

# An evaluation of general practitioners' use of magnetic resonance imaging (MRI)

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|----------------------------------------|---------------------------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Submission date</b><br>23/01/2004   | <b>Recruitment status</b><br>No longer recruiting | <input type="checkbox"/> Prospectively registered<br><input type="checkbox"/> Protocol            |
| <b>Registration date</b><br>23/01/2004 | <b>Overall study status</b><br>Completed          | <input type="checkbox"/> Statistical analysis plan<br><input checked="" type="checkbox"/> Results |
| <b>Last Edited</b><br>12/12/2013       | <b>Condition category</b><br>Other                | <input type="checkbox"/> Individual participant data                                              |

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

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## Additional identifiers

**Protocol serial number**  
PSI03-44

## Study information

**Scientific Title**

**Study objectives**

1. To determine base line data on current use of Magnetic Resonance Imaging (MRI) by general practitioners and its effect on referrals and patient management
2. To develop consensus-based referral guidelines for GPs for the two anatomical sites most frequently requested by GPs
3. To compare two methods of accessing MRI with rates of appropriate scan requests as the main outcome measure
4. To develop education and audit materials with which to disseminate the referral guidelines
5. To evaluate the impact of the two interventions on GP knowledge and appropriateness of scan request
6. To assess the cost effectiveness of the different implementation strategies

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Not provided at time of registration

**Primary study design**

Interventional

**Study design**

Randomised controlled trial

**Study type(s)**

Screening

**Health condition(s) or problem(s) studied**

GPs' use of MRI scans

**Interventions**

Face to face qualitative interviews were conducted with a sample of general practitioners. Data from the interviews were used by a panel of doctors from primary and secondary care to develop guidelines for the appropriate referral of patients for MRI of the knee and of the lumbar spine.

General practices were randomised to access MRI by telephone or letter. Referrals were judged by the panel (blind) for appropriateness with the guidelines as criteria. A difference in the proportion of appropriate scan requests before telephone and written access groups was assessed using the chi-square test. Costs of method of access were determined.

GP knowledge was assessed immediately before and three months after the intervention by postal questionnaire. Telephone interviews with GPs for all subsequent scan requests provided data on which the panel (again blind) assessed against the guideline criteria. The association between practice, patient and randomisation variables with concordance was assessed using stepwise logistic regression. Clustering effects were accounted for by multi-level modelling. The cost of each intervention was measured.

Practices were randomised to receive:

- a. Educational seminar

- b. Audit feedback
- c. Seminar and audit feedback
- d. None

All four groups received guidelines.

### **Intervention Type**

Other

### **Phase**

Not Specified

### **Primary outcome(s)**

1. Consensus guidelines produced, feedback from GPs
2. Concordance of requests with guidelines
3. Knowledge of indications and contraindications for MRI
4. Cost of method of access
5. Cost of implementation strategy

### **Key secondary outcome(s)**

No secondary outcome measures

### **Completion date**

01/06/1998

## **Eligibility**

### **Key inclusion criteria**

150 general practitioners in 39 practices

### **Participant type(s)**

Patient

### **Healthy volunteers allowed**

No

### **Age group**

Not Specified

### **Sex**

Not Specified

### **Key exclusion criteria**

No exclusion criteria

### **Date of first enrolment**

01/04/1995

### **Date of final enrolment**

01/06/1998

## Locations

### Countries of recruitment

United Kingdom

Wales

### Study participating centre

Department of General Practice

Cardiff

United Kingdom

CF23 9PN

## Sponsor information

### Organisation

Record Provided by the NHS R&D 'Time-Limited' National Programme Register - Department of Health (UK)

## Funder(s)

### Funder type

Government

### Funder Name

NHS Primary and Secondary Care Interface National Research and Development Programme (UK)

## Results and Publications

### Individual participant data (IPD) sharing plan

### IPD sharing plan summary

Not provided at time of registration

### Study outputs

| Output type                     | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|---------------------------------|---------|--------------|------------|----------------|-----------------|
| <a href="#">Results article</a> | results | 01/05/2002   |            | Yes            | No              |