Warfarin Sensitivity Test
Using either buccal swab, finger prick on Guthrie card or citrate anticoagulated sample. A warfarin sensitivity test can be added to a coagulation screen. Results available in same turnaround time as baseline bloods

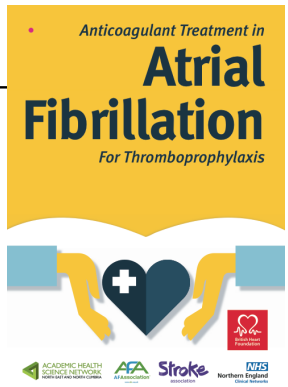
If patient is found to have **normal warfarin sensitivity,** and there are no other contraindications, warfarin is highly likely to be a suitable anticoagulant

If patient is found to have **a moderate degree** of warfarin sensitivity, and there are no other contraindications, warfarin is likely to be a suitable anticoagulant. The patient may require a lower maintainance dose

If patient has CrCl<30ml/min and/or is 75 yrs or over, and there are no other contraindications, the patient may be best suited to warfarin

Optimised AF Pathway in Newcastle

AF diagnosed and decision made to offer anticoagulation



Confirm no contraindications to warfarin/DOAC and ensure baseline bloods have been done and results satisfactory - FBC, U&E, Coagulation screen, LFT, Warfarin Sensitivity Test (WST). Measure patient weight.
Calculate creatinine clearance (CrCl) using Cockcroft-Gault formula

Signpost patient to information on anticoagulation including availability of INR self-testing

Information might include:
Don't Wait to Anticoagulate website and/or NICE patient decision aid CG180

Shared Decision
Patient and clinician jointly review risk factors, warfarin sensitivity, benefits (including self-testing), and patient preference to decide on a preferred treatment.

If patient is found to have **a major degree** of warfarin sensitivity, and there are no other contraindications, the patient may be best suited to a DOAC

Warfarin

Book into NuTH Hospital Anticoagulation Service and include WST results with referral.
Prescribe: Warfarin 1mg and 3mg. Instruct patient not to take dose until seen by the Hospital Anticoagulation Service. Continue aspirin until INR is greater or equal to 1.8. (Tell the patient).
Stop other anti-platelets (and aspirin as above) unless special reasons for continuting.
Arrange follow up with GP: minimum recommended 2m after warfarin initiated.

Hospital Anticoagulation Service will, If appropriate, begin pharmacogenic guided initiation and maintenance dosing using results of WST

When a patient achieves a stable therapeutic INR they transfer to the Community Anticoagulation Service.

INR self-testing
Patient receives training on equipment and monitoring. Competency assessed.

Continue to attend Community Anticoagulation Service

Continue to self-test with 6 montly visits to Community Anticoagulation Service to carry out review and QA testing equipment

Review patients with poor anticoagulation control initially in clinic, and refer back to GP if unable to improve TTR.

Ongoing Monitoring:
GP to review patient's anticoagulation status annually

DOAC

Discuss and initiate appropriate DOAC. Review any medication which may increase the risk of bleeding. Discontinue any anti-platelets and start DOAC the next day. Provide patient with newer anticoagulant warning card and ensure this is carried at all times.

All patients - Review treatment every 3 months until stabilised:
Check adherence, check for signs of thromboembolism, check for any new prescribed or over-the-counter medication which may be contraindicated. Complete patient alert card.

Ongoing Monitoring:
All patients should have annual LFT and FBC
Under 75 years and CrCl>60ml/min ensure annual U&Es
75 yrs or over or CrCl<60ml/min ensure 6 monthly U&Es and weight
CrCl is between 15-30ml/min ensure 3 monthly U&E
Re-calculate CrCl using Cockroft-Gault if any significant changes in serum creatinine/eGFR

To provide feedback or to discuss the new pathway, please contact: Programme Manager Joanne Smithson joanne.smithson@ahsn-nenc.org.uk or Lorna Clark Assistant Director of Pharmacy lorna.clark@nuth.nhs.uk