Rate of Complications of Anesthesia

Experimental Quality Indicators #1
Technical Specifications
Provider-Level Indicator
AHRQ Quality Indicators, Version 4.3, August 2011

Version 4.3a is a maintenance release of Version 4.3. The differences between the two versions are:

- Version 4.3a includes Version 29 of the Limited License edition of the 3M™ APR-DRG Grouper. This grouper corrects an issue found in Version 28 of the Limited License edition of the 3M™ APR-DRG Grouper. The grouper is only used with the Inpatient Quality Indicator (IQI) mortality measures. Version 4.3 includes Version 28 of the Limited License edition of the 3M™ APR-DRG Grouper, which was incorrectly assigning a Risk of Mortality (ROM) subclass for cases dated on or after 10/1/10.
- Version 4.3a allows users to calculate area-level indicators for years 2010 and 2011, correcting an issue previously identified in Version 4.3.

All other aspects of the software, including measure specifications, remain the same. Thus this document (related to Version 4.3) remains unchanged.

Numerator

Discharges with ICD-9-CM diagnosis codes for anesthesia complications in any secondary diagnosis field among cases meeting the inclusion and exclusion rules for the denominator.

Adverse effects in therapeutic use, other central nervous system depressants and anesthetics:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E8763</td>
<td>ENDO TRACHEAL TUBE WRONGLY PLACED DURING ANESTHETIC PROCEDURE</td>
</tr>
<tr>
<td>E9381</td>
<td>HALOTHANE</td>
</tr>
<tr>
<td>E9382</td>
<td>OTHER GASEOUS ANESTHETICS</td>
</tr>
<tr>
<td>E9383</td>
<td>INTRAVENOUS ANESTHETICS</td>
</tr>
<tr>
<td>E9384</td>
<td>OTHER AND UNSPECIFIED GENERAL ANESTHETICS</td>
</tr>
<tr>
<td>E9385</td>
<td>SURFACE AND INfiltrATION ANESTHETICS</td>
</tr>
<tr>
<td>E9386</td>
<td>PERIPHERAL NERVE AND PLEXUS BLOCKING ANESTHETICS</td>
</tr>
<tr>
<td>E9387</td>
<td>SPINAL ANESTHETICS</td>
</tr>
<tr>
<td>E9389</td>
<td>OTHER AND UNSPECIFIED LOCAL ANESTHETICS</td>
</tr>
</tbody>
</table>

Poisoning by other central nervous system depressants and anesthetics:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9681</td>
<td>HALOTHANE</td>
</tr>
<tr>
<td>9682</td>
<td>OTHER GASEOUS ANESTHETICS</td>
</tr>
<tr>
<td>9683</td>
<td>INTRAVENOUS ANESTHETICS</td>
</tr>
<tr>
<td>9684</td>
<td>OTHER AND UNSPECIFIED GENERAL ANESTHETICS</td>
</tr>
<tr>
<td>9687</td>
<td>SPINAL ANESTHETICS</td>
</tr>
<tr>
<td>9651</td>
<td>ACCIDENTAL POISONING, OTHER NERVOUS SYSTEM DEPRESSANTS</td>
</tr>
</tbody>
</table>

Denominator

All surgical discharges, 18 years and older or MDC 14 (pregnancy, childbirth, and puerperium), defined by specific DRGs and an ICD-9-CM code for an operating room procedure.

See Patient Safety Indicators Appendices:
- Appendix A – Operating Room Procedure Codes
Exclude cases:

- with ICD-9-CM diagnosis codes for anesthesia complications (see Numerator) in the principal diagnosis field or in a secondary diagnosis field if present on admission, if known
- with codes for self-inflicted injury, poisoning due to anesthetics (E8551, 9681-4, 9687) and any diagnosis code for active drug dependence, or active nondependent abuse of drugs
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing)

ICD-9-CM Self-inflicted injury diagnosis codes:

Suicide and self-inflicted poisoning by solid or liquid substance:

- E9500 ANALGESICS, ANTIPYRETICS, AND ANTI-RHEUMATICS
- E9501 BARBITURATES
- E9502 OTHER SEDATIVE AND HYPNOTICS
- E9503 TRANQUILIZERS AND OTHER PSYCHOTROPIC AGENTS
- E9504 OTHER SPECIFIED DRUGS AND MEDICINAL SUBSTANCES
- E9505 UNSPECIFIED DRUG OR MEDICINAL SUBSTANCE
- E9506 AGRICULTURAL AND HORTICULTURAL CHEMICAL AND PHARMACEUTICAL PREPARATIONS OTHER THAN PLANT FOODS AND FERTILIZERS
- E9507 CORROSIVE AND CAUSTIC SUBSTANCES
- E9508 ARSENIC AND ITS COMPOUNDS
- E9509 OTHER AND UNSPECIFIED SOLID AND LIQUID SUBSTANCES

Suicide and self-inflicted poisoning by gases in domestic use:

- E9510 GAS DISTRIBUTED BY PIPELINE
- E9511 LIQUEFIED PETROLEUM GAS DISTRIBUTED IN MOBILE CONTAINERS
- E9518 OTHER UTILITY GASES

Suicide and self-inflicted poisoning by other gases and vapors:

- E9520 MOTOR VEHICLE EXHAUST GAS
- E9521 OTHER CARBON MONOXIDE
- E9528 OTHER SPECIFIED GASES AND VAPORS
- E9529 UNSPECIFIED GASES AND VAPORS
- E9530 HANGING
- E9531 SUICIDE BY SUBMERSION (DROWNING)

ICD-9-CM Active drug dependence diagnosis codes:

- 30400 OPIOID TYPE DEPENDENCE - UNSPECIFIED
- 30410 OPIOID TYPE DEPENDENCE - CONTINUOUS
- 30411 OPIOID TYPE DEPENDENCE - EPISODIC
AHRQ QI, Experimental Quality Indicators #1, Technical Specifications,
Rate of Complications of Anesthesia
www.qualityindicators.ahrq.gov

CONTINUOUS
30412 BARBITURATE AND SIMILARLY ACTING SEDATIVE OR HYPNOTIC DEPENDENCE - EPISODIC
30420 COCAINE DEPENDENCE - UNSPECIFIED
30421 COCAINE DEPENDENCE - CONTINUOUS
30422 COCAINE DEPENDENCE - EPISODIC
30430 CANNABIS DEPENDENCE - UNSPECIFIED
30431 CANNABIS DEPENDENCE - CONTINUOUS
30432 CANNABIS DEPENDENCE - EPISODIC
30440 AMPHETAMINE AND OTHER PSYCHO STIMULANT DEPENDENCE - UNSPECIFIED
30441 AMPHETAMINE AND OTHER PSYCHO STIMULANT DEPENDENCE - CONTINUOUS
30442 AMPHETAMINE AND OTHER PSYCHO STIMULANT DEPENDENCE - EPISODIC
30450 HALLUCINOGEN DEPENDENCE - UNSPECIFIED
30451 HALLUCINOGEN DEPENDENCE - CONTINUOUS
30452 HALLUCINOGEN DEPENDENCE - EPISODIC
30460 OTHER SPECIFIED DRUG DEPENDENCE - UNSPECIFIED
30461 OTHER SPECIFIED DRUG DEPENDENCE - CONTINUOUS
30462 OTHER SPECIFIED DRUG DEPENDENCE - EPISODIC
30470 COMBINATIONS OF OPIOID TYPE DRUG W/ ANY OTHER - UNSPECIFIED
30471 COMBINATIONS OF OPIOID TYPE DRUG W/ ANY OTHER - CONTINUOUS
30472 COMBINATIONS OF OPIOID TYPE DRUG W/ ANY OTHER - EPISODIC
30480 COMBINATIONS OF DRUG EXCLUDING OPIOID TYPE DRUG - UNSPECIFIED
30481 COMBINATIONS OF DRUG EXCLUDING OPIOID TYPE DRUG - CONTINUOUS
30482 COMBINATIONS OF DRUG EXCLUDING OPIOID TYPE DRUG - EPISODIC
30490 UNSPECIFIED DRUG DEPENDENCE - UNSPECIFIED
30491 UNSPECIFIED DRUG DEPENDENCE - CONTINUOUS
30492 UNSPECIFIED DRUG DEPENDENCE - EPISODIC

ICD-9-CM Active nondependent abuse of drugs diagnosis codes:
30520 CANNABIS ABUSE - UNSPECIFIED
30521 CANNABIS ABUSE - CONTINUOUS
30522 CANNABIS ABUSE - EPISODIC
30530 HALLUCINOGEN ABUSE - UNSPECIFIED
30531 HALLUCINOGEN ABUSE - CONTINUOUS
30532 HALLUCINOGEN ABUSE - EPISODIC
30540 BARBITURATE AND SIMILARLY ACTING SEDATIVE OR HYPNOTIC ABUSE - UNSPECIFIED
30541 BARBITURATE AND SIMILARLY ACTING SEDATIVE OR HYPNOTIC ABUSE - CONTINUOUS
30542 BARBITURATE AND SIMILARLY ACTING SEDATIVE OR HYPNOTIC ABUSE - EPISODIC
30550 OPIOID ABUSE - UNSPECIFIED
30551 OPIOID ABUSE - CONTINUOUS
30552 OPIOID ABUSE - EPISODIC
30560 COCAINE ABUSE - UNSPECIFIED
30561 COCAINE ABUSE - CONTINUOUS
30562 COCAINE ABUSE - EPISODIC
30570 AMPHETAMINE OR RELATED ACTING SYMPATHOMIMETIC ABUSE - UNSPECIFIED
30571 AMPHETAMINE OR RELATED ACTING SYMPATHOMIMETIC ABUSE - CONTINUOUS
30572 AMPHETAMINE OR RELATED ACTING SYMPATHOMIMETIC ABUSE - EPISODIC
30580 ANTIDEPRESSANT TYPE ABUSE - UNSPECIFIED
30581 ANTIDEPRESSANT TYPE ABUSE - CONTINUOUS
30582 ANTIDEPRESSANT TYPE ABUSE - EPISODIC
30590 OTHER, MIXED, OR UNSPECIFIED DRUG ABUSE - UNSPECIFIED
30591 OTHER, MIXED, OR UNSPECIFIED DRUG ABUSE - CONTINUOUS
30592 OTHER, MIXED, OR UNSPECIFIED DRUG ABUSE - EPISODIC