Radiographic staff (working to protocol) or Consultant Radiologists. Where a radiographer performing referral vetting is in doubt as to the clinical appropriateness of a request, advice should be sought from a Radiologist.

In the context of direct access to MRI, accurately completed referrals will, on the whole, be vetted without further query, as they should comply with RCR guidelines, and particularly with the typical clinical indications highlighted in section 2.4 of this document.

GP’s should be aware that, on occasions, referrals may be rejected and no imaging performed, though this occurrence should be minimal if the referral guidance is followed. Suitable feedback will be given by the provider to explain such a decision.

There will also be occasions where the vetting process suggests greater benefit by performing imaging via another modality than that initially requested. In these instances, unless the modality is within MRI, the request will be rejected and returned to the original referrer with advice on more appropriate imaging options, unless the request is changed to a more appropriate imaging modality.

There will also be occasions where patients cannot tolerate MRI, or for safety reasons, cannot have MRI scanning performed. Where possible, the provider will endeavour to advise as to appropriate imaging via an alternative modality, such that the original clinical question can still be answered. See also “Upright MRI” under section 2.4 which may be appropriate). Please note the contraindications and cautionary notes for MRI scanning included in this guideline before completing a referral. GP’s should discuss contraindications with patients prior to referral, and note any concerns on referrals. This will prevent unnecessary delay in accessing imaging.
2.7 MRI REPORTS

Following MRI scanning, a report will be produced and dispatched to the referring GP, using the address given on the referral, within five working days of the scan.

Reports will provide a diagnosis and a conclusion that advises on any necessary actions, such as onward referral to a specialist.

Where patients are found to have clinically urgent findings, the GP will be informed immediately, with a copy of a report to be sent directly to the relevant practice. On occasions, it may be appropriate for the Radiologist to seek immediate advice from a specialist that could see the patient admitted for treatment. A typical scenario would be in cases where actual or impending cord compression is found on a scan.

This guideline is part of NHS Wakefield CCG’s desire to facilitate easier access to sophisticated diagnostics. Particular care should be taken to ensure that the request form is filled in accurately, full clinical details are given and contra indications and cautions are fully considered. The effectiveness of GP direct access to MRI will be audited and hopefully will be a very useful addition to the GPs clinical care of patients.

2.8 MRI CONTACTS

For any discussions regarding clinical aspects of direct access MRI cases, please contact the MYNHST department of Radiology on 01924 512468 or if the query is non urgent use of e-consultation via ICE is preferred. This will enable subspecialist advice and guidance on appropriateness of examinations and for other non-urgent queries.

3 REFERENCES