

# **Hospital in Motion, a multidimensional implementation project to improve patients' physical behaviour during hospitalization - a study protocol**

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It is hypothesized that a multidimensional implementation approach with multiple interventions integrated in the usual care will improve physical behaviour during hospitalization

<b>Ethische beoordeling</b>	Niet van toepassing
<b>Status</b>	Werving gestart
<b>Type aandoening</b>	-
<b>Onderzoekstype</b>	Observationeel onderzoek, zonder invasieve metingen

## **Samenvatting**

### **ID**

NL-OMON29653

### **Bron**

Nationaal Trial Register

### **Aandoening**

physical behaviour, physical activity, hospitalization, cardiology, oncology

### **Ondersteuning**

**Primaire sponsor:** University Medical Center Utrecht

**Overige ondersteuning:** n.v.t

### **Onderzoeksproduct en/of interventie**

### **Uitkomstmaten**

#### **Primaire uitkomstmaten**

Physical behaviour measured with the behavioural mapping method

# Toelichting onderzoek

## Achtergrond van het onderzoek

### Abstract

### Background

Despite the evidence of the adverse consequences of immobility during hospitalization, patients spend most of the time lying in bed. While physical activity is a modifiable factor which can prevent in-hospital functional decline, bed rest is deep rooted in the hospital culture. To attack this, a multidimensional approach is needed. Therefore, Hospital in Motion, a multidimensional implementation project, was designed to improve inpatient physical behaviour during hospitalization. The aim of this study is to investigate the effectiveness of the implementation of Hospital in Motion on patients' physical behaviour, length of stay and immobility-related complications. Additionally the implementation process will be evaluated.

**Methods** The Hospital in Motion study will be implemented within two specialism (2 wards cardiology and 2 wards oncology) in a Dutch university hospital. Per ward, multidisciplinary teams are composed and follow a step-by-step multidimensional implementation approach which includes the development and implementation of tailored action plans with multiple interventions. A pre-post observational study is used to evaluate the effectiveness, including 80 patients per time point per specialism. The primary outcome physical behaviour is defined as the percentage of the total observed time that a patient spent lying, sitting and active, measured with the behavioural mapping method. Secondary outcomes are length of hospital stay and immobility-related complications. The process evaluation will be measured per ward, with a caregivers survey, patient statements and semi-structured interviews with patients and caregivers. Statistical analyses will be performed separately for each specialism. The different percentages in physical behaviour will be analysed with ANCOVA. The caregivers survey and the patients statements will be analysed per question and tests will be performed on the different outcomes before and after implementation. Semi-structured interviews will be analyses qualitatively.

**Discussion** This study will provide information about both the effectiveness of the Hospital in Motion project on physical behaviour, length of stay and immobility-related complications, as in the procedures of an implementation process aimed to incorporate physical activity in usual care. These insights will be useful for others interested in changing physical behaviour during hospitalization.

## Doeleind van het onderzoek

It is hypothesized that a multidimensional implementation approach with multiple interventions integrated in the usual care will improve physical behaviour during hospitalization

## **Onderzoeksopzet**

pre-, intermediate (6 months) and post implementation (1 year)

## **Onderzoeksproduct en/of interventie**

Implementation of a multidimensional exercise plan

## **Contactpersonen**

### **Publiek**

P. Bor  
Utrecht  
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### **Wetenschappelijk**

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## **Deelname eisen**

### **Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)**

Patients admitted at the University Medical Centre Utrecht in the Netherlands on the cardiology or oncology ward

### **Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)**

None

# Onderzoeksopzet

## Opzet

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Parallel
Toewijzing:	N.v.t. / één studie arm
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

## Deelname

Nederland	
Status:	Werving gestart
(Verwachte) startdatum:	01-11-2017
Aantal proefpersonen:	80
Type:	Verwachte startdatum

## Ethische beoordeling

Niet van toepassing	
Soort:	Niet van toepassing

## Registraties

### Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

### Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

## In overige registers

### Register

NTR-new  
NTR-old  
Ander register

### ID

NL6914  
NTR7109  
METC : 16-250

## Resultaten