Managing Anticoagulation at a Pre-operative Assessment Clinic

Southern Health and Social Care Trust

Sr Rachel Donnelly – Pre-operative assessment manager

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Southern Health and Social Care Trust

History

- Pre-operative Assessment (POA) Service was established in Southern Health and Social Care Trust (SHSCT) in 2006.
- Pre-op all patients who are GA surgery in Orthopaedic, General surgery, Gynae, ENT and Urology surgery
- POA managed anticoagulants for all patients - GA & LA surgery as per Consultant instructions
- Guideline for the Management of Warfarin for Patients Requiring an Elective Procedure in place in SHSCT from 2008
- In 2012 POA responsibility expanded to providing anticoagulant (and antiplatelet) advice to patients who were undergoing Endoscopic procedures in addition to GA and LA.

How was the patient advised before 2012?

- Pre-operative assessment Sisters advised - based on the add to waiting list form completed by the Consultant
- Schedulers and secretaries - Patients contacting the POA team for anticoagulant drug advice being directed to the secretaries or schedulers

How did the Pre-operative Assessment Team become involved

- From 2012 pre-operative assessment were responsible for advising patients who were for GA, LA and endoscopy procedures
- Band 6 Pre-op Sisters advised the patients
- Followed the Guideline for the Management of Warfarin for Patients Requiring an Elective Procedure in place in SHSCT from 2008
- Guidance on the Administration of Medications in Pre-operative Adult Patients were revised in 2012.

Haematology Involvement

- Worked with Dr Boyd, consultant Haematologist and lead consultant for anticoagulation within the SHSCT. She was available for advice and supply of prescriptions for bridging at the weekly anticoagulant clinic
- Anticoagulant pharmacists were already managing anticoagulant clinics throughout the Trust – they were another point of contact for the POA team.

