

New eVTE Risk Assessment Reference Guide for adult medical and surgical patients

The electronic venous thromboembolism (eVTE) risk assessment form for adult medical and surgical inpatients has been upgraded (December 2016). Please note, there is a separate maternity eVTE risk assessment form for patients who are in 'pregnancy and the puerperium'.

The eVTE risk assessment takes the prescriber through risk factors for both thrombosis and bleeding, and contraindications to anti-embolism stockings if appropriate. Based on the answers, it gives a recommendation for thromboprophylaxis: such as to prescribe low molecular weight heparin (LMWH) or mechanical measures (anti-embolism stockings, AES, or intermittent pneumatic compression boots, IPC). The key feature of the new version of the eVTE risk assessment is that it will 'link' the recommended outcome of the eVTE risk assessment to e-prescribing. This should make documentation of the eVTE risk assessment more relevant, and make prescription and documentation easier.

Start Assessment

You can start the assessment by clicking on AdHoc forms on the toolbar

And selecting VTE Risk Assessment

Or by opening the Tasks Screen

And double-clicking the VTE Risk Assessment task

Complete Anticoagulation

Record if the patient is on anticoagulation by clicking on the appropriate radio button.

If you select Yes, the treatment recommendation will be that thromboprophylaxis is not required.

This will be obvious from the red star to the left of the form section.

If you select No the rest of the risk assessment will pop up.

The top screenshot shows the 'VTE Risk Assessment' form with the 'Anticoagulation' section selected. The question is 'Is the patient already on anticoagulation e.g. warfarin, low molecular weight heparin (LMWH), unfractionated heparin, fondaparinux, dabigatran, rivaroxaban, apixaban or edoxaban?'. The 'Yes' radio button is selected. A red star is visible to the left of the 'Anticoagulation' header. The bottom screenshot shows the same form but with 'No' selected. The rest of the form, including 'Patient Type' and 'Thrombosis Risks', is visible.

Complete Patient Type and Thrombosis Risks

Record whether your patient is medical or surgical by clicking on the appropriate radio button.

Review the list of Thrombosis Risks. In none apply click on the No radio button, otherwise click Yes.

If your patient is aged over 60 this will automatically default to Yes.

The screenshot shows the 'VTE Risk Assessment' form with the 'Patient Type' section selected. The 'Medical patient' radio button is selected. The 'Thrombosis Risks' section lists various conditions: Age over 60 years, Active cancer or cancer treatment, One or more significant medical comorbidities (for example: heart disease; metabolic, endocrine or respiratory pathologies; acute infectious diseases; inflammatory conditions), Obesity (body mass index [BMI] over 30 kg/m²), Critical care admission, Dehydration, Known thrombophilias, Personal history or first-degree relative with a history of VTE, Use of hormone replacement therapy, Use of oestrogen-containing contraceptive therapy, Varicose veins with phlebitis, Pregnancy or less than 6 weeks postpartum (see obstetric guidelines for further guidance), Medical patient who has had or is expected to have significantly reduced mobility for 3 days or more, Surgical procedure with a total anaesthetic and surgical time of more than 90 minutes, or 60 minutes if the surgery involves the pelvis or lower limb, Acute surgical admission with inflammatory or intra-abdominal condition, Surgical patient with expected significant reduction in mobility. The question 'Are ANY of the above risks applicable?' has the 'Yes' radio button selected. A red star is visible to the left of the 'Anticoagulation' header.

Complete Bleeding Risks

Tick each bleeding risk the patient has, or instead tick None of the following apply 

Bleeding Risks

- None of the following apply
- Active bleeding
- Acquired bleeding disorders (e.g. acute liver failure)
- Concurrent use of anticoagulants known to increase risk of bleeding (such as warfarin with INR > 2)
- Acute stroke
- Thrombocytopenia (<75 x 10⁹/l)
- Uncontrolled systolic hypertension (230/120 mmHg or higher)
- Untreated inherited bleeding disorders (e.g. haemophilia or von Willebrands disease)
- Neurosurgery, spinal surgery or eye surgery
- Other procedures with high bleeding risk
- Lumbar puncture/epidural/spinal anaesthesia within the next 12 hours
- Lumbar puncture/epidural/spinal anaesthesia within the previous 4 hours

Complete Contraindications to Anti-Embolism Stockings (if needed)

If medical patient with no bleeding risks you will not have to complete this section.

