East London NHS
NHS Foundation Trust

Venous Thromboembolism (VTE)

Risk Assessment Procedure

Fothergill Rehab Centre

East Ham Care Centre

Version	**1.2**
Ratified by	**Nursing Development Steering Group**
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Name of Responsible Committee/individual	**Community Health Newham Quality & Assurance Group**
Circulated to	**Trust intranet** **Fothergill Rehab Centre Nursing Team** **Community Clinical Lead Nurses** **Trust Pharmacy Team** **Medical Staff responsible for Fothergill Rehab Centre Patients**
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Target Audience	**Nurses, Doctors, Community Clinical Lead Nurses and pharmacists with responsibilities on Fothergill Rehab Centre, East Ham Care Centre**

Version	Date	Author	Status	Comment
1.0	**17.5.12**	**Jo Dauvergne**	**Ratified**	**New policy**
1.1	**1.10.12**	**Maggie Parks/ Veta Gordon**	**Final Draft for approval**	**Revised for specific application of NICE guidance to EHCC and inclusion of role of Pharmacist**
1.2	**29/07/2016**	**Veta Gordon/ Joyce Mateta/ Boyim Bebia/ Von-de-viel Nettey**	**Review Draft**	**First line medication for prophylaxis changed (in line with Barts Health)**
1.2	**03/04/2017**	**Von-de-viel Nettey**	**Final Draft**	**Ward name amended**

Contents

Background

Venous thromboembolism (VTE) is a largely preventable phenomenon yet each year around 25,000 people in the UK die from it. Patients in the hospital setting are at significant risk due to immobility and illness. The House of Commons Health Committee recommends "systems must be put in place to ensure that the NICE VTE guidelines are implemented".

VTE occurs when a thrombus (or clot) forms in the deep veins in the lower limb or pelvic veins (a deep vein thrombosis (DVT)), dislodges from its site of origin and is carried in the blood to lodge in the lungs (pulmonary embolism). Whilst VTE often results in death, the impact of a deep vein thrombosis (DVT) which does not result in an embolus must not be forgotten. DVT in itself is a cause of substantial morbidity and may lead to post thrombotic syndrome, with chronic swelling and ulceration of the legs. Along with the personal cost to the patient and their family, there are considerable costs to the healthcare budget.

Clinical detection of a DVT is unreliable - a DVT may be asymptomatic. The risk of developing a thrombus is dependent upon a number of risk factors. Identification of these risks through systematic assessment will enable clinicians to prescribe treatment to help prevent the formation of a thrombus. It is imperative that the balance between the risks and benefits of prophylaxis are carefully considered and that assessment occurs at regular intervals - the risks change as the patient's condition changes.

Anti-embolism (graduated compression) stockings and anticoagulation medicine (e.g. tinzaparin) have been shown to reduce the incidence of deep vein thrombosis and their use for prophylaxis is advocated. However, their use is not without risk. The risks of preventative measures need to be considered against the risk of their side effects, particularly that of bleeding. Low volume bleeding can have as devastating consequences as a major bleed. Furthermore, the guidance for the type of prophylaxis to be used differs among patient populations/conditions – the use of anti-embolic stockings in stroke patients, for example, has not shown any beneficial effects but has shown to increase skin complications such as blisters, ulcers and necrosis. A thorough and systematic assessment of each patient needs to be undertaken, which balances the risk of developing VTE against the risks of prophylactic treatment, to ensure that the safest course of action is followed (see Appendix for risk assessment tool).

The guidance (National Clinical Guideline Centre/NICE 2010) on reducing the risk of VTE is directed at patients admitted to hospital, including those undergoing long-term rehabilitation in hospital. This guidance will therefore apply to the Fothergill Rehab Centre at East Ham Care Centre, which is a rehabilitation facility. The guidance will be adapted to meet the needs of patients on the Fothergill Rehab Centre and outline best practice associated with the types of condition they present with.

Purpose

To ensure that all patients admitted to the Fothergill Rehab Centre have been assessed for risk of VTE and, where appropriate, prophylactic treatment has commenced, in line with NICE guidelines.