Current management

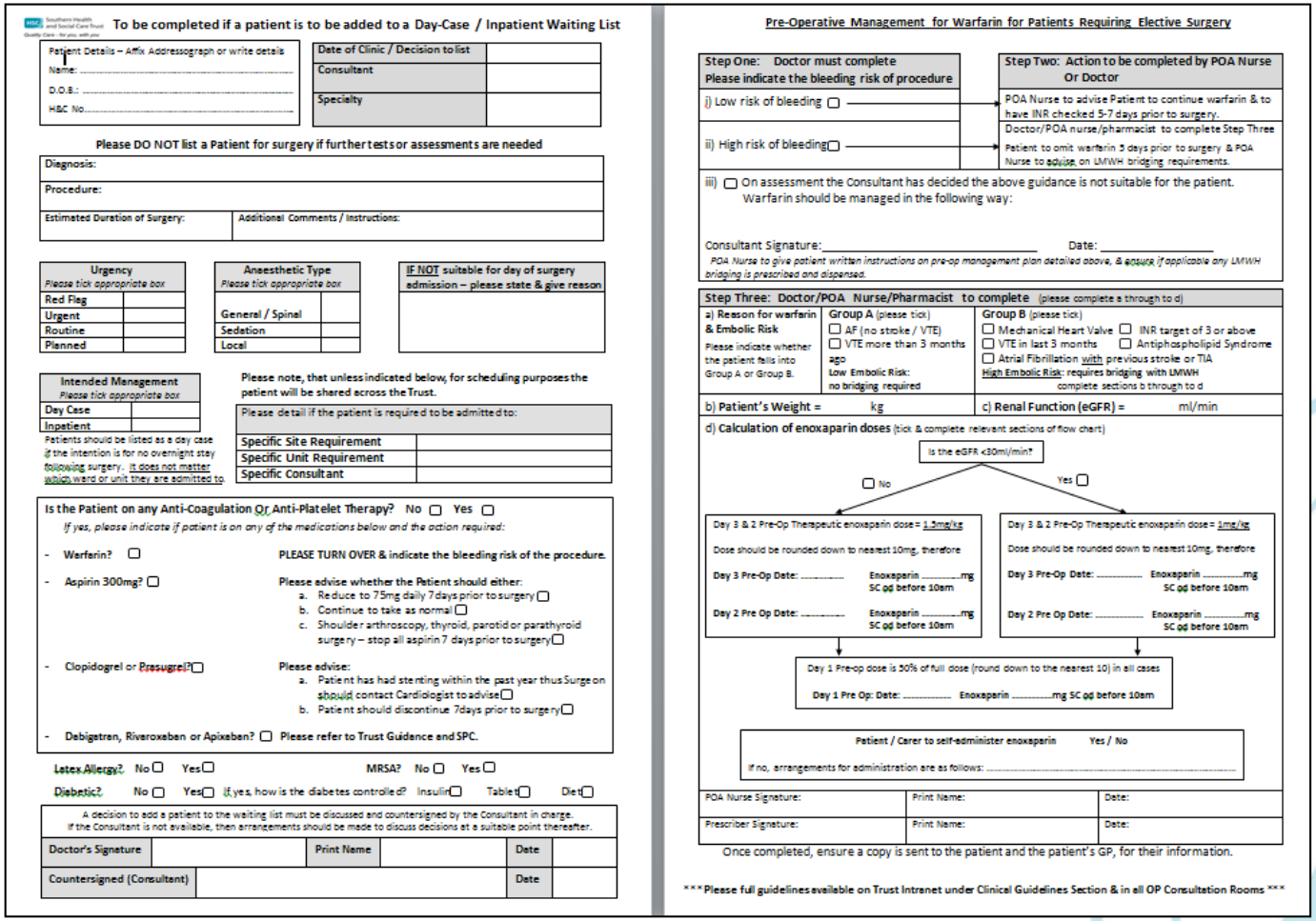
Who Manages this patient Group Now

- Consultant Surgeon
- Pre-operative Assessment Team
- Anti-coagulant pharmacist
- Consultant Haematologist

Role of the Consultant Surgeon

- Completes the “add to waiting list form” for all patients (GA / LA / Endoscopy)
- Indicates which drug the patient is prescribed
- Indicate the management of drug in line with the bleeding risk including bridging if appropriate
- Follows the trust policy and guidelines

Surgery Waiting List Form



To be completed if a patient is to be added to a Day-Case / Inpatient Waiting List

Patient Details – Affix Addressograph or write details

Name: .....

D.O.B.: .....

H&C No. .....

Date of Clinic / Decision to list	
Consultant	
Specialty	

Please DO NOT list a Patient for surgery if further tests or assessments are needed

Diagnosis:	
Procedure:	
Estimated Duration of Surgery:	Additional Comments / Instructions:

Urgency *Please tick appropriate box*	
Red Flag	
Urgent	
Routine	
Planned	

Anaesthetic Type *Please tick appropriate box*	
General / Spinal	
Sedation	
Local	

IF NOT suitable for day of surgery admission – please state & give reason

Intended Management *Please tick appropriate box*	
Day Case	
Inpatient	

Patients should be listed as a day case if the intention is for no overnight stay following surgery. It does not matter which ward or unit they are admitted to.

Please note, that unless indicated below, for scheduling purposes the patient will be shared across the Trust.

Please detail if the patient is required to be admitted to:	
Specific Site Requirement	
Specific Unit Requirement	
Specific Consultant	

Is the Patient on any Anti-Coagulation Or Anti-Platelet Therapy? No ☐ Yes ☐

If yes, please indicate if patient is on any of the medications below and the action required:

- Warfarin? ☐
- Aspirin 300mg? ☐
- Clopidogrel or Prasugrel? ☐
- Dabigatran, Riveroxaban or Apixaban? ☐

PLEASE TURN OVER & indicate the bleeding risk of the procedure.

Please advise whether the Patient should either:
a. Reduce to 75mg daily 7 days prior to surgery ☐
b. Continue to take as normal ☐
c. Shoulder arthroscopy, thyroid, parotid or parathyroid surgery – stop all aspirin 7 days prior to surgery ☐

Please advise:
a. Patient has had stenting within the past year thus Surgeon should contact Cardiologist to advise ☐
b. Patient should discontinue 7days prior to surgery ☐

Please refer to Trust Guidance and SPC.

