



Karolinska  
Institutet

# LEAN-INSPIRED DROP-IN FOR ATRIAL FIBRILLATION SCREENING WITH THUMB-ECG

Elisabeth Rooth<sup>1</sup>, Jacqueline Ulander<sup>2</sup>, Gunnar Sjölund<sup>2</sup>

<sup>1</sup>Dept. of Clinical Science, Karolinska Institute, Danderyd Hospital. <sup>2</sup>Dept. of Heart and Physiology, Danderyd Hospital, Sweden.

## Conclusion:

- ▶ 70 days shorter answering-time with the new fast-track-process for atrial fibrillation-screening
- ▶ Majority (88%) of the results of Thumb-ECG were available at open ward-visit within 6 weeks compared to 55% before fast-track.
- ▶ Significant arrhythmia/AF-findings in 9% of the Thumb-ECG:s

## Background

The interest has increased to find "silent" atrial fibrillation in strokeprevention efforts (ref 1). A diversity of screening-methods are used and the load on the Physiological departments has increased to give access to these investigations.

The resources in hospital care are limited and we must have good logistics to perform and interpret the screening-methods, so that the patient can get a quick diagnosis and treatment. We found out that the time for the Holter-ECG-answers to the clinician could vary greatly between 1 month to > 4 months at the Stroke-open ward clinic at Danderyd Hospital. A great variation in time from referral to signed answer from Physlab gave us an opportunity to create a standardized Lean-inspired process for the patients in need for AF-screening.

## Method



## Results

**Before** the fast-track (16.01.01 - 16-10.02 ): mean time from referral to signed answer by doctor at Phys lab **98 days** (25 st)  
11/25 st (44%) were referred directly from the Strokeunit.

**After** start of fast-track (16.10.03 – 17.04.30) : mean time of **28 days** (31 st)  
31/31 (100 %) were referred directly from the Strokeunit  
4 patients had to wait > 6 weeks for their answer (3 st missed to get hold of Thumb-ECG, 1 pat in need of interpreter).

Out of 122 st Thumb-ECG:s, AF was found in 6 patients (5%)  
6 + 3 st significant arrhythmias (9%)

The process is still valid, with a medium of **25 days** in 2017

**Long-time registration of heartrythm with handheld ECG to be able to detect silent atrial fibrillation is FoU. The scientific evidence is insufficient to evaluate the measure, but studies are performed within the area.**

(Ref 2)

Ref 1: Sobocinski et al. *Europace* 2012;14(8):1112-6.

Ref 2: Swedish guidelines for stroke care 2018

<https://www.socialstyrelsen.se/publikationer2018/2018-3-11>



Zenicor Thumb-ECG

We are interested in more efficient processes for stroke patients, to be able to prevent future stroke/TIA to a lower costs