This guidance will provide the necessary information in order that staff are able to undertake the assessment and ensure prophylaxis is appropriate to patient risk and condition.

Fothergill Rehab Centre Patient Profile

Patients are admitted to Fothergill Rehab Centre as follows:

- Transfer from hospital for rehabilitation following an acute event
- Admission under the care of the Community Clinical Lead Nurses due to a deterioration in condition requiring more frequent monitoring
- For respite care – the person is admitted to allow for relatives/carers to have a short break from caring responsibilities. The patient's care is a continuation of that which they receive at home under the General Practitioner

Assessing Patients on Fothergill Rehab Centre for VTE Risk

Lack of mobility and dehydration are the biggest risk factors for VTE. Prophylactic treatment, hydration and early mobilisation are key to prevention.

Patients requiring VTE Risk Assessment must receive an **initial risk assessment**, be **reassessed 24 hours later** and **regularly thereafter** and **whenever the clinical situation changes** to ensure that the methods of VTE prophylaxis are suitable, to ensure that VTE prophylaxis is being used correctly and to identify adverse events resulting from VTE prophylaxis.

Patients transferred from hospital: Fothergill Rehab Centre staff will ensure that the transferring hospital provide a copy of the VTE risk assessment that they undertook, the type and duration of prophylaxis and any instruction for continuation of such prophylaxis. Should the patient's condition deteriorate, nursing staff will re-assess the risk of VTE using the Risk Assessment Tool and liaise with the responsible medical practitioner accordingly to ensure that VTE prophylaxis is prescribed. The completed assessment tool and clear, written evidence of the discussion with the medical practitioner will be made by the nurse in the patient's record.

Admission via Community Clinical Lead Nurses: the Community Clinical Lead Nurses will undertake the VTE risk assessment, using the Risk Assessment Tool, on admission and 24 hours later, prescribing any treatment accordingly. Clear, written evidence of the assessment will be documented in the patient record.

Respite Care: patients admitted for respite care will not require a VTE risk assessment unless their condition deteriorates, in which case the General Practitioner will be contacted to review the patient/patient requires transfer to A&E.

Staff who are required to carry out the VTE Risk Assessment will receive instruction in how to complete it and the subsequent action required according to the risk rating/risks identified.

Role of the Clinical Pharmacist

The Pharmacist is responsible for ensuring that the correct dose of tinzaparin has been prescribed as per Trust guidelines, in accordance with the patient's renal function and in the absence of any contraindications and drug interactions. The Pharmacist will alert the Medical staff of any cautions, for example risk of bleeding. The Pharmacist will annotate the chart with any warnings. The Pharmacist will be responsible for ensuring that there is an adequate supply of the approved anticoagulant(s), whether that is ward stock that is normally held or patient specific.

The Pharmacist will also educate and provide counselling to the patient in respect of anticoagulants.

Antiplatelet and anticoagulants being used to treat other conditions

Aspirin, clopidogrel and dipyridamole are prescribed for their anti-platelet action. They should not be regarded as adequate prophylaxis for VTE. Additional mechanical or pharmacological VTE prophylaxis should be considered for these patients if they are assessed as at increased risk of VTE, taking into account the risk of bleeding and comorbidities such as arterial thrombosis. If the risk of VTE outweighs the risk of bleeding, pharmacological VTE prophylaxis should be considered according to the reason for admission. If the risk of bleeding outweighs the risk of VTE, mechanical VTE prophylaxis should be offered.

Warfarin and other full anticoagulant therapy (fondaparinux sodium, low molecular weight heparin, unfractionated heparin) - additional pharmacological or mechanical prophylaxis for VTE should NOT be offered to patients taking full anticoagulation therapy e.g. patients taking warfarin who are within their therapeutic range for INR, providing the therapy is continued. Warfarin in the therapeutic range and other full anticoagulant therapies are considered sufficient protection from the risk of VTE; the risk of bleeding outweighs the risk of developing VTE if additional pharmacological prophylaxis were to be added.

