# ERAS APPtimize: a mobile application to involve patients in the pathway of a intestinal surgery

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The use of an interactive app during the perioperative period, when undergoing colorectal surgery, will activate and stimulate patients and therefore result in higher compliance to the ERAS-protocol.

**Ethical review** Approved WMO

**Status** Recruitment stopped

**Health condition type** Gastrointestinal therapeutic procedures

Study type Interventional

## **Summary**

#### ID

NL-OMON29410

#### Source

Nationaal Trial Register

#### **Brief title**

**ERAS APPtimize** 

#### **Condition**

Gastrointestinal therapeutic procedures

#### **Health condition**

Colorectal surgery

#### Research involving

Human

## **Sponsors and support**

**Primary sponsor:** Academic Medical Center (AMC), Department of Surgery

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#### **Source(s) of monetary or material Support:** Academic Medical Center (AMC)

#### Intervention

Other intervention

#### **Explanation**

#### **Outcome measures**

#### **Primary outcome**

The primary outcome is the overall compliance to the ERAS protocol measured as a mean of the percentages of the single ERAS protocol elements which patients are actively involved in.

#### **Secondary outcome**

Postoperative data < 30 days

Length of hospital stay

Overall morbidity < 30 days

Complications - major

Complications - minor

Reoperations

Readmission <30 days

In-hospital mortality

Gastrointestinal

Tolerate solid food

Absence of nausea

Passage of first flatus

Passage of first stool

Weight - preoperative

Weight - at discharge

Activity

Mean preoperative physical activity

Postoperative physical activity

**Fatigue** 

Pain

Perceived pain daily postoperative - discharge

Compliance with intake of (pain) medication

**PROMS** 

General quality of life

Gastro-intestinal quality of life

Physical Activity

Patient satisfaction

# **Study description**

#### **Background summary**

Perioperative care within colorectal surgery is systematically defined in the 'Enhanced Recovery After Surgery' (ERAS) program. This program aims to improve perioperative care in a multimodal way to ensure early but safe release from the hospital. Adequate compliance to the elements of the ERAS protocol is multifactorial with room for improvement through patient involvement, which will enhance the post-operative outcomes such as length of stay in hospital. The aim of this study is to improve compliance to the ERAS protocol. Therefore an application for smartphone will be developed to be used by the patient undergoing colorectal surgery. Objective of this study is to generate evidence that a mobile app can activate and stimulate a patient resulting in improved compliance to the ERAS protocol.

#### **Study objective**

The use of an interactive app during the perioperative period, when undergoing colorectal surgery, will activate and stimulate patients and therefore result in higher compliance to the ERAS-protocol.

#### Study design

Internvention group:

3 weeks prior to surgery download application

1 week prior to surgery start wearing activity tracker

After 3 weeks post-surgery stop wearing activity tracker

Control group:

1 week prior to surgery start wearing activity tracker

After 3 weeks post-surgery stop wearing activity tracker

#### Intervention

ERAS App, a patient centered mobile application

## **Contacts**

#### **Public**

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# **Eligibility criteria**

#### Age

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

#### Inclusion criteria

- Individuals scheduled to undergo colorectal surgery due to:
- o Inflammatory bowel disease
- o Colorectal cancer
- Adults aged >18 years
- Possession of a smartphone operated with iOS 8 and up or Android 4.3 and up

#### **Exclusion criteria**

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

- Palliative surgery or surgery with additional radio- or chemotherapy
- Severe comorbidity which could complicate the postoperative course
- Patients with a Karnofsky score ; Ü40
- Incompetence of understanding the Dutch language
- Visual impairment, unless well corrected with visual aids
- Physical disabilities limiting the use of a mobile application, such as Parkinson; sich as Parkinson; sich
- When pre-operatively is estimated that following the ERAS protocol postoperative is not feasible
- Multiple organ resection

# Study design

## **Design**

Study phase: N/A

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Open (masking not used)

Control: Active Primary purpose: Other

#### Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 24-10-2019

Enrollment: 140

Type: Actual

## **IPD** sharing statement

Plan to share IPD: Undecided

## **Ethics review**

Approved WMO

Date: 09-11-2017

Application type: First submission

Review commission: MEC Academisch Medisch Centrum (Amsterdam)

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# **Study registrations**

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

ID: 52407

Bron: ToetsingOnline

Titel:

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

No registrations found.

## In other registers

Register ID

NTR-new NL7109 NTR-old NTR7314

CCMO NL63874.018.17 OMON NL-OMON52407

# **Study results**