Accidental Puncture or Laceration Rate
Technical Specifications

Pediatric Quality Indicators #1 (PDI #1)
AHRQ Quality Indicators™, Version 4.5, May 2013
Provider-Level Indicator
Type of Score: Rate

Description

Accidental punctures or lacerations (secondary diagnosis) during procedure per 1,000 discharges for patients ages 17 years and younger. Includes metrics for discharges grouped by risk category. Excludes obstetric discharges, spinal surgery discharges, discharges with accidental puncture or laceration as a principal diagnosis, discharges with accidental puncture or laceration as a secondary diagnosis that is present on admission, normal newborns, and neonates with birth weight less than 500 grams.

[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.]

[NOTE: To obtain stratified results, the user must run the PDSASG2.SAS program in the SAS QI Software Version 4.5 or choose to stratify by risk category in the Windows QI Software Version 4.5]

Numerator

Overall:

Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with any secondary ICD-9-CM diagnosis codes for accidental puncture or laceration during a procedure.

ICD-9-CM Accidental puncture or laceration during a procedure diagnosis codes:
- E8700 ACC CUT/HEM IN SURGERY
- E8701 ACC CUT/HEM IN INFUSION
- E8702 ACC CUT/HEM-PERFUSN NEC
- E8703 ACC CUT/HEM IN INJECTION
- E8704 ACC CUT/HEM W SCOPE EXAM
- E8705 ACC CUT/HEM W CATHETERIZ
- E8706 ACC CUT/HEM W HEART CATH
- E8707 ACC CUT/HEM W ENEMA
- E8708 ACC CUT IN MED CARE NEC
- E8709 ACC CUT IN MED CARE NOS
- 9982 ACCIDENTAL OP LACERATION

Risk Category 1:

Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with
any secondary ICD-9-CM diagnosis codes for accidental puncture or laceration during a procedure (see above).

**Risk Category 2:**

Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with any secondary ICD-9-CM diagnosis codes for accidental puncture or laceration during a procedure (see above).

**Risk Category 3:**

Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with any secondary ICD-9-CM diagnosis codes for accidental puncture or laceration during a procedure (see above).

**Risk Category 4:**

Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with any secondary ICD-9-CM diagnosis codes for accidental puncture or laceration during a procedure (see above).

**Risk Category 5:**

Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with any secondary ICD-9-CM diagnosis codes for accidental puncture or laceration during a procedure (see above).

**Risk Category 6:**

Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with any secondary ICD-9-CM diagnosis codes for accidental puncture or laceration during a procedure (see above).

**Risk Category 9:**

Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with any secondary ICD-9-CM diagnosis codes for accidental puncture or laceration during a procedure (see above).

**Denominator**

**Overall:**

Surgical and medical discharges, for patients ages 17 years and younger. Surgical and
medical discharges are defined by specific DRG or MS-DRG codes.

See Pediatric Quality Indicators Appendices:
- Appendix B – Surgical DRGs
- Appendix C – Surgical MS-DRGs
- Appendix D – Medical DRGs
- Appendix E – Medical MS-DRGs

Exclude cases:
- with a principal ICD-9-CM diagnosis code (or secondary diagnosis present on admission) for accidental puncture or laceration during a procedure (see above)
- with any-listed ICD-9-CM procedure codes for spine surgery
- normal newborn
- neonate with birth weight less than 500 grams (Birth Weight Category 1)
- 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)

See Pediatric Quality Indicators Appendices:
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- Appendix L – Low Birth Weight Categories

