

Neonatal Blood Stream Infection Rate

Neonatal Quality Indicators #3

Technical Specifications

Provider-Level Indicator

AHRQ Quality Indicators, Version 4.3, August 2011

(Revised September 1, 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 selected infections defined by specific ICD-9-CM codes in any secondary diagnosis field among cases meeting the inclusion and exclusion rules for the denominator. Any secondary diagnosis ICD-9-CM code for:

03810	STAPHYLOCOCC SEPTICEM NOS	03843	PSEUDOMONAS SEPTICEMIA
03811	METH SUSC STAPH AUR SEPT	03844	SERRATIA SEPTICEMIA
03819	STAPHYLOCOCC SEPTICEM NEC	03849	GRAM-NEG SEPTICEMIA NEC
03840	GRAM-NEG SEPTICEMIA NOS	1125	DISSEMINATED CANDIDIASIS
03842	E COLI SEPTICEMIA		

-----OR-----

Patients with one or more of the following secondary diagnosis ICD-9-CM codes:

77181	NB SEPTICEMIA [SEPSIS]	7907	BACTEREMIA
77183	BACTEREMIA OF NEWBORN		

-----and-----

One of the following secondary diagnosis ICD-9-CM codes among cases meeting the inclusion and exclusion rules for the denominator:

04104	ENTEROCOCCUS GROUP D	0413	KLEBSIELLA INFECT N
04110	STAPHYLOCOCCUS UNSPCFIED	0414	E. COLI INFECT NOS
04111	MTH SUS STPH AUR ELS/NOS	0417	PSEUDOMONAS INFECT NOS
04119	OTHER STAPHYLOCOCCUS	04185	OTH GRAM NEGATV BACTERIA

Denominator

All newborns and outborns with a birth weight 500 to 1499 g (Birth Weight Categories 2, 3, 4 and 5) **OR** gestational age between 24 and 30 weeks, except exclusions (see below).

Include also newborns and outborns with a birth weight greater than or equal to 1500 g (Birth Weight Category 6, 7, 8, or 9), if the infant experienced death (DISP=20), major surgery, mechanical ventilation, or transfer to an acute care facility (DISP=2), except exclusions (see below).

See *Pediatric Quality Indicators Appendices*:

- Appendix A – Operating Room Procedure Codes
- Appendix I – Definitions of Neonate, Newborn, Normal Newborn, and Outborn
- Appendix L – Low Birth Weight Categories

ICD-9-CM Gestation age between 24 and 30 weeks diagnosis codes:

76522	24 COMPLETED WEEKS OF GESTATION	76525	29-30 COMPLETED WEEKS OF GESTATION
76523	25-26 COMPLETED WEEKS OF GESTATION		
76524	27-28 COMPLETED WEEKS OF GESTATION		

ICD-9-CM Mechanical ventilation procedure codes:

9670	CONTINUOUS MECHANICAL VENTILATION OF UNSPEC DURATION	9672	CONSECUTIVE HRS CONTINUOUS MECHANICAL VENTILATION FOR 96 CONSECUTIVE HOURS OR MORE
9671	CONTINUOUS MECHANICAL VENTILATION FOR LESS THAN 96		

Exclude cases:

- with principal diagnosis of sepsis or infection (Appendix H) or secondary diagnosis present on admission
- with birth weight less than 500 grams (Birth Weight Category 1)
- with length of stay less than 2 days
- with missing discharge gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing)

See *Pediatric Quality Indicators Appendices*:

- Appendix L – Low Birth Weight Categories

ICD-9-CM Sepsis diagnosis codes:

0380	STREPTOCOCCAL SEPTICEMIA	78559*	SHOCK WITHOUT MENTION OF TRAUMA, OTHER
0381	STAPHYLOCOCCAL SEPTICEMIA		
03810	STAPHYLOCOCCAL SEPTICEMIA, UNSPECIFIED	9980	POSTOPERATIVE SHOCK
03811	METHICILLIN SUSCEPTIBLE STAPHYLOCOCCUS AUREUS SEPTICEMIA (OCT08)	<u>Septicemia due to:</u>	
03812	METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS SEPTICEMIA (OCT08)	03840	GRAM-NEGATIVE ORGANISM, UNSPECIFIED
03819	OTHER STAPHYLOCOCCAL SEPTICEMIA	03841	HEMOPHILUS INFLUENZAE
0382	PNEUMOCOCCAL SEPTICEMIA (STREPTOCOCCUS PNEUMONIAE SEPTICEMIA)	03842	ESCHERICHIA COLI
0383	SEPTICEMIA DUE TO ANAEROBES	03843	PSEUDOMONAS
78552	SEPTIC SHOCK	03844	SERRATIA
		03849	SEPTICEMIA DUE TO OTHER GRAM-NEGATIVE ORGANISMS
		0388	OTHER SPECIFIED SEPTICEMIAS
		0389	UNSPECIFIED SEPTICEMIA

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99591 SYSTEMIC INFLAMMATORY RESPONSE
SYNDROME DUE TO INFECTIOUS
PROCESS W/O ORGAN DYSFUNCTION

99592 SYSTEMIC INFLAMMATORY RESPONSE
SYNDROME DUE TO INFECTIOUS
PROCESS W/ ORGAN DYSFUNCTION

*Not valid for discharges effective October 1, 2004

See *Pediatric Quality Indicators Appendices:*

- Appendix H – Infection Diagnosis Codes