

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

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

Study design

Randomised controlled trial

Primary study design

Interventional

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?
Results article	results	01/05/2002		Yes	No