### Clinical Practice Guideline for Initiation of Venous Thromboembolism (VTE) Prophylaxis in the Pediatric ICU

**Original Publication Date:** 2013  
**Revision Update:** 9/2017

#### Assessment

<table>
<thead>
<tr>
<th></th>
<th>Low Risk</th>
<th>At Risk</th>
<th>High Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility Status</td>
<td>Baseline</td>
<td>Baseline</td>
<td>Altered</td>
</tr>
<tr>
<td>VTE Risk Factors</td>
<td>None</td>
<td>1 or more</td>
<td>0 - 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 or more</td>
</tr>
</tbody>
</table>

#### Intervention

<table>
<thead>
<tr>
<th></th>
<th>Low Risk</th>
<th>At Risk</th>
<th>High Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourage</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ambulation/Mobility</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>PT/OT</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>SCD and/or Compression</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Stockings</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Anticoagulation Prophylaxis</td>
<td>(see Pharmacologic Considerations below)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### VTE Risk Factors

- **<2 years old (not at age or definitive in ability to ambulate):** motor milestones achieved in development pre-morbidity
- **2-4 years old:** if in normal development pre-morbidity, ability to ambulate at least 150 feet
- **≥5 years old:** if in normal development pre-morbidity, ability to ambulate approximate to adult ability

#### Altered

Temporary inability to ambulate freely, includes an acute state of altered mobility or due to pharmacologic interventions, intubation, or injury. Expected immobility ≥72 hrs.

#### Pharmacologic Considerations

- **Patients < 2 months:** 0.75 mg/kg subcutaneous BID  
- **Patients ≤ 60 kg:** 0.5 mg/kg subcutaneous BID  
- **Patients > 60 kg:** 40 mg subcutaneous BID

*Continue Enoxaparin until Patient can ambulate 150 feet, at baseline mobility, &/or Risk Factors are resolved*

#### Contraindications to Pharmacologic Prophylaxis

- Ongoing or uncontrolled bleeding
- Uncorrected coagulopathy (PLT < 50,000; INR > 1.5; or PT > 2x control)
- <1 year since acute stroke
- Suspected or known paraspinal hematoma
- Major allergy to pork products
- History of heparin-induced thrombocytopenia
- Intracranial monitoring (EVD/Bolt)
- CNS drain (epidural catheter/other)
- Risk for major surgical bleeding

#### Monitoring

- Monitor heparin assay and adjust dose if creatinine clearance is < 30 ml/min
- Consider heparin assay if creatinine clearance is < 60 ml/min or if patient is < 1 year and UOP is < 1 ml/kg/hr
- Heparin assay should be 0.2-0.4

*Consider consulting pharmacy or hematology*

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**Mobility Definitions:**

- **Baseline:** Usual state of ambulation or mobility
  - <2 years old (not at age or definitive in ability to ambulate): motor milestones achieved in development pre-morbidity
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  - ≥5 years old: if in normal development pre-morbidity, ability to ambulate approximate to adult ability

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