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:

Background
The interest has increased to find “silent” atrial fibrillation in stroke prevention 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

Thumb-ECG is collected on drop-in at the Physiology Dept. 3 weeks registration
Patient registration twice daily or upon symptoms

Patient is informed of the results at open ward visit 6-8w post TIA/ stroke or earlier
If AF is found

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

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-ECGs, 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 heart rhythm 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 2: Swedish guidelines for stroke care 2018
https://www.socialstyrelsen.se/publikationer20102016-3-i1

Zenicor Thumb-ECG