Latex Allergy? No ☐ Yes ☐ MRSA? No ☐ Yes ☐

Diabetic? No ☐ Yes ☐ If yes, how is the diabetes controlled? Insulin ☐ Tablet ☐ Diet ☐

A decision to add a patient to the waiting list must be discussed and countersigned by the Consultant in charge. If the Consultant is not available, then arrangements should be made to discuss decisions at a suitable point thereafter.

Doctor's Signature		Print Name		Date	
Countersigned (Consultant)				Date	

Pre-Operative Management for Warfarin for Patients Requiring Elective Surgery

Step One: Doctor must complete Please indicate the bleeding risk of procedure	Step Two: Action to be completed by POA Nurse Or Doctor
i) Low risk of bleeding ☐	POA Nurse to advise Patient to continue warfarin & to have INR checked 5-7 days prior to surgery.
ii) High risk of bleeding ☐	Doctor/POA nurse/pharmacist to complete Step Three Patient to omit warfarin 5 days prior to surgery & POA Nurse to advise on LMWH bridging requirements.

iii) ☐ On assessment the Consultant has decided the above guidance is not suitable for the patient. Warfarin should be managed in the following way:

Consultant Signature: _____ Date: _____

POA Nurse to give patient written instructions on pre-op management plan detailed above, & ensure if applicable any LMWH bridging is prescribed and dispensed.

Step Three: Doctor/POA Nurse/Pharmacist to complete (please complete a through to d)

a) Reason for warfarin & Embolic Risk
Please indicate whether the patient falls into Group A or Group B.

Group A (please tick)
☐ AF (no stroke / VTE)
☐ VTE more than 3 months ago
Low Embolic Risk: no bridging required

Group B (please tick)
☐ Mechanical Heart Valve ☐ INR target of 3 or above
☐ VTE in last 3 months ☐ Antiphospholipid Syndrome
☐ Atrial Fibrillation with previous stroke or TIA
High Embolic Risk: requires bridging with LMWH
complete sections b through to d

b) **Patient's Weight** = kg

c) **Renal Function (eGFR)** = ml/min

d) **Calculation of enoxaparin doses** (tick & complete relevent sections of flow chart)

Is the eGFR <30ml/min?

☐ No

Day 3 & 2 Pre-Op Therapeutic enoxaparin dose = 1.5mg/kg

Dose should be rounded down to nearest 10mg, therefore

Day 3 Pre-Op Date: ..... Enoxaparin .....mg SC od before 10am

Day 2 Pre Op Date: ..... Enoxaparin .....mg SC od before 10am

Yes ☐

Day 3 & 2 Pre-Op Therapeutic enoxaparin dose = 1mg/kg

Dose should be rounded down to nearest 10mg, therefore

Day 3 Pre-Op Date: ..... Enoxaparin .....mg SC od before 10am

Day 2 Pre Op Date: ..... Enoxaparin .....mg SC od before 10am

Day 1 Pre-op dose is 50% of full dose (round down to the nearest 10) in all cases

Day 1 Pre Op: Date: ..... Enoxaparin .....mg SC od before 10am

Patient / Carer to self-administer enoxaparin Yes / No

If no, arrangements for administration are as follows: .....

POA Nurse Signature:	Print Name:	Date:
Prescriber Signature:	Print Name:	Date:

Once completed, ensure a copy is sent to the patient and the patient's GP, for their information.

