**MRI in Prostate malignancy**

**Descriptor:**

NICE guidelines for the diagnosis and management of prostate malignancy were introduced in 2014 and updated in 2019. This audit assesses compliance with the guidance for the MRI investigation of prostate cancer.

**Background:**

The scope of indications for MRI of the prostate is widening with pre-biopsy MRI part of routine clinical practice. However, three indications for multi-parametric MRI (i.e. including T2 and diffusion weighted imaging) are prescribed in current NICE guidance and should be provided by centres delivering a prostate cancer imaging service. These are for imaging for T and N staging, use in management after an initial negative biopsy and in active surveillance.

## The Cycle

**The standard:**

1. Multi-parametric MRI is used as first-line investigation for people with suspected clinically localised prostate cancer

2. Multi-parametric MRI-influenced prostate biopsy is offered if Likert score is 3 or more.

 3. MRI (or CT if MRI is contraindicated) for men with histologically proven prostate cancer if knowledge of the T or N stage could affect management

4. MRI for men with a negative transrectal ultrasound 10–12 core biopsy passes to determine whether another biopsy is needed. Do not offer another biopsy if the multiparametric MRI is negative unless the biopsy showed high-grade prostatic intra-epithelial neoplasia (HGPIN), atypical small acinar proliferation (ASAP) or there is abnormal digital rectal examination

5. At enrolment in active surveillance - (If there is concern about clinical or PSA changes during active surveillance, reassess with MRI and/or rebiopsy). If the MRI results do not agree with the biopsy findings, offer a new MRI-influenced biopsy

6. The appropriate criteria are stated on the MRI request.

**Target:**

100% compliance with these 6 standards.

## Assess local practice

**Indicators:**

• Retrospective review of prostate cancer patients whose MRI prostate scans were reviewed at MDT with MDT co-ordinator or urologist/oncologist

• Patients with prior prostatic biopsy who underwent MRI of the prostate consistent with the criteria 1-6 above

**Data items to be collected:**

Spreadsheet of patient data:

1. List of patients with prostate cancer who had MRI examination of the prostate and biopsy – enter identifier e.g. hospital number. This will exclude patients scanned under a protocol for MRI before any biopsy has been performed

2. Date of MRI scan

3. Indication for scan recorded

4. Is the appropriate indication stated on the MRI request (Y) or (N)?

5. Review clinical data including PSA, Gleason score, co-morbidities and other imaging e.g. MRI or bone scan for evidence of skeletal metastases available to MDT at the time of the scan. Decide with MDT co-ordinator or urologist/oncologist whether criteria are appropriate for scan (Y) or inappropriate (N)

**Suggested number:**

25-50 patients

**Suggestions for change if target not met:**

1. Review local referral pathway of staging of prostate malignancy in the light of NICE guidance and document any updates -present at MDTM

2. Document criteria for MRI request and agree protocol for rejection/review of requests which are not compliant - present at MDTM

3. Small re-audit at 6-12 months depending on outcome

**Resources:**

1. RIS-PACS manager assistance in obtaining the examinations list of prostate MRI

2. 4 hours time: Radiologist and MDT co-ordinator or urologist/oncologist

**References:**

1. Prostate cancer: diagnosis and management. NICE Guideline NG131. Publised 09 May 2019. <https://www.nice.org.uk/guidance/ng131>

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