If medical patient with bleeding risks or surgical patient this section will be yellow instead of grey – you will need to tick each contraindication, or instead tick None of the following apply.

Contraindications to Anti-Embolism Stockings

Consider anti-embolism stockings in patients who do not have:

- None of the following apply
- Local skin condition: fragile skin, dermatitis, gangrene, wound, ulcer or recent skin graft
- Severe leg oedema
- Cardiac failure
- Peripheral neuropathy or other causes of sensory impairment
- Suspected or proven peripheral arterial disease
- Peripheral arterial bypass grafting
- Unusual leg size or shape
- Major limb deformity preventing correct fit
- Known allergy to material of manufacturer

Close Risk Assessment

After completion of the risk assessment click on the curly arrow button in the top-left corner of the window.

P Risk Assess - ZZZXXEPM, VTE-RA



VTE Risk Assessment

The Final Steps

Patient in the last days or weeks of life will be automatically set to No. If this does apply to the patient you're assessing please change to Yes – in this case complete the assessment as usual but consider carefully whether the recommended outcome is appropriate, and if not then then document why at the end – see next section on 'thromboprophylaxis recommendation.'

The VTE Risk Assessment Tool will now make a recommendation for thromboprophylaxis. The recommendation will be whichever section has a red * adjacent. You should click on this section to continue:

VTE Risk Assessment

Is the patient already on anticoagulation e.g. warfarin, low molecular weight heparin (LMWH), unfractionated heparin, fondaparinux, dabigatran, rivaroxaban, apixaban or edoxaban?

Yes No

Patient in the last days or weeks of life?

No Yes

If 'Yes', complete the assessment as usual but carefully consider whether the interventions are appropriate.

Thromboprophylaxis Recommendation

The recommendation comes first.

If you agree with the advice, select Yes.

If you select No, you will need to enter the reason why in the comments box below e.g. end of life care.

You can now sign the form as complete by clicking on the green tick icon.



If the recommendation is thromboprophylaxis "Not Required" the workflow is now complete.

If the recommendation is anything else you should progress to the next section of this guide.

VTE Risk Assessment - ZZZXXEPMMA, VTE-RA

*Performed on: 06/12/2016 1433

Pharmacological Prophylaxis Recommended (Medical Patients)

Start dalteparin subcutaneously daily (NB caution in renal failure where GFR is below 20mL/min, anti-Xa monitoring is recommended if LMWH is to be used for more than 10 days).
Continue until patient is mobile or discharged.

I agree with the advice and will action it: Yes No

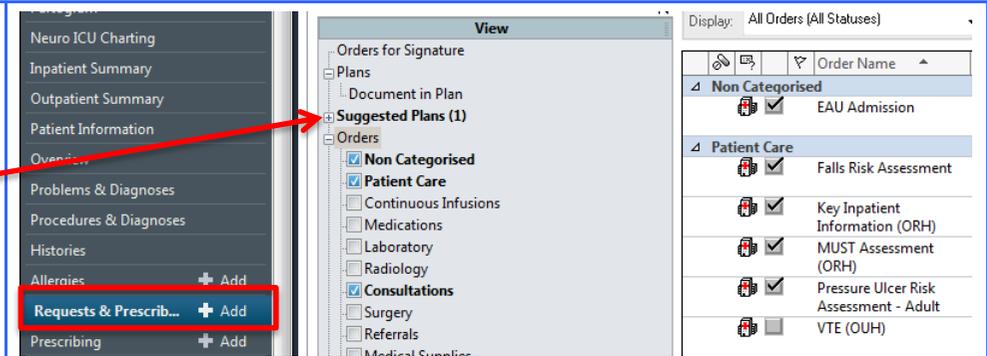
Comments:

The recommended VTE prophylaxis can be found in the "Suggested Plans" section in Requests & Prescribing

Prescribing Thromboprophylaxis

Open Requests & Prescribing

In the View section of the orders window will be a Suggested Plan. Expand this by clicking on the 



