

# Improving the preoperative status of patients undergoing major surgery

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To evaluate the feasibility of (1) the use of the Beter Voorbereid\* application and the study procedures of a randomized controlled trial (finished in June 2019) and (2) evaluating the effectiveness of the \*Beter Voorbereid\* application on improved...

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	Gastrointestinal therapeutic procedures
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON53078

### Source

ToetsingOnline

### Brief title

IMPRESS

### Condition

- Gastrointestinal therapeutic procedures

### Synonym

major invasive surgery

### Research involving

Human

### Sponsors and support

**Primary sponsor:** Vrije Universiteit Medisch Centrum

**Source(s) of monetary or material Support:** Ministerie van OC&W, SIA-RAAK subsidie

## Intervention

**Keyword:** education, preoperative, surgery, webbased

## Outcome measures

### Primary outcome

(1) The main study endpoint is on feasibility.

Feasibility of the use of BeterVoorbereid\* application will be assessed by usability questions (Net promotor score and other usability questions; all patients in the intervention arm) and by semi-structured telephone interviews (random selection of 20 patients in the intervention arm).

(2) The main study endpoint is effectiveness.

The effectiveness will be evaluated using a physical functioning questionnaire on several timepoints, until 12 weeks after hospital discharge

### Secondary outcome

(1) we explore whether the use of this eHealth app leads to changes in preoperative lifestyle (i.e. exercise and/or smoking cessation and/or and/or nutrition) compared to control patients. Feasibility of the study procedures will be assessed using registration of patient recruitment and participation and monitoring of data collection.

(2) 'global health', patient satisfaction, global perceived effect, lifestyle changes, length of hospital stay, postoperative complications

## Study description

### Background summary

The eHealth application \*Beter Voorbereid\* is a mobile eHealth application that uses a set of questions to map a patient's lifestyle risk factors for delayed postoperative recovery in patients undergoing major surgery. Based on the life style of the patient, a tailored preoperative lifestyle advise is provided. Additonal guidance by a physiotherapist will be advised based on the level of pre-operative physical functioning and/or present medical risk factors.

## **Study objective**

To evaluate the feasibility of (1) the use of the Beter Voorbereid\* application and the study procedures of a randomized controlled trial (finished in June 2019) and (2) evaluating the effectiveness of the \*Beter Voorbereid\* application on improved functional recovery after surgery when compared to control patients.

## **Study design**

- (1) Feasibility study (pilot randomized controlled trial) (finished)
- (2) Effectiveness study (RCT)

## **Intervention**

Use of an eHealth application for prehabilitation of surgical patients in the preoperative period. The intervention group is compared to control subjects receiving usual care.

## **Study burden and risks**

There are minimal risks associated with this study. Patients in the intervention group may increase their daily activities and/or visit a physiotherapist. Moreover, all patients included in this study will be followed until the 12 weeks after hospital discharge, with a minimal set of questions per time point (4 post-discharge time points with maximum of 10 minutes per time point to fill in questionnaire).

## **Contacts**

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## **Trial sites**

### **Listed location countries**

Netherlands

## **Eligibility criteria**

### **Age**

Adults (18-64 years)

Elderly (65 years and older)

### **Inclusion criteria**

Age  $\geq$  18 years old

Indication for postoperative hospital stay (minimum of two nights)

One or more lifestyle risk factor

Informed consent

### **Exclusion criteria**

Emergency surgery

Unable to work with the eHealth application

Dutch language inproficiency

No access to a tablet or smartphone

Planned for brain surgery

Less than 7 days between inclusion and surgery

Already participating in intensive pre-operative care pathway (including exercise program)

Already participating in a conflicting study (to be determined per participating center)

## Study design

### Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Single blinded (masking used)

**Primary purpose:** Prevention

### Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	22-11-2018
Enrollment:	580
Type:	Actual

### Medical products/devices used

Generic name:	eHealth application (app) with personalized lifestyle advices
Registration:	Yes - CE intended use

## Ethics review

Approved WMO	
Date:	19-07-2018
Application type:	First submission
Review commission:	METC Amsterdam UMC
Approved WMO	
Date:	13-11-2018
Application type:	Amendment
Review commission:	METC Amsterdam UMC
Approved WMO	
Date:	31-03-2020
Application type:	Amendment
Review commission:	METC Amsterdam UMC

Approved WMO  
Date: 14-03-2022  
Application type: Amendment  
Review commission: METC Amsterdam UMC

## Study registrations

### Followed up by the following (possibly more current) registration

No registrations found.

### Other (possibly less up-to-date) registrations in this register

ID: 28174  
Source: NTR  
Title:

### In other registers

Register	ID
CCMO	NL61503.029.18
OMON	NL-OMON28174