VTE Risk Assessment & Treatment

ALL PATIENTS MUST BE ASSESSED FOR RISK OF BLEEDING BEFORE OFFERING PHARMACOLOGICAL VTE PROPHYLAXIS.

Do not offer pharmacological VTE prophylaxis to patients with any one of the risk factors in Box 1, unless the risk of VTE outweighs the risk of bleeding

BOX 1: Risk Assessment for Bleeding

Regard patient at risk of bleeding if they have any of the following risk factors

- Active bleeding
- Acute Stroke
- Acquired bleeding disorder (such as acute liver failure)
- Concurrent use of anticoagulants know to increase the risk of bleeding (such as warfarin with INR higher than 2)
- Thrombocytopenia (platelets <75 x 10^9/l)
- Uncontrolled systolic hypertension (230/120mmHg or higher)
- Untreated inherited bleeding disorder (such as haemophilia and von Willebrand's disease)
- Lumbar puncture/epidural/spinal anaesthesia expected within next 12 hours
- Lumbar puncture/epidural/spinal anaesthesia within previous 4 hours

Do not offer pharmacological VTE prophylaxis to patients with any one of the risk factors in Box 1, unless the risk of VTE outweighs the risk of bleeding

VTE Prophylaxis

Prophylaxis for VTE may be mechanical, pharmacological or both.

Mechanical methods of prophylaxis

Venous stasis in the deep leg veins causes a decrease in the mean flow and pulsatility of the venous flow trace. Mechanical methods of DVT prophylaxis work to combat venous stasis and include:

- Anti-embolism stockings/graduated compression stockings
- Foot impulse devices (also known as foot pumps)
- Intermittent pneumatic compression devices

Evidence does not indicate that there is a difference in effectiveness between the above devices. Anti-embolism stockings are a passive device whilst the other two are active methods for improving blood flow. The choice of device should be based on individual patient factors including clinical condition, surgical procedure and patient preference.

Mechanical methods of prophylaxis are not associated with an increased risk of bleeding.

Anti-embolism stockings/graduated compression stockings: Anti-embolism stockings and graduated compression stockings are often used inter-changeably BUT they have different indications. Whilst they both offer graduated compression, anti-embolism stockings are designed for the prevention of VTE in the immobile patient whilst graduated compression stockings are designed for the management and treatment of venous leg ulcers and lymphoedema in the ambulant patient. **For VTE prevention anti-embolism stockings only should be used.**

Anti-embolism stockings are not without risk (they may impede circulation and cause tissue damage and necrosis) and it is imperative that patients are fully assessed and their legs carefully measured to ensure the correct size of stocking is provided. For patients with a swollen limb this will mean re-measuring and re-sizing as the swelling/oedema subsides. The stockings may also roll down creating a tourniquet effect, so should be checked regularly throughout the day and night to ensure they are in the correct position.

Anti-embolism stockings should be worn day and night but removed daily so that the skin can be washed and dried and assessed for any sign of tissue damage. In patients with a significant reduction in mobility the skin should be inspected 2 or 3 times per day, particularly the heels and bony prominences. If there is blistering, discolouration of the skin (particularly over the heels and bony prominences) or the patient experiences pain or discomfort discontinue the use of anti-embolism stockings.

Contra-indications to anti-embolism stockings

- Any local condition in which stockings may cause damage e.g. fragile 'tissue paper' skin, dermatitis, gangrene, recent skin graft
- Cellulitis
- Suspected or proven peripheral arterial disease
- Peripheral arterial bypass graft
- Arterial disease – seek expert opinion before using anti-embolism stockings
- Peripheral neuropathy or other causes of sensory impairment
- Cardiac failure
- Severe leg oedema or pulmonary oedema from congestive heart failure
- Unusual leg size or shape
- Major limb deformity preventing correct fit
- Doppler pressure index <0.8
- Known allergy to material of manufacture
- Use caution and clinical judgement when applying anti-embolism stockings over venous ulcers or wounds

In cases where patients have a known contra-indication to anti-embolism stockings this outweighs the benefit of reducing the risk of VTE and the stockings should not be offered. The patient should be offered alternative methods of prophylaxis.

