

# Videomonitoring voor detectie van onregelmatige hartslag

Gepubliceerd: 29-10-2021 Laatst bijgewerkt: 03-03-2024

Irregular heart rate can be detected with a camera-based monitoring technology.

## Ethische beoordeling

Positief advies

## Status

Werving gestopt

## Type aandoening

Hartritmestoornissen

## Onderzoekstype

Observationeel onderzoek, zonder invasieve metingen

## Samenvatting

## ID

NL-OMON25838

## Bron

NTR

## Verkorte titel

FORSEE

## Aandoening

- Hartritmestoornissen

## Aandoening

Atrial fibrillation

## Betreft onderzoek met

Mensen

## Ondersteuning

**Primaire sponsor:** Catharina Hospital, Eindhoven University of Technology, Philips Electronics Nederland B.V.

**Overige ondersteuning:** This study is part of the research proposal funded by ZonMw, NWO, the Hartstichting, and the Dutch CardioVascular Alliance (DCVA) of the funding call "Heart for a sustainable healthcare"

## Onderzoeksproduct en/of interventie

- Overige

## Toelichting

## Uitkomstmaten

### Primaire uitkomstmaten

Validity of camera based monitoring to detect irregular heartrate in comparison with ECG

## Toelichting onderzoek

### Achtergrond van het onderzoek

Forty percent of unanticipated deaths and deteriorations in hospitals occur in low- acuity departments. This alarming figure reflects the limited degree to which the cardiorespiratory status of patients is monitored in these departments, due to the obtrusiveness and expense of existing monitoring technologies, as well as the unpractically high clinical workload and cost that deployment of such technologies would entail. The FORSEE-project explores video monitoring of the cardiorespiratory status of the patient as an innovative unobtrusive method that could eventually aid to reduce workload for staff and better predict deterioration of adverse events. The main objective of this study is to determine the validity of camera based monitoring to detect irregular heart rate in comparison with ECG. Secondary objectives are the validity of the camera based monitoring technology to detect respiratory rate, oxygen saturation and different activity levels. Another secondary objective is to evaluate user and patient experience. This is an observational study, subjects will be asked to add the contactless camera set-up to the standard procedure. The main endpoint is the correspondence between the camera based heart rate and other vital signs in comparison with the standard contact sensors. All data will be analysed retrospectively and the data collected will be used for algorithm development.

### Doel van het onderzoek

Irregular heart rate can be detected with a camera-based monitoring technology.

### Onderzoeksopzet

Endpoint correspondence between the camera based heart rate and other vital signs in comparison with the standard contact sensors: T0 Camera-based vital signs and reference signals will be collected at least 10 minutes before, during and at least 10 minutes after the cardioversion. This data will be analyzed retrospectively, no clinical decisions will be based on this study data. Endpoint patient experience: T0 Questionnaires will be handed out after the

cardioversion and patients will be asked to complete the questionnaire during their hospital stay. T1: When all 48 patients have participated in the trial, a selection of patients will be asked to participate in a focus group (within 3 months after data collection). Endpoint user experience: T0: All involved healthcare providers will be asked to complete a questionnaire about their experience with the video monitoring technology after the cardioversion. T1: When all 48 patients have participated in the trial, a selection of healthcare providers will be asked to participate in a focus group.

## Contactpersonen

### Publiek

Catharina Ziekenhuis Eindhoven  
Iris Cramer

0630603665

### Wetenschappelijk

Catharina Ziekenhuis Eindhoven  
Iris Cramer

0630603665

## Deelname eisen

### Leeftijd

Volwassenen (18-64 jaar)  
Volwassenen (18-64 jaar)  
65 jaar en ouder  
65 jaar en ouder

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

- Leeftijd boven 18 jaar
- In staat om consent formulier te tekenen
- Patienten met atriumfibrilleren gepland voor cardioversie

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

- Gevangenen of patienten uit een psychiatrische instelling
- Mentale beperking
- Taalbarrière

## **Onderzoeksopzet**

### **Opzet**

Fase onderzoek:	N.V.T.
Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Enkelvoudig
Toewijzing:	N.v.t. / één studie arm
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend
Doel:	Diagnostiek

### **Deelname**

Nederland	
Status:	Werving gestopt
(Verwachte) startdatum:	09-08-2021
Aantal proefpersonen:	56
Type:	Werkelijke startdatum

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

**Wordt de data na het onderzoek gedeeld:** Nee

## **Ethische beoordeling**

Positief advies	
Datum:	09-04-2021
Soort:	Eerste indiening

Toetsingscommissie: METC Utrecht  
Huispostnr D01.343  
Postbus 85500  
3508 GA Utrecht  
088 755 6376  
metc@umcutrecht.nl

## 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	NL9854
Ander register	METC MMC : N21.039

## Resultaten