# Innovative integrated care pathway for geriatric rehabilitation

Submission date 05/04/2016	<b>Recruitment status</b> No longer recruiting	<ul> <li>Prospectively registered</li> <li>Protocol</li> </ul>		
Registration date	Overall study status	Statistical analysis plan		
07/04/2016	Completed	[X] Results		
Last Edited 19/05/2023	<b>Condition category</b> Other	Individual participant data		

#### Plain English summary of protocol

Background and study aims

When older adults are in hospital for a long time, it can lead to a loss of practical skills which they need to look after themselves properly. In order to help them to regain these skills and prepare to return home, some older adults are admitted to a geriatric rehabilitation facility. For older adults who follow this path however, there is often a lack of coordination between the caregivers they encounter at hospital, in the geriatric rehabilitation facility and when they return home, which can lead to them not receiving the most complete care. In order to try and solve this issue, an integrated care pathway in geriatric rehabilitation (hospital, geriatric rehabilitation and home care) was developed to improve coordination and continuity of care. The aim of this study is to find out whether or not this integrated care pathway has an effect on care dependency, social participation and quality of life among patients, on costs related to health care use among patients and on the care burden among informal caregivers.

#### Who can participate?

Adults aged 65 and over who have been admitted to the geriatric rehabilitation facility in the period April 2011-March 2012 or in the period April 2013 - August 2014, and their informal carers.

#### What does the study involve?

The study looks at two groups of patients and their informal caregivers. The first group is included before the integrated care pathway was implemented (2011-2012), and the second group is included after the integrated care pathway was implemented (2013-2014). For both groups, at the start of the study, after three months and then after nine months, patients take part in hour-long structured face-to-face interviews to assess their independence, quality of life and how often they take part in social activities. At the same timepoints, informal caregivers undergo half hour-long structured face-to-face interviews to assess how difficult caring for the patient is, their health and how they would feel if someone else were to look after the patient.

What are the possible benefits and risks of participating? There are no direct benefits or risks for participants taking part in this study.

Where is the study run from? azM Herstelzorg (Netherlands) When is the study starting and how long is it expected to run for? February 2010 to January 2016

Who is funding the study? The Dutch National Care for the Elderly Program (Netherlands)

Who is the main contact? Mrs Jolanda van Haastregt j.vanhaastregt@maastrichtuniversity.nl

## **Contact information**

**Type(s)** Scientific

**Contact name** Mrs Jolanda van Haastregt

#### **Contact details**

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## Additional identifiers

EudraCT/CTIS number

**IRAS number** 

ClinicalTrials.gov number

Secondary identifying numbers ZonMw #314070401

# Study information

#### Scientific Title

Evaluation of an innovative integrated care pathway in geriatric rehabilitation for older adults with complex health problems

#### **Study objectives**

The aim of this study is to evaluate the effects of an integrated care pathway in geriatric rehabilitation compared to usual care with respect to level of independence, social participation and quality of life among patients, on self-rated burden among informal caregivers and on costs related to health care use among patients.

## Ethics approval required

Old ethics approval format

#### **Ethics approval(s)** Medical Ethics Committee of University Hospital Maastricht, ref: 11-4-020

**Study design** Single-centered observational case-control study

**Primary study design** Observational

**Secondary study design** Case-control study

**Study setting(s)** Other

**Study type(s)** Other

#### Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet.

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

Health problems in older adults

#### Interventions

The study includes two cohorts of patients and informal caregivers. The reference cohort was included prior to implementation of the integrated care pathway (period 2011-2012) and received care as usual. The care pathway cohort was included after implementation of the integrated care pathway (period 2013-2014) and received care according to the principles of the integrated care pathway.

All cohorts received a baseline measurement at admission to the geriatric rehabilitation facility and two follow-up measurements after three and nine months. Patients received structured face-to-face interviews (approximately 1 hour each) and informal caregivers of these patients received postal questionnaires (30 minutes). To assess the effects of the integrated care pathway, the two cohorts of patients will be compared with each other and the two cohorts of informal caregivers will be compared with each other.

The main components of the integrated care pathway are the following:

1. A care pathway coordinator is appointed. The role of the care pathway coordinator is to act as a port of call for professionals involved in the pathway, to improve communication between professionals from different settings, improve continuity and coordination of care and to further streamline the pathway.