Anti-embolism stockings are available as knee length and thigh length. There is little evidence to demonstrate a greater efficacy of one length over the other. Thigh length stockings can be more difficult to fit and tend to roll down more easily creating a tourniquet effect.

Foot impulse devices (foot pumps): Foot pumps increase venous outflow and reduce stasis in immobilized patients. The haemodynamic effect of the pumping mechanism in the sole of the foot is activated by weight bearing. On weight bearing the venous plexus in the sole is rapidly emptied into the deep veins of the legs. The pulsatile follow produced by walking reduces the risk of thrombus formation. The foot pump device is designed to stimulate the venous pump artificially by compressing the venous plexus and mimicking normal walking and reducing stasis in immobile patients. These are contraindicated in the acute phase of DVT.

Intermittent pneumatic compression devices: these devices use inflatable garments wrapped around the legs which are inflated by a pneumatic pump. The pump provides intermittent cycles of compressed air which alternately inflate and deflate the garment, enhancing venous return. It combats VTE through its haemodynamic effect on reducing venous stasis and by stimulating fibrinolytic activity. This fibrinolytic mechanism is involved in the dissolution of clot and prevention of thrombus formation. These are contraindicated in the acute phase of DVT

Pharmacological methods of prophylaxis

Heparins – may be unfractioned or low molecular weight. Unfractioned heparin requires subcutaneous injection 2-3 times per day, low molecular weight heparin requires subcutaneous injection of 1-2 times per day.

Fondaparinux – given subcutaneously postoperatively once daily

Warfarin – given at an adjusted, variable dose to achieve a therapeutic level estimated by attaining an INR of 2.5. This requires frequent monitoring and takes approximately 5 days for a stable antithrombotic effect to be achieved. There is much variability in response to warfarin due to factors such as age, genetic status, medications, diet and medical conditions. The most important complication is bleeding and may require administration of Vitamin K, prothrombin concentrates and fresh frozen plasma.

Aspirin - the protective effect of aspirin against VTE has been found to be insufficient.

Dabigatran - a new oral anticoagulant which directly inhibits thrombin. It has been approved for use for the prevention of VTE after hip or knee replacement surgery in adults.

Rivaroxaban - a new oral anticoagulant directly inhibiting factor Xa inhibiting thrombin formation and development of thrombi. It has been approved for use for the prevention of VTE after total hip or total knee replacement.

The choice of agent must be made in accordance with NICE guidance.

Medical Patients

NICE recommends pharmacological VTE prophylaxis to general medical patients assessed at being of increased risk of VTE. The advice is to continue the therapy until the patient is no longer considered at risk.

Mechanical prophylaxis is recommended only if the patient is unable to receive pharmacological prophylaxis.

The criteria in Box 2 should be used after assessment for risk of bleeding in Box 1:

Regard medical patients as being at increased risk of VTE if they:

- **Have had or are expected to have significantly reduced mobility for 3 days or more**

  OR
- **Are expected to have ongoing reduced mobility relative to their normal state and have one or more of the risk factors in Box 2**

BOX 2: Risk Factors for VTE

- Active Cancer or cancer treatment
- Age over 60 years
- Dehydration
- Known thrombophilias
- Obesity (BMI>30kg/m²)
- One or more significant comorbidities (e.g. heart disease, metabolic, endocrine or respiratory pathology, acute infectious disease or inflammatory condition)
- Personal history of a first degree relative with a history of VTE
- Varicose veins with phlebitis

Stroke Patients

Anti-embolism stockings are not to be used for VTE prophylaxis in patients who are admitted for stroke as they have been shown to be ineffective in reducing the risk of VTE in stroke patients and were associated with an increased risk of cutaneous adverse reactions. If mechanical measures are required because VTE prevention is needed, then foot pump or intermittent pneumatic compression devices should be considered.

