# The MyHeart Counts cardiovascular Health Study Netherlands

Published: 18-04-2019 Last updated: 15-05-2024

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**Ethical review** Approved WMO **Status** Recruiting

**Health condition type** Cardiac disorders, signs and symptoms NEC

**Study type** Interventional

### **Summary**

### ID

NL-OMON52971

#### Source

**ToetsingOnline** 

#### **Brief title**

MyHeart Counts NL

#### **Condition**

- Cardiac disorders, signs and symptoms NEC
- Lifestyle issues

#### **Synonym**

cardiovascular disease; lifestyle

### Research involving

Human

### **Sponsors and support**

**Primary sponsor:** Leids Universitair Medisch Centrum

Source(s) of monetary or material Support: NFU Citrien eHealth fonds, Zorg & Zekerheid

(zorgverzekeraar)

### Intervention

**Keyword:** cardiovascular health, eHealth, feasibility, observational study

### **Outcome measures**

### **Primary outcome**

effectiveness (mean step counts per day) of four coaching interventions

### **Secondary outcome**

Feasibility (technical, legal and ethical, data quality, costs)

Diet, Smoking, Well-being, Risk perception of cardiovascular disease, Physical activity, Sleep and self-reported cardiovascular disease.

# **Study description**

### **Background summary**

The study of determinants of cardiovascular disease (CVD) is important because it provides insight in risks and opportunities to reduce the burden of CVD. A major gap in our current knowledge about CVD lies in the way we measure these determinants, for example physical activity. This is currently restricted to paper questionnaires and short-duration measurements. Here lies the potential for smartphone technology. The ResearchKit MyHeart Counts app allows researchers to collect data continuously and in large populations. Addutionally, in-app coaching could stimulate a healthy lifestyle. However, the effect of different coaching levels on a smartphone is not yet known. The MyHeart Counts app has been released successfully in the USA by Stanford University. However, the effect and feasibility of this method for use in the Netherlands has not been established.

### Study objective

The primary aim is to assess the effectiveness of four coaching interventions in increasing daily activity of MyHeart Counts app users.

Secondary aims are 1) to study the feasibility (technical, legal and ethical, data quality, costs) of the MyHeart Counts app in the Dutch ambulatory population 2) to study the associations of determinants (Diet, Smoking, Well-being, Risk perception of cardiovascular disease, Physical activity,

Sleep) of cardiovascular disease with self-reported cardiovascular health and 3) Subgroup analysis of primary endpoint. Test whether a particular cluster of individuals will respond more or less favourably to a particular prompt.

### Study design

app-based observational study with integrated cross-over trial

#### Intervention

four different coaching levels

### Study burden and risks

The observational study consists of 7-day study periods, with a frequency of one study period per three months. During these study periods participants will be asked to answer in-app questionnaires and perform a 6-minute walk test with their smartphone at the end of the week. After the first study period, participants are randomized to four different coaching levels in four subsequent weeks. In total, the study takes 5-10 minutes per day in the first week, and 1-2 minutes per day in the following four weeks. The total study takes 5 weeks. Participating with this research does not carry extra health risks. Benefits for participants include getting insight in their cardiovascular risk, personal lifestyle coaching and easy contribution to cardiovascular research from their smartphone.

### **Contacts**

#### **Public**

Leids Universitair Medisch Centrum

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#### **Scientific**

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### **Trial sites**

### **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

### Age

Adults (18-64 years) Elderly (65 years and older)

### Inclusion criteria

In order to be eligible to participate in this study, a subject must meet all of the following criteria:, - >= 18 years

- Living in the Netherlands
- Own an iPhone 5s or higher with the latest software (at least iOS 8)

### **Exclusion criteria**

All participants not meeting the inclusion criteria are not allowed to entry the study.

# Study design

### **Design**

Study type: Interventional

Intervention model: Crossover

Allocation: Randomized controlled trial

Masking: Open (masking not used)

Control: Active

Primary purpose: Basic science

### Recruitment

NL

Recruitment status: Recruiting
Start date (anticipated): 05-10-2022

Enrollment: 1213
Type: Actual

# **Ethics review**

Approved WMO

Date: 18-04-2019

Application type: First submission

Review commission: METC Leiden-Den Haag-Delft (Leiden)

metc-ldd@lumc.nl

Approved WMO

Date: 29-08-2019
Application type: Amendment

Review commission: METC Leiden-Den Haag-Delft (Leiden)

metc-ldd@lumc.nl

Approved WMO

Date: 11-05-2021

Application type: Amendment

Review commission: METC Leiden-Den Haag-Delft (Leiden)

metc-ldd@lumc.nl

Approved WMO

Date: 23-12-2022

Application type: Amendment

Review commission: METC Leiden-Den Haag-Delft (Leiden)

metc-ldd@lumc.nl

# **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: 20977 Source: NTR

Title:

### In other registers

**Register ID** Other 7429

CCMO NL61951.058.18 OMON NL-OMON20977