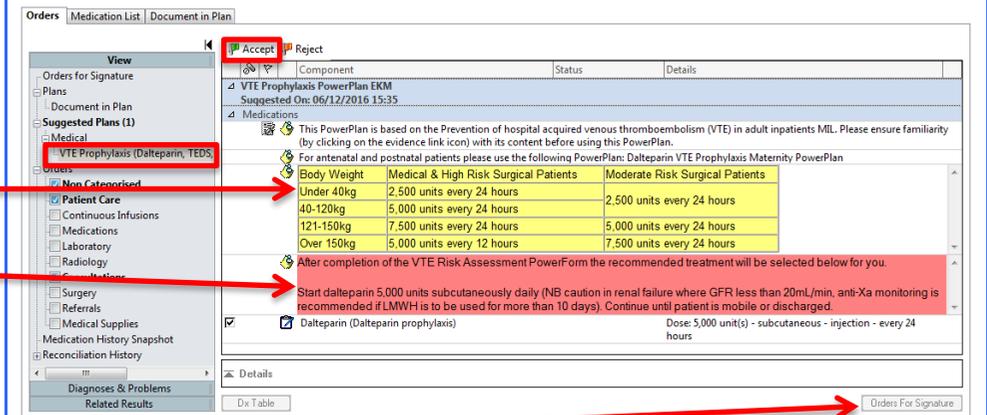
VTE Prophylaxis (Dalteparin, TEDS, IPC) PowerPlan

Click on the suggested plan, and click Accept.

The yellow table outlines what dose of dalteparin should be prescribed.

The red note contains the specific recommendation from the assessment.

Beneath the note will be one or more orders. Because this patient's weight is 80kg it automatically selects the correct dose according to the weight band, removes unnecessary orders and pre-ticks it for you so all you need to do is review the selection and then click Orders For Signature



Variations

If the recommendation is “Mechanical” the PowerPlan looks like this. TEDS are pre-ticked, but this can be changed to IPC, or IPC can be added.

EXCEPTION – If “Acute Stroke” is selected as a Bleeding Risk the PowerPlan will look like this.

If dalteparin is recommended for a surgical patient the PowerPlan looks like this. The pre-ticked dose is what is recommended for a “High Risk” surgical patient. If you believe the patient is only moderate risk you should remove the tick and tick the lower dose instead.

If both mechanical and pharmacological prophylaxis are recommended the PowerPlan looks like this. This contains both types of mechanical prophylaxis with TEDS pre-selected, and high-risk and moderate-risk surgical doses of dalteparin with high-risk pre-selected.

If the patient has thrombosis risk, bleeding risk and stocking contraindications the PowerPlan will guide users to discuss the risks and benefits with their consultant. All available orders will be available but none will be pre-selected.

After completion of the VTE Risk Assessment PowerForm the recommended treatment will be selected below for you.

Prescribe mechanical thromboprophylaxis: anti-embolic stockings and/or intermittent pneumatic compression devices. Review bleeding and thrombosis risks daily.

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> support devices (Anti-embolism stockings (TEDS))	Dose: 1 pair(s) - topical - three times a day Safety checks to be completed once per shift (early / ...
<input type="checkbox"/>	<input checked="" type="checkbox"/> Intermittent pneumatic compression (IPC) device	Dose: 1 pair(s) - topical - three times a day

After completion of the VTE Risk Assessment PowerForm the recommended treatment will be selected below for you.

Prescribe intermittent pneumatic compression (IPC) device. Review bleeding and thrombosis risks daily.

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Intermittent pneumatic compression (IPC) device	Dose: 1 pair(s) - topical - three times a day
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After completion of the VTE Risk Assessment PowerForm the recommended treatment will be selected below for you.

Start dalteparin 5,000 units subcutaneously daily (NB caution in renal failure where GFR less than 20mL/min, anti-Xa monitoring is recommended if LMWH is to be used for more than 10 days). Reduce dose of dalteparin to 2,500 units if you consider the patient to be only moderate risk. Continue to review and re-assess as clinical condition changes. Extended thromboprophylaxis is indicated for certain high risk procedures. For dalteparin, the total duration of extended thromboprophylaxis is: 35 days for hip replacement/fracture, 14 days for knee replacement 28 days for major abdominal cancer surgery.

<input type="checkbox"/>	<input checked="" type="checkbox"/> Dalteparin (Dalteparin prophylaxis)	Dose: 2,500 unit(s) - subcutaneous - injection - every 24 hours
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Dalteparin (Dalteparin prophylaxis)	Dose: 5,000 unit(s) - subcutaneous - injection - every 24 hours

After completion of the VTE Risk Assessment PowerForm the recommended treatment will be selected below for you.