Pharmacological prophylaxis is recommended only in the acute phase of stroke provided haemorrhagic stroke has been excluded and the risk of bleeding is assessed to be low. The duration of treatment is only for the period of the acute event and the patient's condition is stable; **it is therefore highly unlikely that a patient having suffered a stroke will be admitted to Fothergill Rehab Centre with pharmacological VTE prophylaxis**. Should a patient be referred to Fothergill Rehab Centre and is on anticoagulant therapy, it is imperative that the reason for this is clarified BEFORE the patient is admitted to Fothergill Rehab Centre. [Haemorrhagic stroke has already resulted in bleeding in a critical location (the brain) and ischaemic strokes are at risk of haemorrhagic transformation. Bleeding in this patient group is considered a greater risk than VTE]

Patients admitted for rehabilitation following hip replacement

NICE guidance offers the same recommendation for elective and emergency hip surgery.

Mechanical prophylaxis (e.g. anti-embolism stockings) should continue until the patient no longer has significantly reduced mobility. Pharmacological prophylaxis should be used for a total of 28-35 days from surgery, in line with the summary of product characteristics for the drug being used. The duration of prophylaxis should be discussed with the Consultant BEFORE the patient is transferred from hospital and this information must be provided in the discharge summary/transfer documentation so that treatment can be continued on Fothergill Rehab Centre. The prophylactic treatment must be reviewed every week by the Consultant in charge of the patient's care, and the nursing staff must monitor the patient's response to treatment each shift, raising any concerns to the Consultant without delay.

Patients admitted for rehabilitation following knee replacement

NICE guidance offers advice for elective knee replacement only. The guidance states that mechanical prophylaxis should continue until the patient no longer has significantly reduced mobility. Pharmacological prophylaxis should be used for 10-14 days from the time of surgery in line with the summary of product characteristics for the drug being used. The duration of prophylaxis should be discussed with the Consultant BEFORE the patient is transferred from hospital and this information must be provided in the discharge summary/transfer documentation so that treatment can be continued on Fothergill Rehab Centre. The prophylactic treatment must be reviewed every week by the Consultant in charge of the patient's care, and the nursing staff must monitor the patient's response to treatment each shift, raising any concerns to the Consultant without delay.

Patients admitted for rehabilitation following other orthopaedic surgery

Both mechanical and pharmacological prophylaxis should continue until the patient no longer has significantly reduced mobility. The duration of prophylaxis should be discussed with the Consultant BEFORE the patient is transferred from hospital and this information must be provided in the discharge summary/transfer documentation so that treatment can be continued on Fothergill Rehab Centre. The prophylactic treatment must be reviewed every week by the Consultant in charge of the patient's care, and the nursing staff must monitor the patient's response to treatment each shift, raising any concerns to the Consultant without delay.

Patients admitted for rehabilitation following cranial or spinal (neurological) surgery

Mechanical prophylaxis should continue until the patient no longer has significantly reduced mobility. Pharmacological prophylaxis should continue until the patient no longer has significantly reduced mobility (generally 5-7 days). The duration of prophylaxis should be discussed with the Consultant BEFORE the patient is transferred from hospital and this information must be provided in the discharge summary/transfer documentation so that treatment can be continued on Fothergill Rehab Centre. The prophylactic treatment must be reviewed every week by the Consultant in charge of the patient's care, and the nursing staff must monitor the patient's response to treatment each shift, raising any concerns to the Consultant without delay.

Patients admitted with a lower limb plaster cast

Pharmacological prophylaxis should continue until the cast is removed, after evaluating the risks. The duration of prophylaxis should be discussed with the Consultant BEFORE the patient is transferred from hospital and this information must be provided in the discharge summary/transfer documentation so that treatment can be continued on Fothergill Rehab Centre. The prophylactic treatment must be reviewed every week by the Consultant in charge of the patient's care, and the nursing staff must monitor the patient's response to treatment each shift, raising any concerns to the Consultant without delay.

Patients admitted for Palliative Care

Fothergill Rehab Centre is a rehabilitation unit. However, there may be occasions when a patient is admitted for palliative care.