*** Please full guidelines available on Trust Intranet under Clinical Guidelines Section & in all OP Consultation Rooms ***

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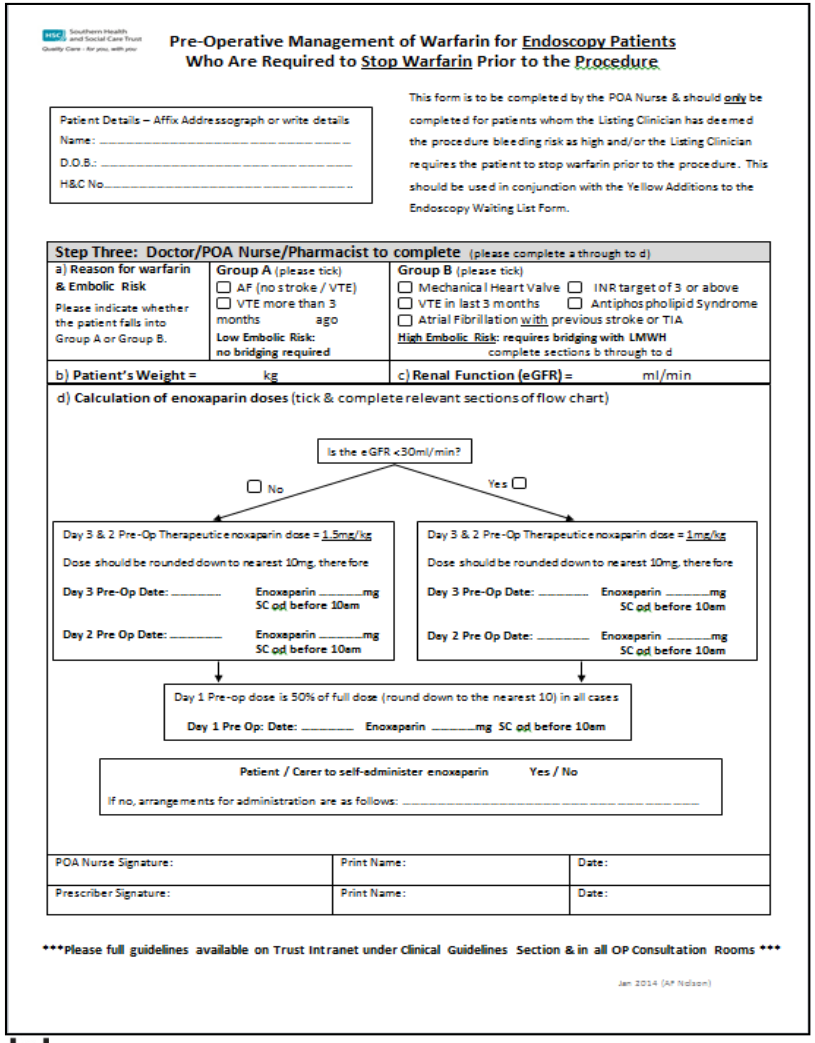
Endoscopy Form



Pre-Operative Management of Warfarin for Endoscopy Patients
Who Are Required to Stop Warfarin Prior to the Procedure

Patient Details – Affix Addressograph or write details
Name: .....
D.O.B.: .....
H&C No .....

This form is to be completed by the POA Nurse & should only be completed for patients whom the Listing Clinician has deemed the procedure bleeding risk as high and/or the Listing Clinician requires the patient to stop warfarin prior to the procedure. This should be used in conjunction with the Yellow Additions to the Endoscopy Waiting List Form.

Step Three: Doctor/POA Nurse/Pharmacist to complete (please complete a through to d)

a) **Reason for warfarin & Embolic Risk**
Please indicate whether the patient falls into Group A or Group B.

Group A (please tick)
- ☐ AF (no stroke / VTE)
- ☐ VTE more than 3 months ago

Low Embolic Risk: no bridging required

Group B (please tick)
- ☐ Mechanical Heart Valve ☐ INR target of 3 or above
- ☐ VTE in last 3 months ☐ Antiphospholipid Syndrome
- ☐ Atrial Fibrillation with previous stroke or TIA

High Embolic Risk: requires bridging with LMWH
complete sections b through to d

b) **Patient's Weight =** kg

c) **Renal Function (eGFR) =** ml/min

d) **Calculation of enoxaparin doses** (tick & complete relevant sections of flow chart)

Is the eGFR <30ml/min?

