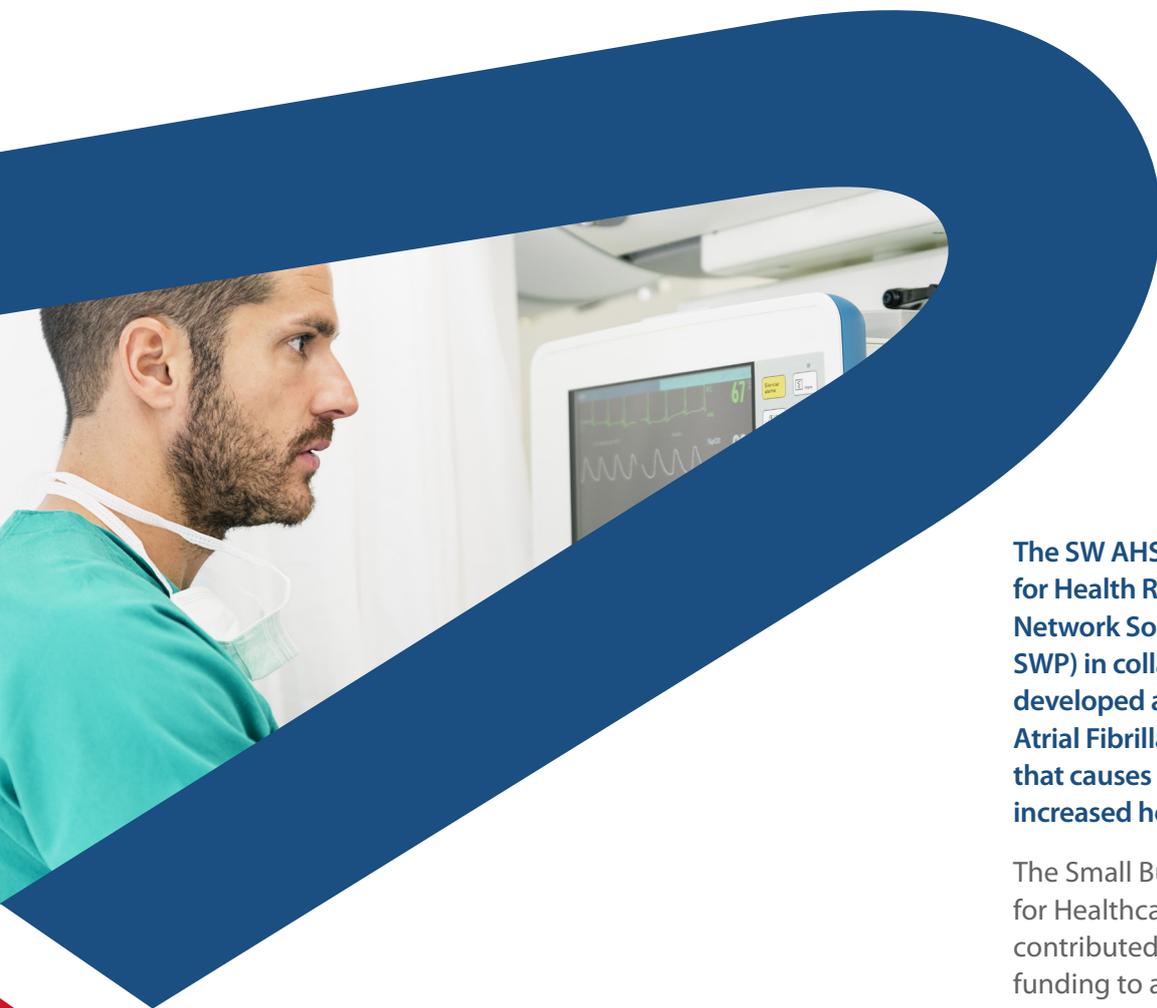




South West  
Academic Health  
Science Network



## Collaboration with Plessey



**The SW AHSN and National Institute for Health Research Clinical Research Network South West Peninsula (CRN SWP) in collaboration with Plessey have developed a device for diagnosing Atrial Fibrillation (AF), a heart condition that causes an irregular and often increased heartbeat.**

The Small Business Research Initiative for Healthcare (SBRI Healthcare) has contributed around £1.1 million in funding to assist the development of the device called imPulse, which hopes to replicate a 12 lead ECG and enable the easier diagnosis of a greater number of AF patients. The SW AHSN has supported Plessey to identify its best route to market for the device by brokering partnerships with various regional stakeholders.

## Challenge identified and actions taken:

Approximately 500,000 people in the UK are diagnosed with AF although it is estimated that around half of all AF patients remain undiagnosed.

The implications are serious – AF patients are at an increased risk of suffering a stroke which has debilitating consequences for patients and the NHS.

Plessey, a manufacturer of semi-conductors, wanted to transfer the technology in its engineering product portfolio to healthcare and successfully applied for SBRI Healthcare funding. The AF diagnostic device aims to replicate the accuracy of a 12 lead electrocardiogram (ECG) test, the current standard for AF diagnosis within primary care, pharmacy or at home.

The SW AHSN introduced the company to various regional stakeholders, as well as the CRN SWP, to help broker clinical trials in the region to benefit both the company and South West patients.

### Impacts/Outcomes

- Up to 500,000 previously undiagnosed patients across the UK could benefit from easier access to ECG technology.
- In the South West, which is the only site for clinical trials of the device, approximately 1000 patients will have their heart rhythm assessed by the device.
- From the clinical trial, it is estimated that 10 patients will be diagnosed with AF, who were previously undiagnosed.
- Plessey's ability to market then sell the product to the NHS will be enhanced by working with the CRN SWP to produce robust clinical evidence through research.
- The SW AHSN's work to support Plessey in the development of the device will safeguard and create jobs in the region.
- SBRI Healthcare's credibility as a research and development funding mechanism is enhanced as a result of companies like Plessey undertaking clinical trials and increasing their chances of procuring into the NHS.

### Plans for the future

The SW AHSN will work with Plessey to find the best route to procurement within South West NHS Clinical Commissioning Groups and Hospital Trusts.

The SW AHSN and CRN SWP plan to collaborate on future projects with product developers and innovators to enable the best possible routes into the NHS for testing, evaluation and clinical trials.

The SW AHSN is developing its innovation support activities by using the language and principles of the North East/North Cumbria AHSN's Innovation Pathway.

### Tips for adoption

The SW AHSN recommends that all AHSNs develop working relationships with local NHS stakeholders, particularly the regional NIHR CRNs. The joint offer provides companies with an excellent resource to help facilitate clinical trials across a region, whilst ensuring the product continues to be developed with a robust evidence base.

## Which national clinical or policy priorities does this example address?

This provides an example of how Academic Health Science Networks can support the business community, by linking companies with the relevant NHS stakeholders to take a product into clinical trials and hopefully procurement into the NHS.

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