A distinction needs to be made between a terminal patient (when a patient appears to be approaching death or has been admitted for end of life care) and a palliative patient (any patient with an incurable disease at any point of their disease journey)

Pharmacological VTE prophylaxis should be considered in patients in palliative care who have potentially reversible acute pathology. The potential risks and benefits and views of patients, their families and carers and the multi-disciplinary team must be taken into account. The VTE prophylaxis must be reviewed daily taking into account the views of patients, their families/carers and multi-disciplinary team.

Pharmacological or mechanical VTE prophylaxis should not be routinely offered to patients admitted for terminal care of those commenced on an end-of-life care pathway.

Patient Information and informed choice

Medical and nursing professionals have a responsibility to inform patients under their care about their proposed interventions and obtain their consent. Information on VTE risk, optimal methods to prevent this, side effects of prophylaxis and the consequences of not receiving it should be provided. The main class of drugs used for VTE prophylaxis are either low molecular weight heparins or unfractioned heparin. Heparin is derived from animal tissues and those marketed in the UK are principally of porcine origin. Animal derived products may be of concern to patients of certain religious or personal beliefs. Synthetic alternatives may be less suitable. Healthcare professionals should be prepared to discuss these concerns with the patients (or their caregivers) and provide them with information to help them to address any ethical or religious concerns.

Patients and/or their families should be offered verbal and written information on:

- The signs and symptoms of deep vein thrombosis and pulmonary embolism
- The correct and recommended duration of use of VTE prophylaxis
- The signs and symptoms of adverse events related to VTE prophylaxis
- The importance of reporting any signs/symptoms/adverse event

If anti-embolism are prescribed:

- The benefits of wearing them
- The importance of daily hygiene to the legs and feet
- Checking the skin for blistering or discolouration particularly the heels and bony prominences

Outcome Measures

Patients on Fothergill Rehab Centre do not develop a VTE

Appropriate Use

All patients admitted to Fothergill Rehab Centre

What to do if this procedure is not followed by others

- Completion of Trust Incident Form (Datix)
- Report to responsible medical practitioner/ Community Clinical Lead Nurses so that situation can be remedied

Monitoring

Monthly audit of patient records to ensure that VTE risk assessment has been carried out according to this guidance

The audit findings will be discussed at a meeting with the Modern Matron, EHCC, Pharmacist, Lead Nurse and Associate Director of Nursing and an action plan made, if needed. Any action will be taken/implemented by the Community Clinical Lead Nurses within two weeks of said meeting.

Audit findings and any action plan will be sent to CHN Quality and Assurance Group

MEDICAL THROMBOPROPHYLAXIS

(Adapted from Barts Health Tinzaparin Prescribing Guideline)

Every medical patient being admitted requires a documented VTE risk assessment at admission or at pre-assessment. This should be repeated at 24h into the admission and whenever the clinical condition changes (as per NICE CG92 VTE risk reduction guideline issued in January 2010).

For THROMBOPROPHYLAXIS use Tinzaparin pre-filled syringes available as 3,500 units and 4,500 units (concentration: 10,000 units / ml). See below.

TINZAPARIN THROMBOPROPHYLAXIS DOSING TABLES: WEIGHT ADJUSTED *(but see notes below for high risk of bleeding and renal impairment)

	<=50kg	**51-109kg**
Tinzaparin	3500 units daily (0.35ml) 	4500 units daily (0.45ml) 

	110-149kg	**>150kg**
Tinzaparin	7000 units daily (2 x 3500 unit syringes) – See above	9000 units daily (2 x 4500 unit syringes) – See above

Please note that tinzaparin comes in a range of different strengths. Please check the dose carefully before administration

***Patients at high risk of bleeding**:

For patients considered at high risk of bleeding e.g. high bleeding risk surgery, the dose of tinzaparin may be reduced e.g. from 4500 units to 3500 units **for body weight 50-109kg.**

