The Birmingham Rehabilitation Uptake Maximisation Study (BRUM). Home-based versus hospital-based cardiac rehabilitation in a multi-ethnic population: cost-effectiveness and patient adherence.

| Submission date | Recruitment status No longer recruiting | Prospectively registered | | |
|-------------------------------|---|--|--|--|
| 25/04/2003 | | Protocol | | |
| Registration date | Overall study status | Statistical analysis plan | | |
| 25/04/2003 | Completed | [X] Results | | |
| Last Edited 26/08/2009 | Condition category Circulatory System | [] 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 HTA 99/32/09

Study information

Scientific Title

Acronym

BRUM

Study objectives

Aim:

What is the relative effectiveness and cost-effectiveness, taking uptake into account, of home-based versus hospital-based cardiac rehabilitation? What are reasons for non-participation?

To answer these questions we will determine:

- 1. Whether there are differences at six months and one year following hospital- and home-based rehabilitation in:
- 1.1. Objective cardiac risk factors
- 1.2. Patient reported uptake and adherence
- 1.3. And whether these differ between patient groups (the elderly, women and patients from ethnic minority groups)
- 2. The relative costs of hospital- and home-based cardiac rehabilitation from both the patients' and NHS perspectives
- 3. Qualitative insights into the reasons for non-participation in the cardiac rehabilitation programmes

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)

Quality of life

Health condition(s) or problem(s) studied

Cardiovascular diseases: Heart disease

Interventions

Hospital-based versus home-based cardiac rehabilitation programmes provided by specialist cardiac rehabilitation nurses. Both programmes will include exercise, relaxation, education and life-style counselling, with referral for psychological treatments as indicated. The home programme will be based around a patient-held manual (The Heart Manual for MI patients) with home visits and telephone support from the cardiac rehabilitation staff. A manual will be developed for revascularisation patients.

Intervention Type

Other

Phase

Not Specified

Primary outcome(s)

Primary outcomes at six months and one year:

- 1. Cardiac risk factors (serum cholesterol, blood pressure, exercise capacity measured by the shuttle test, psychological status-HADS, smoking cessation)
- 2. Uptake and patient reported adherence to each programme
- 3. Patient satisfaction and perceptions of the programmes
- 4. Quality of life
- 5. Use of secondary preventive medication
- 6. Health care utilisation and cardiac events

Costs would be assessed from two perspectives: that of the NHS and socially. NHS costs will be based on resource inputs (time with cardiac nurses, other NHS personnel, travel time, drugs, use of other NHS services) costed up to include labour and overhead costs. Societal costs will extend NHS costs to include costs to patients and to any other relevant agencies (to be decided via patient interviews and costed as for the NHS). If the outcomes differ between the models, a cost-effectiveness evaluation will explore incremental cost-effectiveness using the outcome measures noted above. Otherwise a cost-minimisation analysis is appropriate. In either case, modelling will explore the generalisability of the results by locating the costs in a national context by collecting data from other English rehabilitation programmes by means of a survey. The results will be compared with the range of other CHD interventions, linked to work already in progress (JR's involvement in a national cost effectiveness model funded by DoH).

Key secondary outcome(s))

Not provided at time of registration.

Completion date

28/02/2006

Eligibility

Key inclusion criteria

Consecutive patients admitted to two acute hospitals in the West-Midlands, serving a multiethnic patient catchment, following myocardial infarction (MI) or revascularisation (percutaneous transluminal coronary angioplasty [PTCA]/coronary artery bypass graft [CABG]).

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Not Specified

Sex

All

Key exclusion criteria

Not provided at time of registration.

Date of first enrolment

01/10/2001

Date of final enrolment

28/02/2006

Locations

Countries of recruitment

United Kingdom

England

Study participating centre
Department of Public Health & Epidemiology
Birmingham

Birmingham United Kingdom B15 2TT

Sponsor information

Organisation

Department of Health (UK)

ROR

https://ror.org/03sbpja79

Funder(s)

Funder type

Government

Funder Name

NIHR Health Technology Assessment Programme - HTA (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 | 01/01/2009 | | Yes | No |
| Other publications | design and rationale at | 10/09/2003 | | Yes | No |
| Other publications | recruitment analysis at | 17/05/2005 | | Yes | No |