

INR in the community

In January 2006, the Government charged GPs in England with developing a 'new generation of community facilities' to provide patients with a range of medical and social care services closer to where they live. They revealed that over the next ten years, they wanted to see 5% of resources (£4 billion a year) shifted from secondary to primary care.

Such a shift in the way care is delivered will see a move away from a 'one size fits all approach' within specialist settings to a community-based responsive, flexible service. Specialisms such as ENT and dermatology, for example, may be offered in community hospitals and GP surgeries as a result.

Likewise, anticoagulation services are particularly suitable for being delivered in primary care. Hospital-based clinics are oversubscribed and the situation looks set to worsen with growing numbers of patients taking anticoagulation therapy. In addition, outpatients departments are already overcrowded and many patients need ambulance transport in order to attend.

Some NHS Trusts are already making the decision to move anticoagulation clinics into primary care. This article examines the challenges experienced from the perspective of a lead anticoagulation practitioner and a lead nurse in primary care.



Jean Walton is lead anticoagulation practitioner for Lincolnshire PCT and Beacon Medical Practice, Skegness. She previously worked in hospital-based anticoagulation clinics for ten years and has experienced many oversubscribed clinics in secondary care. "Patients often spend long periods waiting around. In addition, many require ambulance transport, which carries significant time

and cost implications. Too frequently patients aren't given enough time to discuss their fears or changes in medication with a healthcare professional."

Compounding these issues further is the increasing number of patients needing

anticoagulation therapy, such as warfarin, having been identified by general screening recommended by national service frameworks and NICE.

New clinics

GPs in the Lincolnshire area were offered the opportunity to set-up anticoagulation clinics in their surgeries and Jean took a leading role in coordinating this process. For practice staff, introducing a new clinic presented several challenges.

Jean explains, "One important decision to be made was which coagulometer and dosage decision software to use. Thrombotrack (Axis-Shield UK), in conjunction with Thrombotest reagent, was always used in our hospital clinics and as a result we had ten years' experience of using the instrument. I also liaised with biomedical scientists who recommended the Axis-Shield system over other coagulometers because it correlates well with laboratory results from venous samples. It also has the advantage that when community nurses take venous samples, they can be processed on Thrombotrack in the clinic rather than being sent to the laboratory, which means that results are available faster. This isn't possible on all instruments."

Another key consideration was the training of users of both the testing and dosing equipment. Although computer software dosage calculations are automated, the underpinning knowledge is important for being able to interpret results. "In addition to supplying the Thrombotrack instruments, Axis-Shield UK also trained me as a trainer so I was able to cascade this knowledge to other users and attend their first clinics."

Seeing results

Jean and team assessed patients' reactions to the new service; a small survey conducted in Skegness revealed that patients were very happy with the new anticoagulation clinics. "They appreciate receiving individual consultations and seeing the same staff each time", says Jean. At County Hospital Louth, a busy community hospital, venous samples were previously used for all patients. "The new clinic here has really taken off. Previously, patients were bled at the laboratory and then asked to wait in outpatients. Now it's a really slick clinic and both staff and patients love it."



Theresa Hare is lead nurse at Munro Medical Centre in Spalding. When the United Lincolnshire Hospitals NHS Trust decided to move anticoagulation clinics into primary care, the Munro Medical Centre chose to establish an anticoagulation service, and did so in just five weeks. Theresa explains, "We were allocated 250 patients initially.

This has already grown to around 350. Our first steps involved visiting neighbouring clinics in both GP practices and community hospitals to see how they were run. When it came to choosing instrumentation, our neighbours both used Thrombotrack and so we opted for standardisation enabling us to borrow supplies from each other and compare results, should we ever need to.

"Our clinic is operated by eight people with no previous anticoagulation experience so the fact that Thrombotrack is so user-friendly was very important to us. In practice, the instrument has always run very well and the only time we have received results which were off-track were as a result of the INR being greater than 9. We have been very happy with the system we chose.

"While setting up the clinic we received a great deal of support from both Jean Walton and Axis-Shield UK. They both helped us to develop protocols based on their considerable experience and also contributed to our health and safety policies."

Munro Medical Centre originally operated 5 morning clinics a week but that has already been reduced to two as patients have been stabilised and require fewer recalls. "Patients attending the clinics have told us there has been a massive improvement in the service they experience. The system works very well and we are able to allocate patients to specific 7 minute slots.

Successful experience

The experiences shared by Jean Walton and Theresa Hare show that anticoagulation clinics in primary care can be very successful and that patients appreciate receiving care in the community. Choosing experienced partners who will help support anticoagulation practitioners with training and advice has proved to be invaluable in getting the clinics established.

Box text:

About anticoagulation testing

Around one million patients in the UK are estimated to be on oral anticoagulation therapy (OAT), with warfarin being the most common example. OAT is prescribed to patients at high risk of blood clots, including atrial fibrillation, thrombophilia and deep vein thrombosis. However, the dosage must be carefully balanced between a dose which is sufficient to prevent a thrombotic event and one which is too high and may cause bleeding. The efficacy of warfarin is affected by a wide variety of factors including: co-administration of antibiotics or steroids; alcohol; and certain foods such as broccoli (its high vitamin K concentration counteracts the effect of the drug).

Patients on OAT require regular blood tests to ensure that blood clotting time stays within a narrow therapeutic range. The test is known as the international normalised ratio (INR) and the patient's treatment dosage may be amended based on its result.



Anticoagulation monitoring using Thrombotrack at the Beacon Medical Practice, Skegness