

Prescribers should satisfy themselves that a patient is suitable for INR self-testing or monitoring and documented procedures are in place for follow-up.

Introduction

INR monitoring is a vital part of warfarin treatment. The preferred option for most patients is to have their INR checked in the surgery, followed by advice on dose changes if necessary.

- **In BaNES** INR monitoring is either provided by the GP practice or sub-contracted to RUH INR clinic.
- **In Swindon** INR monitoring is provided by the anticoagulation clinic at GWH.
- **In Wiltshire** INR monitoring is either provided by the GP practice or sub-contracted to hospital clinics.

A small number of patients may request to test themselves at home and contact the surgery or INR service provider for dosage advice (*self-testing*) or adjust the dose of warfarin themselves based on an individualised algorithm (*self-monitoring*).

Recommended Actions

In order to consider self-monitoring or self-testing, the patient needs to discuss the process and associated practical issues in detail with their GP practice before the patient purchases a machine and before any anticoagulation testing strips are prescribed. Useful contact details for further advice:

- RUH anticoagulation team: ruh-tr.AnticoagulationTeam@nhs.net
- SFT Anticoagulation Service (01722 429006) or email: sft.anticoagulation.service@nhs.net
- GWH Anticoagulant Clinic (01793 604 344) or email: gwh.anticoag.clinic@nhs.net

The following questions should be answered and clearly documented in the patient notes and in a practice standard operating procedure (SOP):

Alternatively, could this patient be switched to a direct acting oral anticoagulant (DOAC)?

Patient considerations:

- Why is the patient requesting self-monitoring or self-management?
- Is this a valid clinical reason (eg long distance driving/travelling)?
- Can the practice or INR service provider provide training, support and reviews?
- Is the patient suitable and competent? Patients should have the physical and mental capacity to undertake self-testing and be able to adhere to treatment.
- Patients at risk of over-anticoagulation or risk of bleeding and those with anti-phospholipid syndrome (positive lupus anticoagulant) or with haemochromatosis may not be appropriate for self-testing or monitoring. **Discuss with a Haematologist.**

Suggested SOP content:

- Is there a protocol in place to ensure monitoring is done appropriately (at the right time with a correctly maintained & calibrated machine)?
- How frequently should they be testing (to avoid over-testing)? Determine minimum and maximum number of boxes of test strips and lancets required per year.
- How should the results be reported?
- Who is going to record the results?
- Who interprets the results and decides dosing?
- How is the dose communicated to patient?
- What machine will be used? (See specific manufacturer info for calibration details, like Coaguchek)

Further Actions

If after assessment/discussion, self-testing is still considered, remind the patient that the meters need to be purchased by themselves as the machines **are not reimbursable** on the NHS. Self-testing devices cost from £400 to £800. The **test strips, lancets and sharps bin** can be prescribed on an FP10.

BSW ICB Cost Impact

1040 prescriptions for **CoaguChek testing strips** were issued in the last 12 months across BSW totalling over **£83,000**. The cost of the strips is **£75.10 / 24 strips**.

References

1. CKS Oral Anticoagulation 2023 <http://cks.nice.org.uk/anticoagulation-oral#!scenariobasis:40>
2. Fitzmaurice et al "An evidence-based review and guidelines for patients self-testing and management of oral anticoagulation" <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2141.2005.05739.x/epdf>
3. NICE (DG14) Coagucheck meters available from <https://www.nice.org.uk/guidance/dg14>

Other useful DOAC documents within BSWformulary Chapter 2 here

<https://bswtogether.org.uk/medicines/area-prescribing-committee/prescribing-guidance/>

COVID Information

A move to self-testing remains the exception rather than routine practice.

NHSE published a Clinical guide for the management of anticoagulant services during the coronavirus pandemic (November 2020- updated Feb 2021) [Clinical guide for the management of anticoagulant services during the coronavirus pandemic \(nice.org.uk\)](https://www.nice.org.uk/guidance/CG139)

The NHSE guide recognises that during the COVID pandemic, anticoagulant services have a key role in continuing to keep patients on anticoagulants as safe as possible. Training patients to self-test INR in their own homes is one of several considerations. The NHSE guide should be read in full alongside this BSW advisory summary.

Please also see the MHRA Guidance (Oct 2020) [Warfarin and other anticoagulants – monitoring of patients during the COVID-19 pandemic](https://www.mhra.gov.uk/safetyandquality/clinicaltrialsandresearch/clinicaltrialsandresearch/clinicaltrialsandresearch)