☐ No — Day 3 & 2 Pre-Op Therapeutic enoxaparin dose = 1.5mg/kg

Dose should be rounded down to nearest 10mg, therefore

Day 3 Pre-Op Date: ..... **Enoxaparin** .....**mg SC od before 10am**

Day 2 Pre Op Date: ..... **Enoxaparin** .....**mg SC od before 10am**

Yes ☐ — Day 3 & 2 Pre-Op Therapeutic enoxaparin dose = 1mg/kg

Dose should be rounded down to nearest 10mg, therefore

Day 3 Pre-Op Date: ..... **Enoxaparin** .....**mg SC od before 10am**

Day 2 Pre Op Date: ..... **Enoxaparin** .....**mg SC od before 10am**

Day 1 Pre-op dose is 50% of full dose (round down to the nearest 10) in all cases

Day 1 Pre Op: Date: ..... **Enoxaparin** .....**mg SC od before 10am**

Patient / Carer to self-administer enoxaparin Yes / No

If no, arrangements for administration are as follows: .....

POA Nurse Signature:	Print Name:	Date:
Prescriber Signature:	Print Name:	Date:

***Please full guidelines available on Trust Intranet under Clinical Guidelines Section & in all OP Consultation Rooms ***

Jan 2014 (AF Nelson)

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Role of Pre-operative Assessment Team

- Co-ordinates the patient care
- Patient for GA - at the nurse led pre-op clinic the patient's medication and dose are confirmed with the patient and NIECR – anticoagulant drug is added to PAS
- At this clinic appointment, the patient receives written advice informing that the drug may need to be stopped and to contact POA
- Endoscopy Patients – POA team receive email to a central POA endoscopy email address informing us about patient
- LA patients – Pre-op admin team review admission lists and alert nursing team
- Pre-op Sr / Cn request the patient's notes to review add to waiting list form
- Add to waiting list form reviewed along with the trust guidelines
- If the advice is not in keeping with trust guidelines the anticoagulant pharmacist is contacted to confirm and then the consultant surgeon is contacted to inform them of any changes that are required to agree with trust guidelines

When the patient is given a date for surgery:

- Alerted by pre-op admin team of TCI date (GA & LA Patient)
- Scheduling team send endoscopy patient details to POA via an email
- Patient also phones pre-op
- Pre-op Sr / Cn contacts the patient by phone to relay the advice verbally and sends the patient out written advice
- If bridging is required the Pre-op Sr / Cn contacts the anticoagulant pharmacist to complete the prescription
- Bridging prescription is dispensed at hospital pharmacy and the collection of this is co-ordinated by pre-op
- Inform GP if the drug is to be stopped prior to procedure and or if bridging is required

Role of the Anticoagulant Pharmacist

- Since the appointment of an additional anticoagulant pharmacist in mid-2012, the role of the pharmacist in POA clinics has increased
- Available by bleep and email for advice
- Meets the POA nurses several times a week to review patients' who require bridging and advice on when to stop a DOAC
- Can offer advice on patients where the decision on bridging is unclear, using the existing guidelines

Role of the Consultant Haematologist

- No longer required to routinely prescribe bridging – this role is now the pharmacist's
- Point of contact for the pharmacist if further advice or clarification is required
- Involved in guideline development and is influential when engaging other teams to comply with guidelines

