

Can rehabilitation delivered immediately on hospitalisation for an acute exacerbation of chronic respiratory disease improve long term health outcomes?

Submission date 07/08/2009	Recruitment status No longer recruiting	☒ Prospectively registered ☐ Protocol
Registration date 02/10/2009	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 10/07/2014	Condition category Respiratory	☐ 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

Study information

Scientific Title
Can rehabilitation delivered immediately on hospitalisation for an acute exacerbation of chronic respiratory disease improve long term health outcomes? A randomised controlled trial

Acronym

The REACH trial

Study objectives

The hypothesis is that an early and proactive rehabilitation strategy which is delivered immediately on hospitalisation for an acute exacerbation of chronic respiratory disease will prevent the decline in physical function associated with the exacerbation, improve clinical outcomes and reduce the risk of subsequent hospitalisation.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Not provided at time of registration

Primary study design

Interventional

Study design

Prospective parallel group randomised single blind controlled clinical trial

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Chronic respiratory disease

Interventions

Treatment for patients in the intervention group will start within 48 hours of admission for an acute exacerbation of chronic respiratory disease. It will take the form of a daily, individually prescribed, graduated exercise and strength training programme and will continue until discharge. After discharge, patients will continue a home-based customised rehabilitation programme for six weeks. Patients in the control group will receive 'best usual care' from the medical, nursing, physiotherapy and occupational therapy teams.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

Hospital readmission rate at 12 months

Key secondary outcome(s)

1. Exercise capacity, measured at discharge home, 6 weeks after randomisation, 6 months after discharge and 12 months after discharge
2. Health status, measured at discharge home, 6 weeks after randomisation, 6 months after discharge and 12 months after discharge
3. Psychological wellbeing, measured at discharge home, 6 weeks after randomisation, 6 months

after discharge and 12 months after discharge

4. Muscle strength and thickness, measured at discharge home, 6 weeks after randomisation, 6 months after discharge and 12 months after discharge

5. Biomarkers, measured at discharge home, 6 weeks after randomisation, 6 months after discharge and 12 months after discharge

6. Spirometry, measured at discharge home, 6 weeks after randomisation, 6 months after discharge and 12 months after discharge

7. Length of stay, measured at discharge home

8. Nutritional status, measured at 6 weeks after randomisation, 6 months after discharge and 12 months after discharge

9. Muscle structure changes, measured at 6 weeks after randomisation, 6 months after discharge and 12 months after discharge

10. Focus groups for psychological analysis, measured at 12 months after discharge

11. Healthcare utilisation, measured at 12 months after discharge

Completion date

30/09/2013

Eligibility

Key inclusion criteria

1. Patients aged 40 and over of either sex who are admitted to hospital with an acute exacerbation of chronic respiratory disease

2. Ability to give informed consent

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Key exclusion criteria

1. Musculoskeletal or neuromuscular conditions that significantly contribute to exercise limitation

2. Psychiatric or neurological conditions that render the patient unable to comply with the rehabilitation programme

3. Not living independently at the time of admission

4. Admission for an acute myocardial infarction

5. Terminal disease with an estimated survival time of less than three months

6. Four or more hospitalisations for acute exacerbations of chronic respiratory disease in the preceding 12 month period

Date of first enrolment

01/01/2010

Date of final enrolment

30/09/2013

Locations

Countries of recruitment

United Kingdom

England

Study participating centre

Department of Pulmonary Rehabilitation

Leicester

United Kingdom

LE3 9QP

Sponsor information

Organisation

University Hospitals of Leicester NHS Trust (UK)

ROR

<https://ror.org/02fha3693>

Funder(s)

Funder type

Government

Funder Name

National Institute of Health Research (NIHR) (UK) - Collaboration for Leadership in Applied Health Research and Care - Leicestershire, Northamptonshire and Rutland (CLAHRC LNR)

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	08/07/2014		Yes	No