National Initiative Case Study: Successful Anticoagulation Service at Brentwood Community Hospital

Introduction

The National Anticoagulation Initiative aims to decrease strokes in at-risk patients with Atrial Fibrillation (AF) by promoting appropriate, safe and locally available oral anticoagulation. The scalable National AC initiative, which is lead by Professor Sir Muir Gray, has been working with influential thought leaders since 2012 to discuss treatment, best practice and benchmarking, with the aim of taking this forward into more populations nationwide.

AF is responsible for 1 in 4 ischaemic strokes in the UK. AF-related strokes are associated with a significant risk of death or severe, permanent disability in those who survive. Anticoagulation can significantly decrease stroke risk by two thirds. The National AF Initiative is designed to provide a system to increase the percentage of individuals with AF on effective and safe anticoagulation, in order to decrease stroke incidence by developing an integrated network of service providers working to the same aims and objectives, criteria and standards. This already covers a population of about 4 million and over the next three to four years the aim is to extend this coverage nationally.

A team working at Brentwood Community Hospital is among the first to share their best practice.

Background

Dr Andy Hughes is Consultant Community Haematologist at Brentwood Community Hospital, the only haematologist in the UK who is based exclusively in a community setting. He has been involved with the National Initiative since its inception. He set up a nurse-led anticoagulation service at Brentwood Community Hospital in 2008, initially with a handful of patients. The service now covers the Brentwood CCG locality, with nine practices serving a population of 76,000. As of February 2014 there were 840 active patients being anticoagulated.

Establishing a successful anticoagulation service

Dr Hughes explains: "Our main aim was to provide a locally available, effective and safe anticoagulation service which would cover the local population, and particularly to facilitate the local anticoagulation of individuals with AF at risk of stroke. GPs are able to refer directly to the clinic which provides comprehensive pre-treatment counseling, warfarin initiation and long term INR monitoring. The service provides morning and afternoon clinics Monday to Thursday. Patients have a timed appointment, have a capillary INR measurement done using the Roche

CoaguChek XS Plus Point of Care testing device. They have a face-to-face consultation and warfarin dosing is aided by the use of a computerised dosing software system (INRstar)". The service is largely nurse-delivered but Dr Hughes is available on site every day to provide clinical support and backup as required.

Initially the clinic aimed to provide a locally available anticoagulation service for the Brentwood population, but there was little effective integration with local GPs as regards a planned approach to anticoagulating individuals with AF in order to decrease local stroke incidence. As a result of Dr Hughes's involvement with the National AC Initiative he has been able to develop increasing integration with the local GP practices. All have now run the GRASP-AF tool and the results compare favorably with national data in that 58% of individuals with AF deemed at risk of stroke with a CHADS $_2$ score of 2 or more are on an oral anticoagulant. However, this means that 42%, 381 patients, are not and $1/3^{rd}$ of these individuals are only on aspirin and 8% on no antithrombotic treatment.

Dr Hughes says: "Because of our involvement with the National AC Initiative we have been able to begin to integrate our local anticoagulation service more effectively with our local GPs which will facilitate anticoagulating an increasing number of patients with AF at risk of stroke. With the current anticoagulation coverage we are saving 24 strokes per year, compared to no antithrombotic treatment, that saves the local health economy £290K. By being part of the National AC Initiative we are now in a position to steadily improve anticoagulation coverage, save more individuals from strokes and provide additional financial savings".

Replicating the model

Dr Hughes commented further: "The Initiative brings together diverse services but now with common aims and objectives in order to develop a national model of care with agreed criteria and standards to measure performance, which is currently lacking. Service provision locally can remain variable as appropriate however. We believe that this is something that could and should be replicated elsewhere in the country in order to decrease AF-related strokes nationally by increasing the number of individuals at risk on an oral anticoagulant and to increase the efficacy, safety and convenience of such treatment".