

# Does the combination of early rapid assessment by an emergency specialist and fast priority lab testing shorten the amount of time patients spend in the emergency department?

No registrations found.

<b>Ethical review</b>	Positive opinion
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	-
<b>Study type</b>	Observational non invasive

## Summary

### ID

NL-OMON20153

### Source

NTR

### Brief title

EZFLOW

### Health condition

Crowding in the emergency departments (EDs) and prolonged waiting times force EDs to operate beyond their capacity and threaten patient outcomes

## Sponsors and support

**Primary sponsor:** nvt

**Source(s) of monetary or material Support:** nvt

## Intervention

## Outcome measures

### Primary outcome

mean length of stay

### Secondary outcome

reducing secondary tests and producing faster laboratory results

## Study description

### Background summary

Background and rationale:

In the current health care system Emergency Departments (EDs) are marked by a number of challenges. One of the most important is prolonged waiting time and crowding in the EDs. Time patients spend in the Emergency Department is often used inefficiently. Prolonged waiting times and crowding have been associated with substantial delays in the administration of antibiotics and pain medication which is associated with higher rates of morbidity and mortality. In addition longer waiting times are associated with a greater degree of patient dissatisfaction. Recent studies suggest that a different approach with rapid assessment by a (senior) Emergency Physician shortens the amount of time patients spend in the Emergency department (ED). Furthermore new laboratory transportation and analysing technologies have been developed which ought to be faster than current central lab testing.

**Objective:** Determine if rapid assessment by an Emergency Physician in combination with priority lab testing reduces a patient's length of stay compared to the current approach.

**Hypothesis:** This study hypothesis is that rapid evaluation by an Emergency Physician supported by priority lab testing (PLT) will reduce the mean length of stay in the Emergency Department and facilities will be used more efficiently. This contributes to a better overall quality of emergency health care.

**Study design:** The EZ-Flow project is a prospective observational, non-randomized mono-center evaluation study.

**Study population**

**Inclusion criteria:** patients aged 18 and older that will be treated by an Emergency Physician. All patients were either not referred to a specialty, referred to the Emergency Physician, self-referrals or brought in by ambulance.

Exclusion criteria: patients with a primary trauma or resuscitation, all patients that could not meet the inclusion criteria or no laboratory tests were ordered.

To have adequate power 300 patients have to be included ( $\alpha = 0.05$ ,  $\beta = 0.80$ , SD 90 minutes).

All patients were either not referred to a specialty, referred to the Emergency Physician, self-referrals or brought in by ambulance.

The study group will be compared to the retrospective control group. All control patients received usual care.

Intervention: Directly (within 10 minutes) after arrival in the ED rapid assessment of all included patients will be performed by an Emergency Physician. All of these patients will be selected for priority lab testing.

Data collection: All prospective study patients were observed in the ED. The observation data were noted on paper forms (see Appendix 2) and once completed by laboratory staff, digitalized into Data Manager ETZ. All control group data were selected retrospectively with the use of the electronic patient file. The data were exported and analysed into SPSS, version 19.

Main study outcome: The mean length of stay of a patient attending the Emergency Department. This was defined as time from arrival in a treatment room up until a patient is discharged or ready for admission.

Impact: Once the study is fully conducted and leads to positive results, this system will be applied in the Elisabeth TweeSteden Hospitals. Hereby reducing inefficiencies and a faster patient flow to the next destination of care.

## **Study objective**

rapid assessment by an Emergency Physician supported by priority lab testing (PLT) will reduce length of stay in the emergency department

## **Study design**

time patients arrival in the treatment room tot the point in time when all Emergency Department care was completed and the patient moved on to the next destination of care.

## **Intervention**

Rapid assessment by an emmergency specialist

AND

priority lab testing

## Contacts

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## Eligibility criteria

### **Inclusion criteria**

All patients:

aged 18 and older

presenting at the ED (including patients arriving by ambulance)

with or without referral from primary healthcare providers

seen by an emergency specialist for rapid assessment within 10 minutes after arriving at one of the ED cubicles

need for blood tests in their (routine) diagnostic process

### **Exclusion criteria**

trauma patients, incl. minor injury work stream patients

when rapid assessment could not be performed within 10 minutes

## Study design

### Design

Study type:	Observational non invasive
Intervention model:	Crossover
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

### Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	01-03-2016
Enrollment:	0
Type:	Actual

## Ethics review

Positive opinion	
Date:	30-08-2017
Application type:	First submission

## Study registrations

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

No registrations found.

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

No registrations found.

## In other registers

### Register

NTR-new

NTR-old

Other

### ID

NL6504

NTR6692

METC ETZ : L0201.2016

## Study results