Dear Colleague

DEVELOPMENT OF A REGIONAL VTE RISK ASSESSMENT TOOL


Following the issue of these letters, the HSC Safety Forum established a VTE collaborative with HSC Trusts and an associated Advisory Group, chaired by Dr G Benson, Consultant Haematologist. The Safety Forum VTE Advisory Group has now developed and agreed a single risk assessment tool (copy attached) for use throughout all HSC Trusts. This should ensure that every adult patient has a documented VTE risk assessment on admission to hospital and that the risk assessment is conducted in accordance with clinical risk assessment criteria that reflect NICE clinical guideline CG92. In particular, the risk assessment reflects the balance for each patient between the risk of bleeding risk as well as their clotting risk.
It is hoped that a unified approach to VTE risk assessment will simplify the training of medical staff and nursing staff and also reduce the need for re-training if they rotate through Trusts or move their place of employment.

We strongly commend the use of the VTE risk assessment tool and would encourage its use in all Trusts. Trust Medical Directors have indicated that they are supportive of the use of this tool.

Yours sincerely

Dr Michael McBride  
Chief Medical Officer

Mrs A McLernon  
Acting Chief Nursing Officer

This letter is available at [www.dhsspsni.gov.uk](http://www.dhsspsni.gov.uk)
### RISK ASSESSMENT FOR VENOUS THROMBOEMBOLISM (VTE)

- All patients should be risk assessed on admission to hospital.
- Patients should be reassessed within 24 hours of admission and whenever the clinical situation changes.

**STEP 1**
Assess all patients admitted to hospital for level of mobility (tick one box).

- All surgical patients, and all medical patients with significantly reduced mobility, should be considered for further risk assessment.

**STEP 2**
Review the factors shown on the assessment sheet against thrombosis risk, ticking each box that applies (more than one box can be ticked).

- Any tick for thrombosis risk should prompt thromboprophylaxis according to NICE guidance or refer to Trust guideline for thromboprophylaxis.
- If no box is ticked for thrombosis risk, the patient is at low risk of VTE.
- The risk factors listed are not exhaustive; clinicians may consider additional risks in individual patients and offer thromboprophylaxis.

**STEP 3**
Review the factors shown against bleeding risk and tick each box that applies (more than one box can be ticked).

- Any tick should prompt clinical staff to consider if bleeding risk is sufficient to preclude pharmacological intervention.

**STEP 4**
- Tick overall risk of VTE
- Tick if thromboprophylaxis is prescribed and the type prescribed

**STEP 5**
- Sign, date and time the risk assessment following completion.

**Reference**
   [http://guidance.nice.org.uk/CG92](http://guidance.nice.org.uk/CG92)

Adapted from the Department of Health VTE risk assessment template, March 2010
### Venous Thromboembolism (VTE) Risk Assessment for Hospitalised Adults

Risk assessment must be completed on admission

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#### Step 1: Assess for level of mobility – All Patients

<table>
<thead>
<tr>
<th>Surgical patient</th>
<th>Tick</th>
<th>Medical patient expected to have ongoing reduced mobility relative to normal state</th>
<th>Tick</th>
<th>Medical patient NOT expected to have significantly reduced mobility relative to normal state</th>
<th>Tick</th>
</tr>
</thead>
</table>

Assess for thrombosis and bleeding risk below (Complete steps 2 – 5) | Risk assessment complete (Go to step 5)

#### Step 2: Review thrombosis risk

Any tick for thrombosis risk factors should prompt consideration for thromboprophylaxis

- **Patient related**
  - Active cancer or cancer treatment
  - Age >60
  - Dehydration
  - Known thrombophilias
  - Personal history / first degree relative with history of VTE
  - One or more significant medical comorbidities (eg heart disease; metabolic, endocrine or respiratory pathologies; acute infectious diseases; inflammatory conditions)
  - Obesity (BMI>30kg/m²)
  - Use of hormone replacement therapy
  - Use of oestrogen-containing oral contraceptive therapy
  - Varicose veins with phlebitis
  - Pregnancy or < 6 weeks post partum (see obstetric risk assessment for VTE)

- **Admission related**
  - Significantly reduced mobility for 3 days or more
  - Hip or knee replacement
  - Hip fracture
  - Total anaesthetic + surgery time > 90 minutes
  - Surgery involving pelvis or lower limb with anaesthetic + surgery time > 60 minutes
  - Acute surgical admission with inflammatory or intra-abdominal condition
  - Critical care admission
  - Surgery with significant reduction in mobility
  - The above risk factors are not exhaustive, additional risks may be considered. Other:

#### Step 3: Review bleeding risk

Any tick should prompt staff to consider if bleeding risk is sufficient to preclude pharmacological intervention

- **Patient related**
  - Active bleeding
  - Acquired bleeding disorder (such as acute liver failure)
  - Concurrent use of anticoagulants known to increase risk of bleeding (such as warfarin with INR >2)
  - Acute stroke
  - Thrombocytopenia (Platelets <75x10⁹/l)
  - Uncontrolled systolic hypertension (>230/120)
  - Untreated inherited bleeding disorder (such as haemophilia and von Willebrand’s disease)

- **Admission related**
  - Neurosurgery, spinal surgery or eye surgery
  - Lumbar puncture / epidural / spinal anaesthesia expected in the next 12 hours
  - Lumbar puncture / epidural / spinal anaesthesia within the previous 4 hours
  - Other procedure with high bleeding risk
  - The above risk factors are not exhaustive, additional risks may be considered. Other:

#### Step 4: Tick the appropriate risk category

<table>
<thead>
<tr>
<th>Risk of VTE (tick)</th>
<th>High risk of VTE with low bleeding risk</th>
<th>High risk of VTE with significant bleeding risk</th>
<th>Low risk of VTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thromboprophylaxis prescribed on kardex? (tick)</td>
<td>Yes</td>
<td>Type Prescribed (tick)</td>
<td>Pharmacological e.g. LMWH</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>Mechanical</td>
<td></td>
</tr>
</tbody>
</table>

#### Step 5: Signature

<table>
<thead>
<tr>
<th>VTE risk assessed on admission</th>
<th>Signature:</th>
<th>Print Name:</th>
<th>Date and Time:</th>
</tr>
</thead>
</table>

VTE risk should be re-assessed within 24 hours and whenever clinical condition changes

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*Northern Ireland VTE Advisory Group, June 2011*