ICD-9-CM Spine surgery procedure codes¹:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0301</td>
<td>REMOVAL FB SPINAL CANAL</td>
</tr>
<tr>
<td>0302</td>
<td>REOPEN LAMINECTOMY SITE</td>
</tr>
<tr>
<td>0309</td>
<td>SPINAL CANAL EXPLOR NEC</td>
</tr>
<tr>
<td>0353</td>
<td>VERTEBRAL FX REPAIR</td>
</tr>
<tr>
<td>036</td>
<td>SPINAL CORD ADHESIOLYSIS</td>
</tr>
<tr>
<td>8053</td>
<td>REP ANULUS FIBROSUS-GRFT</td>
</tr>
<tr>
<td>8054</td>
<td>REP ANULS FIBROS NEC/NOS</td>
</tr>
<tr>
<td>8100</td>
<td>SPINAL FUSION NOS</td>
</tr>
<tr>
<td>8101</td>
<td>ATLAS-AXIS FUSION</td>
</tr>
<tr>
<td>8102</td>
<td>OTH CERV FUSION ANT/ANT</td>
</tr>
<tr>
<td>8103</td>
<td>OT CERV FUSION POST/POST</td>
</tr>
<tr>
<td>8104</td>
<td>DRSL/DRSLUMB FUS ANT/ANT</td>
</tr>
<tr>
<td>8105</td>
<td>DRSL/DSLMB FUS POST/POST</td>
</tr>
<tr>
<td>8106</td>
<td>LUMB/LMBSAC FUS ANT/ANT</td>
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<tr>
<td>8107</td>
<td>LMB/LMBSAC FUS POST/POST</td>
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<tr>
<td>8108</td>
<td>LUMB/LMBSAC FUS ANT/ANT</td>
</tr>
<tr>
<td>8130</td>
<td>SPINAL REFUSION NOS</td>
</tr>
<tr>
<td>8131</td>
<td>REFUSION OF ATLAS-AXIS</td>
</tr>
<tr>
<td>8132</td>
<td>REFUS OTH CERV/CL ANT/ANT</td>
</tr>
<tr>
<td>8133</td>
<td>REFUS OTH CERV POST/POST</td>
</tr>
<tr>
<td>8134</td>
<td>REFUS DRS/DRSLMB ANT/ANT</td>
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<td>8135</td>
<td>REFUS DRS/DRSLMB POST/PST</td>
</tr>
<tr>
<td>8136</td>
<td>REFUS LMB/LMBSAC ANT/ANT</td>
</tr>
<tr>
<td>8137</td>
<td>REFUS LMB/LMBSAC POST/PST</td>
</tr>
<tr>
<td>8138</td>
<td>REFUS LMB/LMBSAC ANT/POST</td>
</tr>
<tr>
<td>8139</td>
<td>REFUSION OF SPINE NEC</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.

² Code has code also instructions
Risk Category 1:

Surgical and medical discharges, for patients ages 17 years and younger, with either MDC 2 (eye), MDC 3 (ear, nose, mouth, and throat), MDC 9 (skin, subcutaneous tissue, and breast), MDC 19 (mental diseases and disorders), MDC 22 (burns), or MDC 23 (factors influencing health status). Surgical and medical discharges are defined by specific DRG or MS-DRG codes.

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Exclude cases:
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- with any-listed ICD-9-CM procedure codes for spine surgery
- normal newborn
- neonate with birth weight less than 500 grams (Birth Weight Category 1)
- 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)

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Risk Category 2:

Surgical and medical discharges, for patients ages 17 years and younger, with either MDC 4 (respiratory system), MDC 5 (circulatory system), or MDC 17 (myeloproliferative diseases and disorders [poorly differentiated neoplasms]). Surgical and medical discharges are defined by specific DRG or MS-DRG codes.

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Risk Category 3:

Surgical and medical discharges, for patients ages 17 years and younger, with either MDC 11 (kidney and urinary tract), MDC 12 (male reproductive system), or MDC 13 (female reproductive system). Surgical and medical discharges are defined by specific DRG or MS-DRG codes.

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Risk Category 4:

Surgical and medical discharges, for patients ages 17 years and younger, with either MDC 0/99 (ungroupable), MDC 16 (blood and blood forming organs and immunological disorders), MDC 18 (infectious and parasitic diseases and disorders), or MDC 25 (human immunodeficiency virus infection). Surgical and medical discharges are defined by specific DRG or MS-DRG codes.
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**Risk Category 5:**

Surgical and medical discharges, for patients ages 17 years and younger, with either MDC 1 (nervous system), MDC 8 (musculoskeletal system and connective tissue), MDC 21 (injuries, poison, and toxic effect of drugs), or MDC 24 (multiple significant trauma). Surgical and medical discharges are defined by specific DRG or MS-DRG codes.

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Risk Category 6:

Surgical and medical discharges, for patients ages 17 years and younger, with either MDC 6 (digestive system), MDC 7 (hepatobiliary system and pancreas), or MDC 10 (endocrine, nutritional, and metabolic system). Surgical and medical discharges are defined by specific DRG or MS-DRG codes.

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Risk Category 9:

Surgical and medical discharges, for patients ages 17 years and younger, that do not meet the inclusion rules for Risk Category 1 through Risk Category 6. Surgical and medical discharges are defined by specific DRG or MS-DRG codes.

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