Trust-wide Service

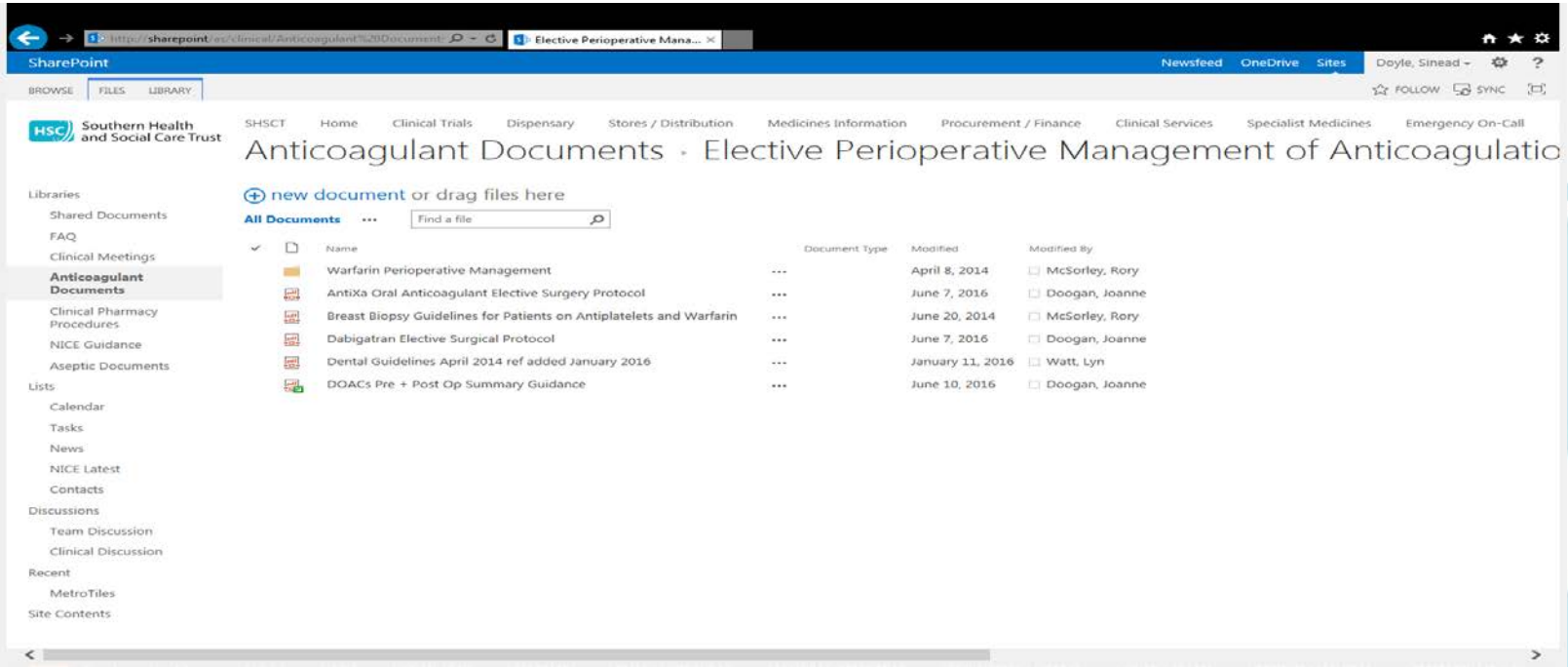
- With the expansion of the POA clinics and the bowel screening programme, the anticoagulant team are available to these clinics throughout the Trust.
- The bridging prescription is prepared and can be collected by the patient at the most convenient hospital site. The POA nurses organise administration of enoxaparin, either with the patient self-injecting, calling at their local treatment room or organising District Nursing if necessary.

The next step…DOACs

- A guideline to assist with prescribing DOACs in the peri-operative period is currently in draft form.
- There is limited data on the use of DOACs around surgery but more is emerging as time goes on.
- Difficulties encountered have included limited data, e.g., in the area of dentistry and with regards to spinal anaesthesia.

Accessibility to Guidelines

- All polices and procedures are on the intranet SharePoint for ease of access



Example of a Pre-op Case

- Patient undergoing Right Partial Parotidectomy – high bleeding risk
- Previous PE – classed as a high risk patient by surgeon
- Pharmacist contacted by email – advised that no bridging required as PE more than 3 months ago, to stop warfarin 5 days pre-op

Example of a Pre-op Case

- Patient undergoing urology procedure
- History of recurrent DVT, target INR of 3.5 – so high risk patient
- Weight 136kg
- Based on Trust guidelines for patients over 120kg, enoxaparin prescribed at 0.75mg/kg twice daily so 100mg enoxaparin twice daily with 100mg in the morning the day before procedure, warfarin stopped 5 days pre-op.

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