

Joint Working

Executive Summary

Project title	BE-AWARE: Home-Based ECG- Atrial Fibrillation detection with Wireless Ambulatory Recorded ECG
Project partners	Portsmouth Hospitals University NHS Trust Daiichi Sankyo UK Ltd
Start – Finish date	November 2020 – March 2022

Project summary

All patients (project target n=200) referred to the Cardiology department by their GP with palpitation, pre-syncope and syncope will be considered for inclusion into this project. At telephone consultation patients with palpitation and pre-syncope will be offered a Kardiamobile (Alivecor) device (instead of conventional ambulatory monitoring like 24 hours Holter monitor or 5 days cardiac memo). Patients with syncope will be offered a Wellysis S-patch device (as an alternative to subcutaneous implanted Reveal device). Kardiamobile will be activated by the patient at time of symptoms. The device will be returned once symptom-rhythm correlation occurred or after 3 months. Wellysis S-patch will be worn for 21 consecutive days and then returned by the patient. Both devices connect to a software and analysis of ECG strips will be performed by the project team with subsequent letter of diagnosis to the requesting consultant and GP for further management.

Aim of the quality improvement project is to reduce time to diagnosis in patient presenting with palpitation, pre-syncope, syncope in comparison to conventional ambulatory ECG monitoring. Further aim is the improvement in AF detection and subsequent management of AF including treatment with anticoagulation to prevent stroke and associated morbidity and mortality. A patient questionnaire will assess patient satisfaction and reported outcome measures.

Expected benefits to patients, the NHS and Daiichi-Sankyo

Expected Benefits for the Patient:

- Avoidance of patients to attend the outpatient setting in times of COVID
- Vulnerable and shielded patients will have access to ambulatory ECG monitoring during COVID without face-to-face interaction
- Shorter time to diagnosis of cardiac arrhythmia with S-patch or KardiaMobile in comparison to conventional ambulatory cardiac monitoring
- Avoidance of repeat investigations to detect AF.
- Prevention of stroke, hospitalisation, morbidity and mortality secondary to undiagnosed and untreated AF.
- Improvement of patient experience with novel ambulatory devices in comparison with conventional.

Expected Benefits for NHS:

- Able to offer ambulatory ECG monitoring to vulnerable and shielded patients during COVID.
- Higher proportion of AF detection due to prolonged monitoring
- Shorter time to diagnosis of cardiac arrhythmia with s-patch and KardiaMobile in comparison to conventional ambulatory cardiac monitoring.
- Reduction in cost of repeat investigation due to delay in diagnosis.
- Reduction in cost of outpatient reviews due to remote investigations.
- Financial benefit due to prevention of stroke and subsequent hospitalisation, morbidity and mortality.

Expected Benefits for Daiichi-Sankyo UK:

- Higher proportion of AF detection and improvement in patient outcomes
- Pilot project for future joint working projects and sharing best practice
- Create more opportunities for the appropriate use of Direct Oral Anticoagulants, including Daiichi- Sankyo UK's medicines in suitable patients in line with NICE treatment guidelines. If this improvement occurs, we are likely to see an increase in DOAC prescriptions.
- Journal publication and associated publicity likely resulting in future collaborations and subsequent raise in profile of Daiichi-Sankyo.