Postoperative Pulmonary Embolism or Deep Vein Thrombosis Rate

Patient Safety Indicators #12
Technical Specifications
Provider-Level Indicator
AHRQ Quality Indicators, Version 4.3, August 2011

Numerator

Discharges among cases meeting the inclusion and exclusion rules for the denominator with ICD-9-CM codes for deep vein thrombosis or pulmonary embolism in any secondary diagnosis field.

**ICD-9-CM Deep vein thrombosis diagnosis codes:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>45111</td>
<td>PHLEBITIS AND THROMBOSIS OF FEMORAL VEIN (DEEP) (SUPERFICIAL)</td>
</tr>
<tr>
<td>45119</td>
<td>PHLEBITIS AND THROMBOPHLEBITIS OF DEEP VESSEL OF LOWER EXTREMITIES – OTHER</td>
</tr>
<tr>
<td>4512</td>
<td>PHLEBITIS AND THROMBOPHLEBITIS OF LOWER EXTREMITIES UNSPECIFIED*</td>
</tr>
<tr>
<td>45181</td>
<td>PHLEBITIS AND THROMBOPHLEBITIS OF ILIAC VEIN</td>
</tr>
<tr>
<td>4519</td>
<td>PHLEBITIS AND THROMBOPHLEBITIS OF OTHER SITES - OF UNSPECIFIED SITE*</td>
</tr>
<tr>
<td>45340</td>
<td>DVT-EMBLSM LOWER EXT NOS (OCT04)</td>
</tr>
<tr>
<td>45341</td>
<td>DVT-EMB PROX LOWER EXT (OCT04)</td>
</tr>
<tr>
<td>45342</td>
<td>DVT-EMB DISTAL LOWER EXT (OCT04)</td>
</tr>
<tr>
<td>4538</td>
<td>OTHER VENOUS EMBOLISM AND THROMBOSIS OF OTHER SPECIFIED VEINS*</td>
</tr>
<tr>
<td>4539</td>
<td>OTHER VENOUS EMBOLISM AND THROMBOSIS OF UNSPECIFIED SITE*</td>
</tr>
</tbody>
</table>

* Does not apply on or after October 1, 2009.

**ICD-9-CM Pulmonary embolism diagnosis codes:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4151</td>
<td>PULMONARY EMBOLISM AND INFARCTION</td>
</tr>
<tr>
<td>41511</td>
<td>IATROGENIC PULMONARY EMBOLISM AND INFARCTION</td>
</tr>
<tr>
<td>41519</td>
<td>PULMONARY EMBOLISM AND INFARCTION, OTHER</td>
</tr>
</tbody>
</table>

Denominator

All surgical discharges age 18 and older defined by specific DRGs or MS-DRGs and an ICD-9-CM code for an operating room procedure.

See Patient Safety Indicators Appendices:
- Appendix A – Operating Room Procedure Codes
- Appendix D – Surgical Discharge DRGs
- Appendix E – Surgical Discharge MS-DRGs

Exclude cases:
- with principal diagnosis of deep vein thrombosis or pulmonary embolism or secondary diagnosis present on admission
- where a procedure for interruption of vena cava is the only operating room procedure
- where a procedure for interruption of vena cava occurs before or on the same day as the first operating room procedure
Note: If day of procedure is not available in the input data file, the rate may be slightly lower than if the information was available.

- MDC 14 (pregnancy, childbirth, and puerperium)
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing)

ICD-9-CM Interruption of vena cava procedure code:
387    INTERRUPTION OF VENA CAVA