

## Managing Patient Self-Testing

ST JAMES'S HOSPITAL, DUBLIN

### Summary

St James's Hospital houses the National Centre for Hereditary Coagulation Disorders (NCHCD) which has responsibility for 1500 patients who attend the anticoagulation clinic. In 2003, plans to improve the anticoagulation service involved the presentation of a business case to the Health Service Executive (HSE) with the aim to introduce patient self-testing.

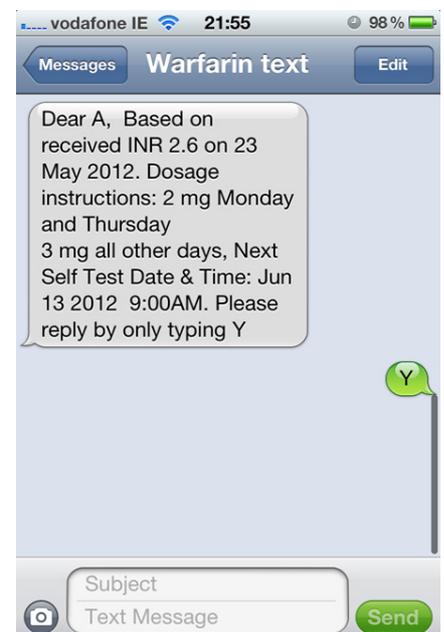
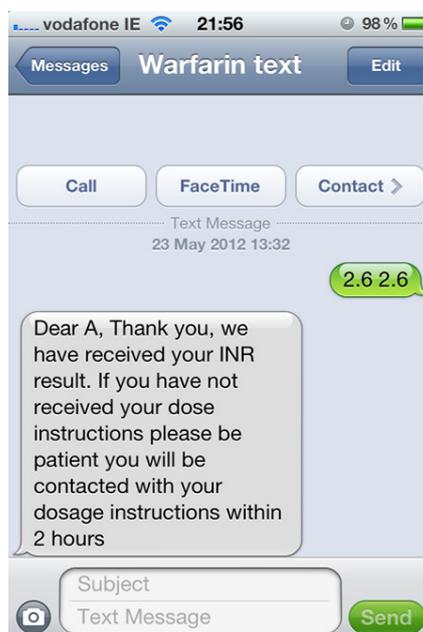
The successful proposal included a web based dosing system (DAWN AC Version 7) with remote access by GP's, the purchase of 300 CoaguChek XS devices and a third party software application for text messaging (Valentia Technologies).

All new patient self-testers were reviewed after three months and then subsequently at six monthly intervals. Due to the success of the self-testing programme, the volume of phone calls from patients reporting their INR results proved to be a problem for staff.

In response to this new challenge, the anticoagulation service worked with Valentia Technologies to design and develop a system that was able to accept the self-test patient INR result in the form of a mobile/cell phone text message and transmit it automatically into the DAWN system.

Once the patient has submitted their INR results, they receive their dosage instructions back in the form of a text message and are asked to confirm receipt, again via text.

*"Monthly audits using the DAWN system showed that self-testers had a higher percentage time in range than those who attended the clinic"*



Prior to launch, the system was validated with respect to accuracy, functionality, reliability and ease of use.

So far results have been extremely positive.

## PATIENT SELECTION AND TRAINING

Selecting patients for self-testing was determined using the following acceptance criteria:

- Patients on Warfarin long term
- Patients with sufficient manual dexterity, eyesight and cognitive skills for daily tasks
- Individuals who are motivated to be involved with their own care or primary carers who will take the responsibility
- Patients who have been compliant in attending the anticoagulation service and taking their medication

A training programme was developed that involved visual and verbal device demonstrations, competency tests, a supporting DVD from Roche on monitoring INR levels accurately, and a signed contract of compliance.

The training also provided the opportunity to re-educate the patients and this was carried out with the following learning objectives:

- The indication for Warfarin
- Warfarin therapy monitoring
- Side effects of Warfarin therapy
- The importance of reporting any adverse incident
- Potential for drug interactions with Warfarin and reporting any medication changes
- Keeping a record of any INR results and doses
- Operating the CoaguChek XS and finger stick testing
- Quality control

*This case study is based on a presentation given by Catherine Reilly, St James's Hospital Dublin, at a DAWN AC User Group Meeting*

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