

## Warfarin patient self-testing Pendleside Medical Practice, Clitheroe

Pendleside Medical Practice in Clitheroe has recently been able to offer a new kind of connected self-care to patients prescribed warfarin. Patients are able to test their own blood at home, and send their INR result directly to the practice via an app called **INRstar Engage**.

Rosalee is a patient at Pendleside Medical Practice. Her doctor, Dr Lucy Astle, talked to us about implementing the project at Pendleside, which is part of a wider project involving 5 practices in East Lancashire CCG, and supported by the Innovation Agency.

*"We were struggling with our anticoagulation clinics. They were very busy and time consuming. It seemed there was potential to reduce the time commitment for both patients coming in and the nurses running the clinics."*

**Dr Lucy Astle**

Some of Dr Astle's patients were already self-testing using their own devices. However they still needed to speak to the practice nurse to convey their INR result, and discuss any issues.

"Patients, especially working-aged patients could spend a lot of time trying to speak to the practice nurse."

The INRstar Engage app is a solution to this problem. The patient sends the INR result directly to the practice's warfarin-monitoring system, INRstar, along with answers to safety questions and any other information they wish to provide. This information is also filed back to the clinical system, thus providing a continuous narrative.

"The educational aspects of the app and digital tutorials help patients to increase knowledge of their condition and medication. They hopefully better understand what they are doing and why they are doing it."

The project already had some unexpected benefits, particularly for patients who had needed to stop warfarin on a temporary basis.

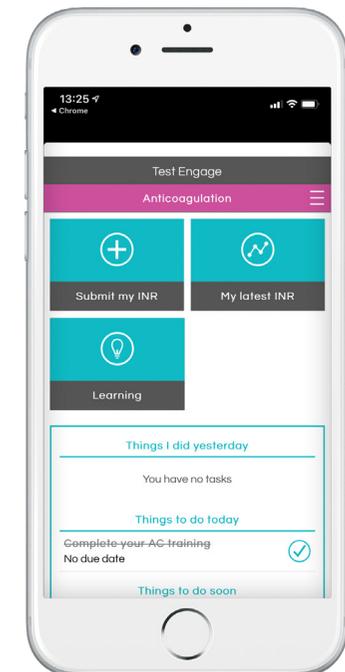
"Rosalee has had several procedures recently which has meant testing her INR regularly, sometimes on a daily basis. Previously she would have travelled to the practice to do this, but because she is self-testing, she has been able to test and send her own readings from the comfort of her own home."

Rosalee Stevenson is a 66 year old patient at Pendleside Medical Practice. She has been taking warfarin for atrial fibrillation for the last 6 years. She has found self-testing to be "invaluable".

We asked Rosalee whether she would recommend self-testing to other patients on warfarin.

*"It's so simple. It's given me peace of mind, and I know it's there in case I don't think things are right. If I go to the dentist or have a shoulder injection, I've got to stop warfarin. With self-monitoring I know I can come back and test my INR, and get it back to the level. It's just peace of mind. I would recommend it to anybody. It's wonderful."*

**Rosalee Stevenson**



## How easy it is to enable patient access to connected self-care?

Dr Astle told us that their approach to offering connected self-care to patients had been completely open.

“We decided not to make our own judgements about which patients we thought would be good at self-testing. We offered it as an option to all of our patients on warfarin, and have sometimes been surprised with the outcomes. Many of our older patients within the project have been as enthusiastic and successful as our younger patients who we may have expected to be more ‘tech-savvy’.”

“What we say to our patients is ‘there is an option to monitor your warfarin at home and online. Why not go away and have a look at the training to see if you like it, and if you do, have a go.’ This hopefully helps to empower patients and promote self-management from the start.”

*“We want our patients to feel well and stay healthy. Although they may have medical conditions needing warfarin, we want to be able to reduce the medicalisation of this, and for them to be able to manage their medication from home or on holiday!”*

**Dr Lucy Astle**

## Faster data with less risk of error

INRstar Engage sends data to INRstar, which in turn files back to the clinical system so offers a continuous narrative of the patient within, which in turn offers safety benefits and reduced risk from transcription errors. Lucy said:

“The INRstar Engage app sends patient data directly from their self-monitoring device to the practice’s warfarin-monitoring system, which is also linked to the electronic patient record. This reduces the risk of transcription errors, and therefore offers a safety benefit for the patient and the practice.”

“The seamless connectivity was the reason we chose to use the INRstar Engage app.”

## What has been the biggest advantage to self-monitoring so far?

“Flexibility and independence for the patients around their warfarin therapy, followed by the potential to improve patient care. We have already seen some improvements in a measure used to assess the effectiveness of warfarin therapy called time-in-therapeutic range. In Rosalee’s case her warfarin control is better now than it has ever been, and we hope this result could be seen in other patients self-testing.”



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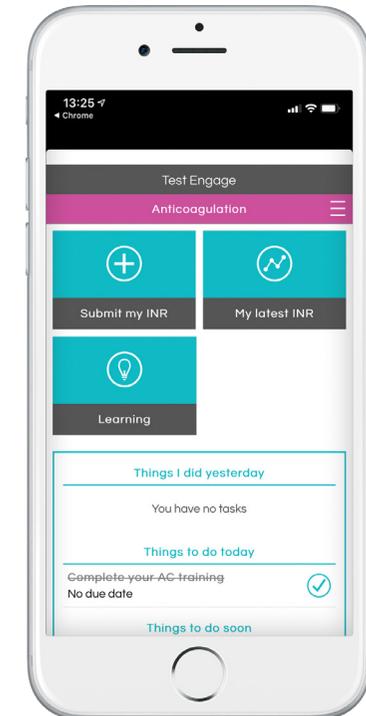
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