Joint Working

Executive Summary

Project title:	Remote detection and diagnosis of Atrial Fibrillation (AF): service redesign project – SPINE PCN
Project partners:	NHS SPINE Primary Care Network Daiichi Sankyo UK Ltd
Start date:	October 2021- January 2023
Project Support:	Daiichi Sankyo UK Ltd financial contribution £30,869.40 NHS SPINE PCN indirect contribution £20,910.00

This summary has been written by Daiichi Sankyo with consultation and approval from the Joint Working Group.

Project summary

The project aims to improve the AF detection gap by detecting AF and confirming AF diagnosis using digital health technologies. In addition, this project brings detection and diagnosis of AF into patients' homes, allowing at-risk patients access to the right treatments at the appropriate time.

The project allows systematic and opportunistic case finding and managing local AF pathway (adhering to local guidance) whilst patients are at home. The project intends to improve outcomes - the detection gap, health economic outcomes and enhance the healthcare professionals' and patients' experiences with remote detection and diagnosis of AF.

This project is first of four/five pilots planned to run in parallel across various regions. Each pilot project will be individually evaluated, and the collective outcome for overall evaluation. The outcomes of the evaluation of this pilot site are available below.

Expected benefits to patients the NHS & Daiichi Sankyo UK Ltd

Expected benefits to patients:

- Shorter time to diagnosis of cardiac arrhythmia with digital health technologies in comparison to conventional 12 lead ECG and/or ambulatory cardiac monitoring.
- Higher proportion of AF detection with subsequent access to treatment and management of atrial fibrillation.
- Avoidance of patients to attend the GP practices and outpatient setting in times of COVID, and detection and diagnosis conducted remotely.

- Prevention of AF related stroke, hospitalisation, morbidity and mortality secondary to undiagnosed and untreated AF.
- Increased awareness of Atrial Fibrillation, and patient empowerment.
- Improvement of patient experience with novel detection/diagnosis devices in comparison with conventional management.

Expected benefits to NHS:

- Able to conduct systematic and opportunistic case finding remotely at scale (i.e. high-risk group at PCN/CCG level).
- Higher proportion of AF detection due to systematic and opportunistic case finding, in addition to conventional care pathway.
- Shorter time to diagnosis of cardiac arrhythmia with digital health technologies in comparison to conventional 12 lead ECG and/or ambulatory cardiac monitoring.
- Able to offer AF detection/diagnosis and subsequent treatment to vulnerable and shielded patients during COVID-19.
- Able to adhere to local guidance.
- Reduced primary and secondary care workload and improved efficiencies.
- Financial benefit due to prevention of AF related stroke and subsequent hospitalisation, morbidity and mortality.
- Reduction in cost of repeat investigation due to delay in diagnosis and outpatient reviews.
- Improvement of HCP experience with novel detection/diagnosis devices in comparison with conventional.
- Bringing services from secondary to primary care and supporting NHS Long Term Plan.

Expected benefits to Daiichi Sankyo UK Ltd:

- Recognised and engaged as a trusted partner of choice for the NHS.
- Raise Daiichi Sankyo corporate profile and awareness for digital health solutions for patient outcomes improvement.
- It is anticipated as part of the project that more patients may be treated with a pharmaceutical product. This may include but is not exclusive to products manufactured by Daiichi Sankyo UK Ltd.

- Potential of scaling across wider NHS outreach and supporting local guideline/requirements.
- Journal publication and associated publicity likely resulting in future collaborations.

Outcomes

- In total, the AF detection project enabled a service evaluation of 588 patients in one practice.
- The FibriCheck app usage was very good, with 7 in 10 patients using the app at least once. However, only 1 in 6 patients used the app according to the volume of measurements expected.
- 6.7% detection yield for possible AF or AFl (which included case of persistent AF or AFl) using the FibriCheck app.
- 27.6% were diagnosed with AF and 10.3% were diagnosed with a non-AF arrhythmia using the QuardiocoreTM device. However, less than half of patients (48.3%) used the device as recommended.