Post-stroke atrial fibrillation monitoring to support appropriate anticoagulant therapy

Atrial fibrillation accounts for between 13 to 26% of all ischemic strokes and is a major cause of stroke recurrence without adequate intervention.

CASE STUDY

Innovation overview

Ischemic stroke is the leading cause of adult disability in the developed world and the third leading cause of patient mortality. In patients who have had a stroke, atrial fibrillation greatly increases the chance of a further stroke and is associated with poor prognosis and increased stroke severity. Oral anticoagulants reduce this risk of recurrent stroke in patients with atrial fibrillation and it is therefore critically important to treat these patients appropriately.

The aim of this project is to evaluate atrial fibrillation monitoring technology to improve patient outcomes following stroke. Patients will be offered screening which has not been available before. Based on existing literature, is it expected that 20% of patients will be identified as having atrial fibrillation and therefore offered oral anticoagulation. We anticipate that appropriate oral anticoagulant prescribing may reduce the risk of recurrent stroke by approximately 60%, improving clinical outcomes and reducing healthcare costs.

Objectives

- Establish post-stroke monitoring protocols at the Highland stroke unit.
- Perform monitoring and ensure that patients who are eligible for anticoagulation have this appropriately prescribed.
- Evaluate clinical outcomes and patient satisfaction metrics.

Potential impacts and outcomes

Adoption of atrial fibrillation testing and appropriate oral anticoagulant prescribing has the potential to reduce the risk of recurrent stroke. This will improve patient outcomes, reduce NHS costs and improve compliance with UK national screening guidelines.

City-Region Deal deliverables

Supported company for product innovation: Daiichi-Sankyo, Ltd.
Healthcare service delivery improvement: Improved monitoring and management of stroke patients.

External partner:

Daiichi-Sankyo, Ltd.

University lead:

Prof Steve Leslie,
Professor of Cardiology and Consultant cardiologist (NHS Highland)