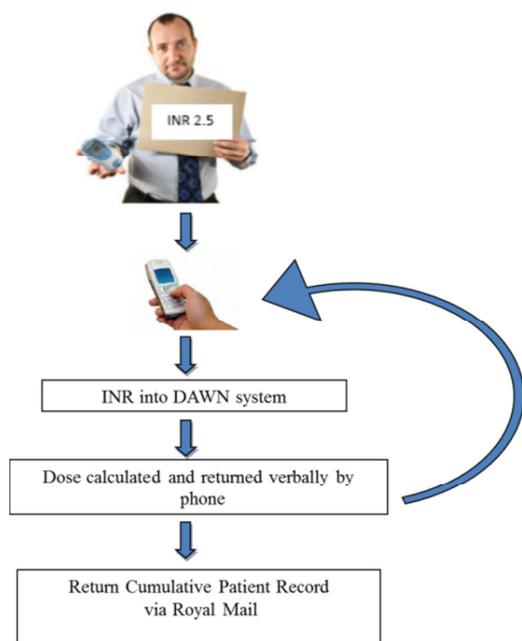


A Review of Self-Testing Patients: How Are They Doing?

Jeff Walker, Chief Biomedical Scientist, Mid-Yorkshire Hospitals NHS Trust

In 2009 Mid Yorkshire Hospitals NHS Trust carried out a management review of self-testing anticoagulation patients. Patients tested at home and either text or phoned in their INR results which would then be entered into DAWN AC and their dose returned to them either by phone or letter.

Patient Self-Testing Workflow



The Trust did not advertise the fact that it offered self-testing as an option to patients; rather the patient had to approach them and ask to be transferred to the self-testing model and with no funding available, patients had to buy their own CoaguChek machine and strips.

A first appointment would be made with the patient to discuss how the system would work and the contract. The contract outlined the responsibilities of the patient, the laboratory and the GP, which included the requirement for the patient to gain agreement from the GP who would sign up that the patient was capable of taking on self-testing. A further 3 training sessions followed the initial appointment to ensure that the patient was fully educated.

The introduction of self-testing to the anticoagulation service was designed to reduce the workload, improve patient compliance and share responsibility of care, whilst promoting the fact that the Trust was committed to providing the best possible service after listening to users.

The achievements and benefits gained from self-testing included improved compliance; better relationships between staff and patients; better INR control and increased patient and staff satisfaction.

The Trust learnt that it was important to keep everyone involved in the patient's care informed at each stage to reduce resistance and gain buy-in, whilst at the same time starting small and increasing patient numbers gradually.

In 2013 a study was undertaken to assess how the self-testing patients were performing and the effectiveness of this model since its introduction in 2009.

The study included the following patients:

- Those who had been on Warfarin for a minimum of six months prior to starting self-testing and had been self-testing for six months

- Four patients who had at least six months prior to self-testing and between three and six months post self-testing

This totalled 35 patients, around 50% of the total self-testers the service had and made up of early adopters who fell into one of three categories: building site workers; travelling retired; and children, for whom the flexibility of self-testing aligned well with their lifestyles and/or personal and work circumstances.

The self-test study data produced some favourable results:

- Every patient apart from one showed an improved Therapeutic Time in Range (TTR)
- The average improvement in TTR was 18% (16.8% including the one non-improver)
- There was a 22% improvement in TTR amongst the poorly controlled (those with a TTR below 65% prior to self-testing)
- There was a 15% improvement in TTR amongst the well-controlled patients (those with a TTR above 65% prior to self-testing)
- 80% of patients who were poorly controlled prior to self-testing (TTR below 65%) moved into the well-controlled category after self-testing

The study also highlighted some key patient satisfaction indicators on top of the positive clinical results:

- 82.4% of patients felt that their INR was more stable since starting self-testing
- 94.1% felt more in control of their anticoagulation therapy since starting self-testing
- 100% would recommend self-testing to other anticoagulation patients
- 100% agreed that self-testing had been beneficial to their lifestyle