

# Utilizing activity trackers to increase postoperative ambulation

<b>Submission date</b> 17/06/2015	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 29/06/2015	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 22/07/2015	<b>Condition category</b> Surgery	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

We are investigating the use of activity trackers as a novel quality improvement strategy to increase postoperative ambulation (walking after surgery). Postoperative ambulation is frequently recommended in surgical guidelines, but often difficult for patients and hospital staff to comply with. Activity trackers have been successfully used in outpatient clinics as a motivation tool for ambulation and health monitoring, but have rarely been used in the inpatient surgical setting. This study aims to test how well activity trackers perform in increasing postoperative ambulation.

### Who can participate?

Adult patients having an bariatric operation performed at our center ( that is, laparoscopic roux-n-y gastric bypass, laparoscopic adjustable gastric band, and laparoscopic sleeve gastrectomy).

### What does the study involve?

All participants are given activity trackers and then randomly allocated into one of two groups. Those in group 1 are given feedback on the number of steps they take. Those in group 2 do not receive this feedback. The number of steps taken each day is then compared between the two groups.

### What are the possible benefits and risks of participating?

The benefits of participating are limited to the use of the activity trackers and there is no financial compensation for subjects. There are no major risks to wearing the activity trackers.

### Where is the study run from?

Boston Medical Center (USA)

### When is the study starting and how long is it expected to run for?

March 2015 to March 2016

### Who is funding the study?

Boston Medical Center Resident Quality Improvement Council (USA)

Who is the main contact?

Dr Ryan Macht

## Contact information

### Type(s)

Public

### Contact name

Dr Ryan Macht

### ORCID ID

<https://orcid.org/0000-0002-1944-1653>

### Contact details

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## Additional identifiers

## Study information

### Scientific Title

Utilizing activity trackers to increase postoperative ambulation: a novel quality improvement strategy to quantify ambulation and decrease bariatric surgery complications

### Study objectives

The goal of this study is to evaluate activity tracker feedback as a strategy to increase early ambulation after surgery and to assess the association of early mobility with postoperative outcomes. We hypothesize that feedback from activity trackers will increase postoperative ambulation and lead to decreased ambulation-related complications.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

Boston University Medical Center IRB, 28/01/2015, ref: H-33593

### Study design

Single-center randomized controlled trial

### Primary study design

Interventional

### Study type(s)

Not Specified

**Health condition(s) or problem(s) studied**

Postoperative complications following bariatric surgery

**Interventions**

All subjects will receive an activity tracker following surgery with randomization into two groups:

1. Participants receive ambulation feedback as an inpatient
2. Participants do not receive any feedback

**Intervention Type**

Device

**Primary outcome(s)**

Postoperative ambulation (average steps/day)

**Key secondary outcome(s)**

1. Postoperative readmission or emergency department visit
2. Venous thromboembolism
3. Postoperative complications
4. Weight loss

Patient experience outcomes will be obtained by a short survey given to all study participants at their two-week postoperative visit.

**Completion date**

31/03/2016

**Eligibility****Key inclusion criteria**

All patients undergoing any of the three bariatric operations performed at our center (laparoscopic roux-n-y gastric bypass, laparoscopic adjustable gastric band, and laparoscopic sleeve gastrectomy).

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Sex**

All

**Key exclusion criteria**

Patients undergoing revisional bariatric surgery or emergent/elective reoperations

**Date of first enrolment**

01/03/2015

**Date of final enrolment**

01/03/2016

## Locations

**Countries of recruitment**

United States of America

**Study participating centre****Boston Medical Center**

One Boston Medical Center Place

Boston

United States of America

MA 02118

## Sponsor information

**Organisation**

Boston University Medical Center Institutional Review Board

**ROR**

<https://ror.org/05qwgg493>

## Funder(s)

**Funder type**

Research organisation

**Funder Name**

Boston Medical Center Resident Quality Improvement Council (USA)

## Results and Publications

**Individual participant data (IPD) sharing plan****IPD sharing plan summary**

Available on request