Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate Technical Specifications

Patient Safety Indicators #12 (PSI #12)
AHRQ Quality Indicators™, Version 4.5, May 2013
Provider-Level Indicator
Type of Score: Rate

Description

Perioperative pulmonary embolism or deep vein thrombosis (secondary diagnosis) per 1,000 surgical discharges for patients ages 18 years and older. Excludes cases with principal diagnosis for pulmonary embolism or deep vein thrombosis; cases with secondary diagnosis for pulmonary embolism or deep vein thrombosis present on admission; cases in which interruption of vena cava is the only operating room procedure or in which interruption of vena cava occurs before or on the same day as the first operating room procedure; and obstetric discharges.

[NOTE: The software provides the rate per hospital discharge. However, common practice reports the measure as per 1,000 discharges. The user must multiply the rate obtained from the software by 1,000 to report events per 1,000 hospital discharges.]

Numerator

Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with a secondary ICD-9-CM diagnosis code for deep vein thrombosis or a secondary ICD-9-CM diagnosis code for pulmonary embolism.

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>FEMORAL VEIN PHLEBITIS</td>
</tr>
<tr>
<td>45119</td>
<td>DEEP PHLEBITIS-LEG NEC</td>
</tr>
<tr>
<td>4512</td>
<td>THROMBOPHLEBITIS LEG NOS</td>
</tr>
<tr>
<td>45181</td>
<td>ILLAC THROMBOPHLEBITIS</td>
</tr>
<tr>
<td>4519</td>
<td>THROMBOPHLEBITIS NOS</td>
</tr>
</tbody>
</table>

ICD-9-CM Pulmonary embolism diagnosis codes:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4151</td>
<td>PULMON EMBOLISM/INFARCT</td>
</tr>
<tr>
<td>41511</td>
<td>IATROGEN PULM EMB/INFARC</td>
</tr>
</tbody>
</table>

1 The procedure or diagnosis codes are continuously updated. The current list of ICD-9-CM codes is valid for October 2012 through September 2013. Italicized codes are not active in Fiscal Year 2013.
Denominator

Surgical discharges, for patients ages 18 years and older, with any-listed ICD-9-CM procedure codes for an operating room procedure. Surgical discharges are defined by specific DRG or MS-DRG codes.

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 a principal ICD-9-CM diagnosis code (or secondary diagnosis present on admission) for deep vein thrombosis (see above)
• with a principal ICD-9-CM diagnosis code (or secondary diagnosis present on admission) for pulmonary embolism (see above)
• where the only operating room procedure is interruption of vena cava
• where a procedure for interruption of vena cava occurs before or on the same day as the first operating room procedure†
• 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

† If day of procedure is not available in the input data file, the rate may be slightly lower than if the information was available