

# Mobility recovery after hip fracture: physical activity and rehabilitation program among community-dwelling hip fracture patients

**Submission date**  
24/09/2009

**Recruitment status**  
No longer recruiting

Prospectively registered

Protocol

**Registration date**  
03/03/2010

**Overall study status**  
Completed

Statistical analysis plan

Results

**Last Edited**  
11/06/2020

**Condition category**  
Injury, Occupational Diseases, Poisoning

Individual participant data

## Plain English summary of protocol

Not provided at time of registration

## Contact information

### Type(s)

Scientific

### Contact name

Dr Sarianna Sipilä

### Contact details

Rautpohjank 8a

Jyvaskyla

Finland

40700

-

sarianna.sipila@jyu.fi

## Additional identifiers

## Study information

### Scientific Title

Physical activity and rehabilitation program among community-dwelling hip fracture patients: a single centre randomised controlled trial

### Acronym

ProMo

**Study objectives**

This study investigates the effects of a rehabilitation program on mobility and functional capacity of older community-dwelling people operated for hip fracture.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Ethical Committee of the Jyväskylä Central Hospital Board approved on the 18th August 2007 and 22nd August 2008.

**Study design**

Single centre randomised controlled trial

**Primary study design**

Interventional

**Study type(s)**

Treatment

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

Collum or pertrochanter fracture

**Interventions**

Intervention group:

Individually tailored physical rehabilitation program aiming to restore mobility (ProMo). The purpose of the intervention is to restore mobility after hip fracture. The one year intervention starts within one month (at least six weeks after discharged from the health care centre. ProMo is a multicomponent rehabilitation protocol consisting of individual progressive home exercise program and counselling/management sessions for physical activity promotion and pain and fear of falling management. Usage and satisfaction with assistive devices for walking will also be discussed.

Control group:

Usual care. The control group is instructed to follow the guidelines provided by the hospital and health care centre.

The total duration of the intervention is 12 months. The subjects (both intervention and control groups) will be followed up for 12 months after the intervention.

**Intervention Type**

Other

**Phase**

Not Applicable

**Primary outcome(s)**

The short term primary outcome (at 3 and 6 months) is Short Physical Performance Battery (SPPB) including habitual walking speed, chair rise and balance tests. One year primary outcome will be mobility limitation and disability.

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

Measured at baseline, 3, 6 and 12 months:

1. Maximal and habitual walking speed over 10 metres
2. Isometric muscle strength for knee extension and leg extension power, assessed from both sides
3. Functional balance, assessed by Berg Balance Scale
4. Fear of falling, assessed by Activities-specific Balance Confidence scale
5. Pain, assessed by Visual Analogue Scale (VAS) and questionnaire
6. Functional capacity, assessed by validated questionnaire
7. Level of physical activity, assessed by a questionnaire
8. Information concerning use of formal and informal care
9. Bone density and geometry measured for lower leg
10. Depressive mood (Beck Depression Inventory [BDI])

Measured at baseline, 6 and 12 months:

11. Bone density and geometry measured for arm

Measured at baseline, 3, 6 and 12 months and 24 months (12 month follow-up):

12. Form of dwelling, collected by a questionnaire and health and social service registers

## **Completion date**

30/06/2012

## **Eligibility**

### **Key inclusion criteria**

Over 60-year-old community-dwelling men and women operated for hip fracture at the local hospital during 2008 - 2009 and living in the city of Jyväskylä or neighbouring municipalities

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

Patient

### **Healthy volunteers allowed**

No

### **Age group**

Senior

### **Sex**

All

### **Total final enrolment**

81

### **Key exclusion criteria**

1. Living in an institution
2. Confined to bed at the time of the fracture
3. Severe memory problems (min-mental state examination [MMSE] less than 19)

4. Severe cardiovascular or pulmonary disease
5. Severe progressive disease (i.e., neoplasm, amyotrophic lateral sclerosis [ALS])
6. Unwillingness to participate

**Date of first enrolment**

01/01/2008

**Date of final enrolment**

30/06/2012

## Locations

**Countries of recruitment**

Finland

**Study participating centre**

Rautpohjank 8a

Jyvaskyla

Finland

40700

## Sponsor information

**Organisation**

Ministry of Education (Finland)

**ROR**

<https://ror.org/02w52zt87>

## Funder(s)

**Funder type**

Government

**Funder Name**

Ministry of Education (Finland)

**Funder Name**

The Social Insurance Institution of Finland (Kela) (Finland)

# 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	01/12/2012		Yes	No
<a href="#">Results article</a>	results	01/12/2013		Yes	No
<a href="#">Results article</a>	results	01/05/2014		Yes	No
<a href="#">Results article</a>	results	01/04/2015		Yes	No
<a href="#">Results article</a>	results	09/06/2020	11/06/2020	Yes	No
<a href="#">Study website</a>	Study website	11/11/2025	11/11/2025	No	Yes