Postoperative Sepsis Rate

Patient Safety Indicators #13
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 among cases meeting the inclusion and exclusion rules for the denominator with ICD-9-CM code for sepsis in any secondary diagnosis field.

<table>
<thead>
<tr>
<th>ICD-9-CM Sepsis diagnosis codes:</th>
<th>Septicemia due to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0380   STREPTOCOCCAL SEPTICEMIA</td>
<td>03840  GRAM-NEGATIVE ORGANISM, UNSPECIFIED</td>
</tr>
<tr>
<td>0381   STAPHYLOCOCCAL SEPTICEMIA</td>
<td>03841  HEMOPHILUS INFLUENZAE</td>
</tr>
<tr>
<td>03810  STAPHYLOCOCCAL SEPTICEMIA, UNSPECIFIED</td>
<td>03842  ESCHERICHIA COLI</td>
</tr>
<tr>
<td>03811  METHICILLIN SUSCEPTIBLE STAPHYLOCOCCUS AUREUS SEPTICEMIA (OCT08)</td>
<td>03843  PSEUDOMONAS</td>
</tr>
<tr>
<td>03812  METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS SEPTICEMIA (OCT08)</td>
<td>03844  SERRATIA</td>
</tr>
<tr>
<td>03819  OTHER STAPHYLOCOCCAL SEPTICEMIA</td>
<td>03849  SEPTICEMIA DUE TO OTHER GRAM-NEGATIVE ORGANISMS</td>
</tr>
<tr>
<td>0382   PNEUMOCOCCAL SEPTICEMIA (STREPTOCOCCUS PNEUMONIAE SEPTICEMIA)</td>
<td>0388   OTHER SPECIFIED SEPTICEMIAS</td>
</tr>
<tr>
<td>0383   SEPTICEMIA DUE TO ANAEROBES</td>
<td>0389   UNSPECIFIED SEPTICEMIA</td>
</tr>
<tr>
<td>78552  SEPTIC SHOCK</td>
<td>99591  SYSTEMIC INFLAMMATORY RESPONSE SYNDROME DUE TO INFECTIOUS PROCESS W/O ORGAN DYSFUNCTION</td>
</tr>
<tr>
<td>9980   POSTOPERATIVE SHOCK</td>
<td>99592  SYSTEMIC INFLAMMATORY RESPONSE SYNDROME DUE TO INFECTIOUS PROCESS W/ ORGAN DYSFUNCTION</td>
</tr>
</tbody>
</table>

Denominator

*Not valid for discharges effective October 1, 2004
All elective* surgical discharges age 18 and older defined by specific DRGs or MS-DRGs and an ICD-9-CM code for an operating room procedure.

*Elective - SID Admission type # is recorded as elective (Admission Type = 3)

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

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Exclude cases:
- with principal diagnosis of sepsis or secondary diagnosis present on admission
- with principal diagnosis of infection or secondary diagnosis present on admission
- with any code for immunocompromised state or cancer
- MDC 14 (pregnancy, childbirth, and puerperium)
- with length of stay of less than 4 days
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing)

See Patient Safety Indicators Appendices:
- Appendix F – Infection Diagnosis Codes
- Appendix H – Cancer Diagnosis Codes
- Appendix I – Immunocompromised State Diagnosis and Procedure Codes