***In patients with renal impairment:**

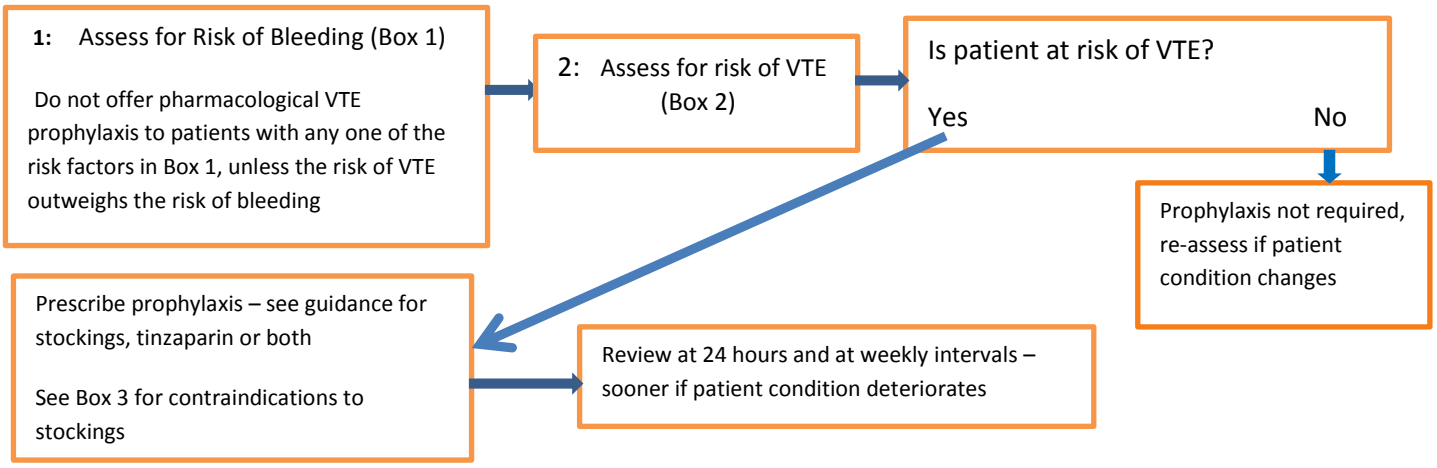
If due to chronic kidney disease, if eGFR < 20mls/min: tinzaparin 3,500 units once daily **(2,500 units once daily for patients that are <45kg).**

(Unfractionated heparin, at the dose: 5,000 units BD subcutaneously - irrespective of body weight- may alternatively be used at the prescriber's discretion).

Apply patient ID sticker/Patient details here

VTE Assessment:

Route of admission	Is VTE Assessment Required?
Patient admitted via GP for respite Care	**VTE assessment not required – follow GP plan of care**
Patient transferred from hospital	**Check VTE assessment from hospital – has treatment been completed? If treatment to be continued, follow instructions from hospital & NICE guidance. Ensure weekly review (sooner if patient condition deteriorates)**
Patient admitted by Community Clinical Lead Nurses	**Undertake VTE assessment and prescribe prophylaxis as per NICE guidance/Policy**



Name of person completing risk assessment (PRINT): Designation:

Signature: Date: Contact No:

	Date & Signature	Date & Signature	Date & Signature
Patient has been assessed in accordance with criteria above			
Is prophylaxis required? (circle as appropriate) Yes No			
What type of prophylaxis required (circle as appropriate) Anti-embolic stockings Tinzaparin 3500 units daily (<=50kg) Tinzaparin 4500 units daily (>51 – 109kg) Tinzaparin 7000 units daily (110 – 149kg) Tinzaparin 9000 units daily (>=150kg)			
Prophylaxis has been prescribed on medication chart			
Patient has been reassessed 24 hours later to ensure the methods of VTE prophylaxis are suitable, prophylaxis is being used correctly and any adverse events has been identified and acted upon			
Patient has been assessed at weekly intervals to ensure that prophylaxis is still required and methods of prophylaxis remain suitable, are being used correctly and any adverse events identified and acted upon			
Patient's condition has changed and reassessment has occurred			

Box 1: Risk Assessment for bleeding -

Do not offer pharmacological VTE prophylaxis to patients with any one of the risk factors unless the risk of VTE outweighs the risk of bleeding