Offer mechanical thromboprophylaxis: anti-embolism stockings and/or intermittent pneumatic compression devices. Start dalteparin 5,000 units subcutaneously daily (NB caution in renal failure where GFR less than 20mL/min, anti-Xa monitoring is recommended if LMWH is to be used for more than 10 days). Reduce dose of dalteparin to 2,500 units if you consider the patient to be only moderate risk. Continue to review and re-assess as clinical condition changes. Extended thromboprophylaxis is indicated for certain high risk procedures. For dalteparin, the total duration of extended thromboprophylaxis is: 35 days for hip replacement/fracture, 14 days for knee replacement 28 days for major abdominal cancer surgery

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> support devices (Anti-embolism stockings (TEDS))	Dose: 1 pair(s) - topical - three times a day Safety checks to be completed once per shift (early / ...
<input type="checkbox"/>	<input type="checkbox"/> Intermittent pneumatic compression (IPC) device	Dose: 1 pair(s) - topical - three times a day
<input type="checkbox"/>	<input checked="" type="checkbox"/> Dalteparin (Dalteparin prophylaxis)	Dose: 2,500 unit(s) - subcutaneous - injection - every 24 hours
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Dalteparin (Dalteparin prophylaxis)	Dose: 5,000 unit(s) - subcutaneous - injection - every 24 hours

After completion of the VTE Risk Assessment PowerForm the recommended treatment will be selected below for you.

Discuss the risks and benefits of offering either mechanical or pharmacological thromboprophylaxis with your consultant. Document the decision in the patient's medical notes. Continue to review and re-assess as clinical condition changes

<input type="checkbox"/>	<input checked="" type="checkbox"/> support devices (Anti-embolism stockings (TEDS))	Dose: 1 pair(s) - topical - three times a day Safety checks to be completed once per shift (early / ...
<input type="checkbox"/>	<input checked="" type="checkbox"/> Intermittent pneumatic compression (IPC) device	Dose: 1 pair(s) - topical - three times a day
<input type="checkbox"/>	<input checked="" type="checkbox"/> Dalteparin (Dalteparin prophylaxis)	Dose: 2,500 unit(s) - subcutaneous - injection - every 24 hours
<input type="checkbox"/>	<input checked="" type="checkbox"/> Dalteparin (Dalteparin prophylaxis)	Dose: 5,000 unit(s) - subcutaneous - injection - every 24 hours
<input type="checkbox"/>	<input checked="" type="checkbox"/> Dalteparin (Dalteparin prophylaxis)	Dose: 7,500 unit(s) - subcutaneous - injection - every 24 hours
<input type="checkbox"/>	<input checked="" type="checkbox"/> Dalteparin (Dalteparin prophylaxis)	Dose: 5,000 unit(s) - subcutaneous - injection - every 12 hours

Review and Sign

Review and then click Sign to activate the orders.

Details
0 Missing Required Details Dx Table **Sign**

Prescribing Thromboprophylaxis *before* a risk assessment?



You will no longer be able to order thromboprophylaxis if a risk assessment has not been completed.

An alert will fire allowing you to either complete the risk assessment or cancel the order.

Discern: (1 of 1)

Cerner **VTE Risk Assessment Missing**

Before you can prescribe Dalteparin prophylaxis for this patient you must perform a full risk assessment.

To start, please click on the VTE-RA button below on the left.

Alert Action

Cancel

VTE-RA **OK**

Prescribing Thromboprophylaxis *after* a risk assessment

If you try to prescribe thromboprophylaxis after the risk assessment but forget to select the Suggested plan it doesn't matter – the PowerPlan will still automatically adjust based on the most recent risk assessment and weight.

After completion of the VTE Risk Assessment PowerForm the recommended treatment will be selected below for you.

Discuss the risks and benefits of offering either mechanical or pharmacological thromboprophylaxis with your consultant. Document the decision in the patient's medical notes. Continue to review and re-assess as clinical condition changes

<input type="checkbox"/>	<input checked="" type="checkbox"/> support devices (Anti-embolism stockings (TEDS))	Dose: 1 pair(s) - topical - three times a day Safety checks to be completed once per shift (early / ...
<input type="checkbox"/>	<input checked="" type="checkbox"/> Intermittent pneumatic compression (IPC) device	Dose: 1 pair(s) - topical - three times a day
<input type="checkbox"/>	<input checked="" type="checkbox"/> Dalteparin (Dalteparin prophylaxis)	Dose: 2,500 unit(s) - subcutaneous - injection - every 24 hours
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<input type="checkbox"/>	<input checked="" type="checkbox"/> Dalteparin (Dalteparin prophylaxis)	Dose: 7,500 unit(s) - subcutaneous - injection - every 24 hours