Accidental Puncture or Laceration Rate
Technical Specifications

Pediatric Quality Indicators #1 (PDI #1)
AHRQ Quality Indicators™, Version 5.0
March 2015
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 code:
9982 ACCIDENTAL PUNCTURE OR LACERATION DURING A PROCEDURE

Risk Category 1:

Eye, ear, nose, mouth, throat, skin, breast and other low-risk procedures discharges (MDC = 2,3,9,19,22,23), 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:

Thoracic, cardiovascular, and specified neoplastic procedures discharges (MDC = 4, 5, 17), 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:

Kidney, and male/female reproductive procedures discharges (MDC = 11, 12, 13), 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:

Infectious, immunological, hematological, and ungroupable procedures discharges (MDC = 0, 16, 18, 25, 99), 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:

Trauma, orthopedic, and neurologic procedures discharges (MDC = 1, 8, 21, 24), 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:

Gastrointestinal, hepatobiliary, and endocrine procedures discharges (MDC = 6, 7, 10), 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:

Other 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:
• Appendix I – Definitions of, Neonate, Newborn, Normal Newborn, and Outborn
• Appendix L – Low Birth Weight Categories

ICD-9-CM Spine surgery procedure codes:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>0301</td>
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<td>REOPEN LAMINECTOMY SITE</td>
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<tr>
<td>0309</td>
<td>SPINAL CANAL EXPLOR NEC</td>
</tr>
<tr>
<td>0353</td>
<td>VERTEBRAL FX REPAIR</td>
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<tr>
<td>036</td>
<td>SPINAL CORD ADHESIOLYSIS</td>
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<td>8053</td>
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<td>8103</td>
<td>OTHER CERVICAL FUS POST</td>
</tr>
<tr>
<td>8104</td>
<td>DORSAL/DORSOLUM FUS ANT</td>
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<td>LUMBAR/LUMBOSAC FUS POST</td>
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<td>8482</td>
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<td>8483</td>
<td>REV PEDCL DYN STABIL DEV</td>
</tr>
<tr>
<td>8485</td>
<td>REV FACET REPLACE DEVICE</td>
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</tbody>
</table>
**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.

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)

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- Appendix L – Low Birth Weight Categories

**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
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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
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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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