

# Prevention of Venous Thromboembolism (VTE) in Adult Hospitalised Patients – Guideline Overview

Abridged information; refer to ['Guideline for the Prevention of Venous Thromboembolism \(VTE\) in Adult Hospitalised Patients'](#) for full details

**Identify all patients requiring VTE Risk Assessment** (section 1.1); **conduct advance-planning when possible** (section 1.2)  
 Not in scope of THIS guideline: pregnancy and puerperium\*, paediatrics, outpatients or cancer day patients, treatment of VTE  
 \*Refer to 'Queensland Clinical Guidelines: Venous thromboembolism (VTE) prophylaxis in pregnancy and the puerperium'

**VTE Risk Assessment required:** (section 1.1)  
 • All inpatient admissions including mental health, rehabilitation and palliative care  
 • Day surgery or procedures under general and prolonged anaesthesia with significantly reduced mobility  
 • Isolated injury requiring temporary lower limb immobilisation, including Emergency Department discharge

**VTE Risk Assessment NOT routinely required:** (section 1.1)  
 • Terminally ill or end of life care patients (in consultation with patient or carer and multidisciplinary team)  
 • Day surgery or procedures under local anaesthesia without reduced mobility  
 • Emergency Department discharge other than lower limb immobilisation

**Undertake VTE Risk Assessment** (section 1.3)  
 As soon as possible using statewide ['Adult Venous Thromboembolism Risk Assessment Tool'](#) or locally endorsed equivalent

**Specific patients at increased VTE risk:** (section 1.3.4)

<p><b>Medical Patients:</b></p> <ul style="list-style-type: none"> <li>• Acute stroke</li> <li>• Critically ill</li> <li>• Decompensated heart failure</li> <li>• Active inflammatory bowel disease</li> </ul>	<p><b>Surgical and Orthopaedic Patients:</b></p> <ul style="list-style-type: none"> <li>• Major abdominal-pelvic surgery for cancer</li> <li>• Total hip or knee arthroplasty</li> <li>• Fragility fractures (pelvis, hip, proximal femur)</li> <li>• Major trauma surgery</li> <li>• Craniotomy</li> <li>• Cardiac surgery</li> <li>• Abdominal aortic aneurysm repair</li> </ul>	<ul style="list-style-type: none"> <li>• Thoracic surgery with primary or metastatic cancer</li> <li>• Elective spinal surgery (admission longer than 2 days) with risk factors</li> <li>• Bariatric surgery</li> <li>• Temporary immobilisation (above or below knee cast, or backslab)</li> </ul>
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**ALL other patients individually risk assessed**

Increased risk → VTE prophylaxis required  
 Low risk → No VTE prophylaxis required

**Assess Contraindications and Special Considerations to Prophylaxis** (section 1.4)

**Mechanical Prophylaxis Contraindications** (section 1.4.1)

<p><b>Contraindications:</b></p> <ul style="list-style-type: none"> <li>• Severe peripheral arterial disease or ulcer</li> <li>• Skin graft or peripheral arterial bypass graft</li> <li>• Severe leg or pulmonary oedema</li> <li>• Allergy to material of manufacture</li> <li>• Severe localised leg problems</li> </ul>	<p><b>Additional contraindications specific to graduated compression stockings only:</b></p> <ul style="list-style-type: none"> <li>• Leg deformity or obesity preventing correct fit</li> <li>• Peripheral neuropathy</li> <li>• Stroke</li> </ul>
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**Pharmacological Prophylaxis Contraindications** (section 1.4.2) **and Special Considerations** (section 1.4.3)

<p><b>Absolute contraindications:</b></p> <ul style="list-style-type: none"> <li>• Already anticoagulated</li> <li>• Active major bleeding</li> <li>• Recent clinically significant bleeding</li> <li>• Thrombocytopenia (platelets less than 50 x 10<sup>9</sup>/L)</li> <li>• Inherited or acquired bleeding disorders</li> </ul>	<p><b>Relative contraindications:</b></p> <ul style="list-style-type: none"> <li>• High bleeding risk surgery within last 2 weeks</li> <li>• Recent gastrointestinal or genitourinary bleeding</li> <li>• Recent central nervous system bleeding</li> <li>• High bleeding risk intracranial or spinal lesion</li> <li>• Uncontrolled systolic hypertension</li> <li>• High bleeding risk condition</li> </ul>	<p><b>Special considerations:</b></p> <ul style="list-style-type: none"> <li>• Heparin-induced thrombocytopenia or thrombosis</li> <li>• Lumbar puncture</li> <li>• Therapeutic anticoagulation</li> <li>• Antiplatelet therapy</li> <li>• Patient's personal beliefs</li> </ul>
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Mechanical Prophylaxis Contraindicated → No contraindications to Mechanical Prophylaxis  
 Pharmacological Prophylaxis Contraindicated → No contraindications or special considerations to Pharmacological Prophylaxis → Special considerations with Pharmacological Prophylaxis

**Conduct baseline tests** (section 1.5)

**Identify relevant VTE prophylaxis recommendations** (sections 2.1 and 2.2)

<p><b>Medical and Mental Health Patients:</b></p> <ul style="list-style-type: none"> <li>• Acute stroke (section 2.1.1)</li> <li>• Critically ill (section 2.1.2)</li> <li>• Medical cancer inpatients (section 2.1.3)</li> <li>• Acutely ill (section 2.1.4)</li> <li>• Mental health patients (section 2.1.5)</li> <li>• All other medical patients – see prophylaxis options: pharmacological (section 1.7) and mechanical (section 1.8)</li> </ul>	<p><b>Surgical and Orthopaedic Patients:</b></p> <ul style="list-style-type: none"> <li>• General and abdominal-pelvic surgery (section 2.2.1)</li> <li>• Major abdominal-pelvic surgery for cancer (section 2.2.2)</li> <li>• Total hip or knee arthroplasty (section 2.2.3)</li> <li>• Fragility fractures (section 2.2.4)</li> <li>• Ambulatory patients with isolated lower limb immobilisation (section 2.2.5)</li> <li>• Other orthopaedic procedures (section 2.2.6)</li> <li>• Major trauma (section 2.2.7)</li> </ul>	<ul style="list-style-type: none"> <li>• Craniotomy (section 2.2.8)</li> <li>• Cardiac surgery (section 2.2.9)</li> <li>• Vascular surgery (section 2.2.10)</li> <li>• Thoracic surgery (section 2.2.11)</li> <li>• Elective spinal surgery (section 2.2.12)</li> <li>• Bariatric surgery (section 2.2.13)</li> <li>• All other surgical patients – see prophylaxis options: pharmacological (section 1.7) and mechanical (section 1.8)</li> </ul>
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**Assess benefits versus risks of VTE prophylaxis**

**Develop VTE Prevention Plan** (section 1.6); document in patient record or ieMR  
 Prescribe VTE prophylaxis as appropriate in the medication chart or ieMR

**Monitor patient** (sections 1.10.1 to 1.10.3)

**Reassess risks of VTE and bleeding** (section 1.10.4)

**Write discharge plan** (section 1.10.6); ensure transfer of care