- Risk Assessment for Bleeding
- Active Bleeding
- Acute Stroke
- Acquire bleeding disorder (e.g. acute liver failure)
- Concurrent use of anticoagulants known to increase the risk of bleeding (e.g. warfarin with INR>2)
- Thrombocytopenia (platelets <75x 10^9/l)
- Uncontrolled systolic hypertension (230/120mmHg or higher)
- Untreated inherited bleeding disorder (e.g. haemophilia, von Willebrand's disease)
- Lumbar puncture/epidural/spinal anaesthesia expected within next 12 hours
- Lumbar puncture/epidural/spinal anaesthesia within previous 4 hours

BOX 2: Risk Factors for VTE

Regard <u>medical</u> patients as being at increased risk of VTE if they:

- **Have had or are expected to have significantly reduced mobility for 3 days or more**

OR

- **Are expected to have ongoing reduced mobility relative to their normal state <u>and</u> have one or more of the following risk factors**

  - Active Cancer or cancer treatment
  - Age over 60 years
  - Dehydration
  - Known thrombophilias
  - Obesity (BMI>30kg/m^2)
  - One or more significant comorbidities (e.g. heart disease, metabolic, endocrine or respiratory pathology, acute infectious disease or inflammatory condition)
  - Personal history of a first degree relative with a history of VTE
  - Varicose veins with phlebitis

Refer to specific guidance in the VTE Prophylaxis Policy in respect of patients with stroke, following hip or knee replacement/surgery, other orthopaedic surgery, neurosurgery, plaster cast, palliative care

Box 3: Contraindications to anti-embolic stockings

- Any local condition in which stockings may cause damage e.g. fragile 'tissue paper' skin, dermatitis, gangrene, recent skin graft
- Cellulitis
- Suspected or proven peripheral arterial disease
- Peripheral arterial bypass graft
- Arterial disease – seek expert opinion before using anti-embolism stockings
- Peripheral neuropathy or other causes of sensory impairment
- Cardiac failure, severe leg oedema or pulmonary oedema from congestive heart failure
- Unusual leg size or shape, major limb deformity preventing correct fit
- Doppler pressure index <0.8
- Known allergy to material of manufacture
- Use caution and clinical judgement when applying anti-embolism stockings over venous ulcers or wounds

East London NHS
NHS Foundation Trust

East Ham Care Centre Fothergill Rehab Centre
Venous Thromboembolism (VTE) Risk Assessment Audit

Instructions
You should mark each question with a CROSS clearly inside one box [X] using a black or blue pen. If you make a mistake just scribble it out and put a cross in the correct box. Sample criteria: Service Users on Fothergill Rehab Centre who have been transferred from hospital or admitted via Community Clinical Lead Nurses; at least 10 service users to be audited

Background			
Patient admitted via			
Transfer from Hospital ☐		Community Clinical Lead Nurses ☐	

Standard 1 **TRANSFER FROM HOSPITAL**			
Copy of VTE Risk Assessment from transferring Hospital is in patient record	Yes ☐	No ☐	
Where applicable, VTE prophylaxis has been prescribed	Yes ☐	No ☐	N/A ☐
Where applicable, VTE prophylaxis has been reviewed weekly/ as patient condition changes	Yes ☐	No ☐	N/A ☐

Standard 2 **ADMISSION VIA COMMUNITY CLINICAL LEAD NURSES**			
Assessment form has been completed	Yes ☐	No ☐	
Requirement/no requirement for prophylaxis indicated	Yes ☐	No ☐	
Type of prophylaxis required indicated	Yes ☐	No ☐	
Prophylaxis prescribed on medication chart	Yes ☐	No ☐	
Patient reassessed at 24 hours after admission	Yes ☐	No ☐	
Patient assessed at weekly intervals	Yes ☐	No ☐	N/A ☐
Patient assessed if condition changed	Yes ☐	No ☐	N/A ☐

Standard 3		
Type of prophylaxis prescribed is correct for patient	Yes ☐	No ☐
Prescribed prophylaxis administered as intended	Yes ☐	No ☐

Comments: