HeliconHeart™

Digital INR for effective stroke prevention

Approximately 150,000 people suffer the debilitating effects of stroke every year in the UK.

Stroke rehabilitation almost inevitably requires a combination of drug therapy, physiotherapy, occupational therapy and endless visits to GPs and hospital clinics for monitoring. The lives of the patients and those close to them change overnight.

The inevitable financial cost is also high; stroke in the UK costs £2.8billion every year. Stroke related to Atrial Fibrillation - or AF (one of the most common factors in stroke) - costs over £2billion with £485m being spent on acute care for AF-related strokes.

And yet, with better management of AF more strokes could be prevented and the cost of stroke reduced by 20% (NICE 2006). That's why Helicon Health has been working to improve the management of patients with long-term conditions such as AF for over two decades.

HeliconHeart, our first product, is an integrated, web-based solution for stroke prevention, which makes it easier for busy healthcare professionals to plan and manage AF, oral anticoagulation and stroke prevention services. It is also designed for patients who wish to play a more active role in managing their condition.

Compliant with National Institute for Health and Care Excellence (NICE) guidelines on anticoagulation and self monitoring, and cited as a learning exemplar in NICE's guidelines for atrial fibrillation, the HeliconHeart package uniquely includes:

- **a web and standards based electronic health record (EHR)**
- **anticoagulation and stroke prevention anticoagulation advisory functions**
- **remote blood pressure monitoring**
- **digital INR monitoring**
- **real-time audit across multiple sites**
- **blended learning (for clinicians and patients)**
- **clinical governance**
- **professional services to help establish the service.**

More strokes could be prevented *and the cost of stroke* **reduced by 20%**

(NICE 2006)

For more information, go to **www.heliconhealth.co.uk** / email: **info@heliconhealth.co.uk**

How does HeliconHeart improve stroke prevention?

Work has been ongoing to reduce stroke but there have been a number of barriers preventing or slowing progress.

HeliconHeart tackles many of these barriers:

Barrier	With HeliconHeart
Single electronic health record (EHR) The proliferation of systems across the NHS has slowed progress towards a single Electronic Health Record. This has made it hard for clinicians at different sites to manage patients with multiple long-term conditions.	HeliconHeart's single EHR allows GPs, nurses, hospital clinicians, pharmacists, patients and carers to work together effectively with access to a real-time 'whole patient' record. HeliconHeart's anticoagulant advisory system includes optimal oral anticoagulant choices and management. It also offers advice about the management of the AF itself.
Education The move to shared care gives GPs greater responsibility for the management of patients with long-term conditions such as AF. In addition, New Oral Anticoagulant drugs (NOACs) have added a layer of complexity and risk, which requires ongoing education for clinicians and patients.	Helicon Health's innovative, blended-learning CPD course for stroke prevention is the result of over a decade's work. We are the only UK provider of comprehensive patient-centred, blended learning for clinicians AND the patient/carer.
Patient Engagement Shared care requires patients to take greater responsibility for their care but they need to be suitably informed and educated to do this. They also need secure access to their EHR and clinician(s), to provide updates and seek advice when needed.	HeliconHeart helps the patient to become more confident and competent and thereby more involved in his/her own care. It connects the patient directly with the clinician and his/her personal electronic health record. Our partnership with InHealthCare gives patients the flexibility to upload their results online or send them to their clinician via SMS or IVR (Interactive Voice Response).
Affordable access to INR monitoring devices Until now, monitoring devices have been prohibitively expensive.	Using InHealthCare's digital INR monitoring service, we have removed the up front cost of the CoaguChek device.
Interoperability with GP systems The huge number of legacy systems across the NHS has created confusion and made it difficult for new systems to be interoperable.	Using Inhealthcare's Clinical Integration Platform, HeliconHeart is integrated, within the N3 networks, into GP and other clinical systems.
Governance Shared care carries increased risk. It therefore requires close monitoring of services and performance across different sites.	HeliconHeart's robust governance system aids risk management and enables multi-site comparisons.

Case study

Community based and Hospital supported Cardiovascular Services including Anticoagulant and Stroke Prevention Services - North Central London

The service is delivered from 2 hospital out-patient departments, 30 General Practices, three community pharmacists, one polyclinic and one community hospital in North Central London. There is also a growing cohort of patients who are self-testing or self-managing their anticoagulation.

Results

The community-based and hospital supported shared care services are now building progressively:

- **Patient numbers are over 7,000 and rising at an average rate of 5% per month**
- **200 healthcare practitioners and 30 patients participated in the accredited face-to-face learning (which now forms part of our blended learning programme)**

An independently commissioned survey demonstrated that all the patients interviewed favoured the new anticoagulation service over the hospital-based service used previously, for a number of reasons including convenience, a lower risk of hospital acquired infection and a good face-to-face explanation of results and action to take.

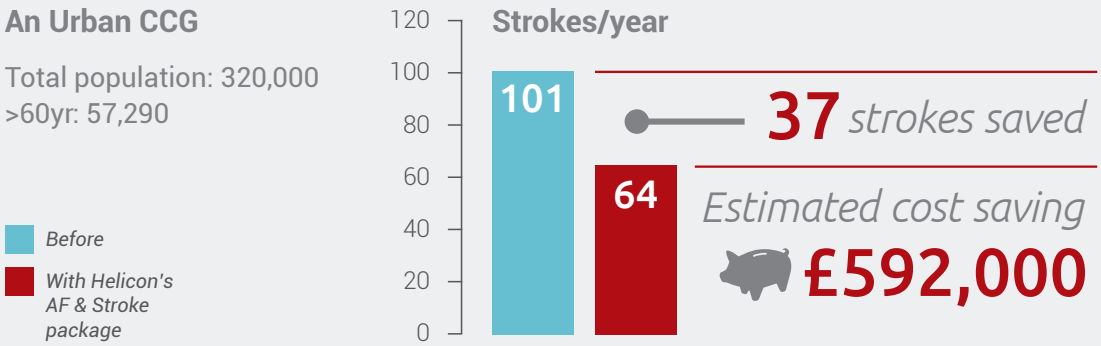
The graphic below shows the cost and benefits if patients with AF not yet diagnosed and those diagnosed but not treated appropriately, were better managed:

"The combination of software, education and governance delivered by HeliconHeart is very compelling. We have been delighted with the impact of the service, so much so that we intend to use it to help us manage other long-term conditions, such as heart failure, atrial fibrillation and coronary artery disease, where the overlaps with anticoagulant treatment are considerable.

"We now collate a wide range of data, from blood test results to the QA of the instruments and devices used on each of the delivery sites. This enables us to monitor and measure the quality of all aspects of the anticoagulant and stroke prevention service, from education to patient outcomes and the safety of the clinical environment."

Dr John Luckit, Consultant Haematologist, North Middlesex Hospital

Impact of Helicon AF & Stroke Package



Case study

Patient self-monitoring

Grace da Silva was diagnosed with Atrial Fibrillation (AF) in the early 1990s when she was in her late 30s, following investigations into an unrelated issue. At the time, her children were very young and she worked part time.

She was prescribed warfarin and submitted herself to long-term anticoagulation, with a regime of 6 weekly blood tests at her local hospital, Whittington Health. As parking at the hospital is difficult, she uses public transport, which takes approximately 40 minutes each way, traffic permitting.

A few years ago Grace had a pacemaker fitted. This made a significant difference to her quality of life but further improvement came when her partner purchased a CoaguChek device, to enable her to self-monitor her anticoagulation.

She was given advice and support by the anticoagulation clinic, to get her started and she hasn't looked back since.

> *"The CoaguChek device has made a huge difference; I now do my finger prick test in the comfort of my own home and simply call in the results, which are uploaded to HeliconHeart for the clinic to review. It only takes a couple of minutes and I don't have to queue for the bus on my day off or wait in hospital waiting rooms with lots of people that have coughs and colds.*
>
> *"Even better, I no longer have to plan my holiday around my blood test appointments as I can simply take the device with me and call the results in as normal. It's amazing!"*

Grace also suffers from osteoporosis and diabetes so it is important that all of her clinicians are kept up to speed with her treatment.

Grace concludes:

> *"I get comfort from knowing that, thanks to HeliconHeart, all my clinicians have access to a single electronic health record for me. I also like playing an active role in my treatment and I find I worry less about my AF."*

HeliconHeart at a glance

- Real-time electronic health record (EHR) shared with CCG colleagues and patient
- Anticoagulant advisory system
- Interoperability with existing GP systems and other clinical systems
- Affordable patient self-monitoring, using Roche's Coaguchek and BP monitor
- Hosted on NHS spine via N3
- Education for clinicians
- Education for patients

Pricing

HeliconHeart is a managed service, priced to enable large-scale rapid deployment. We can have the system set up for you within a few weeks, subject to your requirements. In order to provide you with a quote, we will need to know:

- **Number of sites you are working across and the details of these sites**
- **Current size of AF and anticoagulant patient cohort**
- **Which GP system you are using**
- **Which hospital systems and versions you need interoperability with**

Next steps

To find out more or request a quote, please email **info@heliconhealth.co.uk**

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HeliconHeart

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A partnership with InHealthCare

Helicon Health Inhealthcare

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