

# Application of eHealth in coronary artery bypass surgery patients to improve recovery and reduce postoperative health utilisation

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Use of videoconsultation and online educational videos can reduce postCABG care consumption with the first 30 days and improve patient quality of life and recovery.

<b>Ethische beoordeling</b>	Positief advies
<b>Status</b>	Werving gestart
<b>Type aandoening</b>	-
<b>Onderzoekstype</b>	Interventie onderzoek

## Samenvatting

### ID

NL-OMON24003

### Bron

Nationaal Trial Register

### Verkorte titel

IMPROV-ED

### Aandoening

Coronary artery disease

## Ondersteuning

**Primaire sponsor:** Catharina ziekenhuis

**Overige ondersteuning:** N/A

## Onderzoeksproduct en/of interventie

## Uitkomstmaten

### Primaire uitkomstmaten

The primary endpoint of this study is the amount of in- and out of hospital care consumption which does not result in readmission. In-hospital care is defined as unplanned visits to the emergency department, the outpatient clinic and consultations by telephone with a physician/nurse. Out of hospital care is defined as visits to general practitioners, contact with the Dutch Heart Association, physiotherapist etc.

## **Toelichting onderzoek**

### **Achtergrond van het onderzoek**

Rationale: Emergency department (ED) visits after coronary artery bypass surgery (CABG) is estimated to range between 10-20% within the first 30 days. Ehealth applications have been proposed in CABG patients and are described to have the potential to reduce ED visits and to involve and assist patients in their recovery and reduce anxiety. In this way healthcare expenses can be reduced and quality of care will be improved.

Objective: Primary objective of the current study is to reduce care consumption in the first 40 days after discharge, which will be evaluated with care consumption specific questionnaires (out of hospital care) and care activity analysis (in hospital care). Secondary objective is to increase patient involvement in their postoperative recovery and health. Patient reported outcome measures (PROMs) will be used to evaluate different facets of mental and physical health.

Methods: Randomised controlled trial with an experimental arm (extended care) and a control group (usual care). Extended care will consist of online information developed by the Netherlands Heart Association (Nederlandse hartstichting) about the surgical procedure and recovery process in text and videos combined with videoconsultation with a physician, both in addition to usual care. The control group will not have access to the online information and e-consultation.

Nature and extent of the burden and risks associated with participation, benefit and group relatedness: Participation to the study will not extend hospital admission and no extra follow up visits are required. The eHealth application we intend to investigate should be easily incorporated in usual care and everyday life for patients. The applications are therefore developed for use from the patient' own computer or smartphone.

### **Doel van het onderzoek**

Use of videoconsultation and online educational videos can reduce postCABG care consumption with the first 30 days and improve patient quality of life and recovery.

### **Onderzoeksopzet**

- Prior to CABG

- At discharge
- 1 week after discharge
- 2 weeks after discharge
- 6 weeks after discharge

## **Onderzoeksproduct en/of interventie**

Videoconsultation (at 1 week and 3 weeks after discharge) and online educational videos (available throughout study period; developed with the Netherlands Heart Association)

## **Contactpersonen**

### **Publiek**

Catharina ziekenhuis  
Gijs van Steenberg

0402398360

### **Wetenschappelijk**

Catharina ziekenhuis  
Gijs van Steenberg

0402398360

## **Deelname eisen**

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

A potential subject who meets the following criteria can be included for participation in this study:

- Over 18 years of age planned for elective, isolated CABG/OPCAB
- Have sufficient knowledge to use computers and have access to the internet. Children can assist but patients should be able to access their own email and navigate the internet to use the provided eHealth strategy.
- Own a computer with internet connection with webcam/build in camera
- Comply to the minimal specifications for use of video consultation which are:
  - o PC/Laptop: Windows 7 or 10 with Chrome or Firefox

- o Android tablet: at least Nougat software installed and use of Chrome browser
- o Apple Ipad: at least iOS 12.3.4
- Ability to speak, read and interpret the Dutch language.

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

A potential subject who meets any of the following criteria will be excluded from participation in this study:

- Insufficient knowledge of Dutch language
- No informed consent
- Insufficient knowledge/experience of/with computer use to use video consultation or navigate on the educational website.
- No access to the internet
- Not compliant with technical specifications
- Not in possession of webcam/camera for video consultation
- Emergency surgery

## **Onderzoeksopzet**

### **Opzet**

Type:	Interventie onderzoek
Onderzoeksmodel:	Anders
Toewijzing:	Gerandomiseerd
Blinding:	Open / niet geblindeerd
Controle:	Geneesmiddel

### **Deelname**

Nederland	
Status:	Werving gestart
(Verwachte) startdatum:	20-02-2020
Aantal proefpersonen:	320
Type:	Verwachte startdatum

## **Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)**

**Wordt de data na het onderzoek gedeeld:** Nog niet bepaald

## Ethische beoordeling

Positief advies

Datum: 07-04-2020

Soort: Eerste indiening

## 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	ID
NTR-new	NL8510
Ander register	MEC-U : R19.100

## Resultaten