2. A triage instrument is introduced to be used by discharge nurses in the hospital. The instrument instructs discharge nurses to gather information on each patient regarding their functional prognosis, endurability, teachability/trainability and both the patient's and informal caregiver's needs and abilities. This information should enable the users of the instrument to decide if geriatric rehabilitation is appropriate for a patient or not. If the discharge nurse has

doubts about the appropriateness of geriatric rehabilitation for a patient, an elderly care physician from the geriatric rehabilitation facility should be consulted.

3. Patients and their informal caregivers are always actively involved in the triage decision in the hospital, in the establishment of their care and treatment plan in the geriatric rehabilitation facility and in primary care.

4. All patient discharge summaries (medical and nursing) from the hospital to the geriatric rehabilitation facility and from the geriatric rehabilitation facility to primary care professionals are sent no later than on the day of discharge and should be of high quality.

5. Evaluation meetings between care professionals from the hospital and the geriatric rehabilitation facility are organized at least twice a year, and between the geriatric rehabilitation facility and primary care professionals at least once a year. These meetings should focus on improving the triage process, the timing and quality of discharge summaries and (quality of the) transfer of patients between the hospital, geriatric rehabilitation facility and primary care.

#### Intervention Type

Other

#### Primary outcome measure

Patients:

Level of independence is measured using the Katz Index of activities of daily living (KATZ-15) at baseline, 3 and 9 months.

Caregivers:

Effects of the pathway on informal caregivers is determined through measuring the subjective burden of informal caregiving with the Self-Rated care Burden VAS at baseline, 3 and 9 months.

#### Secondary outcome measures

Patients:

1. Instrumental Activities of Daily Living, measured with the Frenchay Activities Index at baseline, 3 and 9 months

2. Social participation, assessed with a subscale of the Impact on Participation and Autonomy (IPA) questionnaire at baseline, 3 and 9 months

3. Psychological well-being, measured using a subscale from the RAND-36 at baseline, 3 and 9 months

4. Quality of life, measured with a modified version of Canthril's Self Anchoring Ladder at baseline, 3 and 9 months

Caregivers:

1. Self-perceived health, assessed with the first question of the RAND-36 at baseline, 3 and 9 months

2. Transfer of care, by asking informal caregivers to indicate on a scale from 1-10 how happy they would feel if their informal care activities were taken care of by someone else at baseline, 3 and 9 months

Overall study start date 01/02/2010

**Completion date** 01/01/2016

## Eligibility

#### Key inclusion criteria

Patients:

1. Admitted to the geriatric rehabilitation facility in the period April 2011-March 2012 or in the period April 2013 - August 2014

2. Aged  $\geq$  65 years

3. Admitted to the hospital prior to admission to the geriatric rehabilitation facility

4. Community-dwelling prior to hospital admission

5. Patients with complex care needs and related functional loss and care dependency

Caregivers: Informal caregivers aged 18 years and over.

Participant type(s)

Patient

**Age group** Senior

Upper age limit

65 Years

**Sex** Both

#### Target number of participants

We expected an inclusion number of 51 patients in the reference cohort and 153 in the care pathway cohort (due to the longer inclusion period). It was expected that among approximately 65% of the participants, an informal caregiver would agree to participate (33 informal caregivers in the reference cohort and 99 informal caregivers in the care pathway cohort).

#### Total final enrolment

260

#### Key exclusion criteria

Patients: 1. Patients with strokes, trauma orthopedics, elective orthopedics 2. Cognitive problems

Date of first enrolment 01/04/2011

Date of final enrolment 01/09/2014

## Locations

**Countries of recruitment** Netherlands Study participating centre azM Herstelzorg Sint Pieterstraat 23 Maastricht Netherlands 6211 JM

### Sponsor information

**Organisation** The Dutch Organization for Health Research and Development

**Sponsor details** Laan van Nieuw Oost-Indië 334 The Hague Netherlands 2593 CE

**Sponsor type** Research organisation

Website www.zonmw.nl

ROR https://ror.org/01yaj9a77

## Funder(s)

**Funder type** Government

**Funder Name** The Dutch National Care for the Elderly Program

## **Results and Publications**

Publication and dissemination plan

Three publications planned:

- 1. Process evaluation: July 2016
- 2. Effect evaluation: September 2016
- 3. Economic evaluation: December 2016

#### Intention to publish date

31/12/2016

#### Individual participant data (IPD) sharing plan

#### IPD sharing plan summary

Available on request

#### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	16/11/2018	17/07/2019	Yes	No
Other publications	Process evaluation	13/01/2017	19/05/2023	Yes	No