

Neonatal Blood Stream Infection Rate

Neonatal Quality Indicators #3

Technical Specifications

Provider-Level Indicator

AHRQ Quality Indicators, Version 4.4, March 2012

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 denominator¹:

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

¹ Italicized codes are not active in the current fiscal year.

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

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

76522	24 COMP WEEKS GESTATION	76524	27-28 COMP WKS GESTATION
76523	25-26 COMP WKS GESTATION	76525	29-30 COMP WKS GESTATION

ICD-9-CM Mechanical ventilation procedure codes:

9670	CON INV MEC VEN-UNSP DUR	9672	CONT INV MEC VEN 96+ HRS
9671	CONT INV MEC VEN <96 HRS		

Exclude cases:

- with principal diagnosis of sepsis or infection 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)
- * Only for cases that otherwise qualify for the numerator

See *Pediatric Quality Indicators Appendices*:

- Appendix H – Infection Diagnosis Codes
- Appendix L – Low Birth Weight Categories

ICD-9-CM Sepsis diagnosis codes^{1,2}:

0380	STREPTOCOCCAL SEPTICEMIA
<i>0381</i>	<i>STAPHYLOCOCCAL SEPTICEMIA</i>
03810	STAPHYLCOCC SEPTICEM NOS
03811	METH SUSC STAPH AUR SEPT
03812	MRSA SEPTICEMIA
03819	STAPHYLCOCC SEPTICEM NEC
0382	PNEUMOCOCCAL SEPTICEMIA
0383	ANAEROBIC SEPTICEMIA
78552	SEPTIC SHOCK
78559*	SHOCK W/O TRAUMA NEC
<i>9980</i>	<i>POSTOPERATIVE SHOCK</i>
99800	POSTOPERATIVE SHOCK, NOS
99802	POSTOP SHOCK, SEPTIC

Septicemia due to:

03840	GRAM-NEG SEPTICEMIA NOS
03841	H. INFLUENAE SEPTICEMIA
03842	E COLI SEPTICEMIA
03843	PSEUDOMONAS SEPTICEMIA
03844	SERRATIA SEPTICEMIA
03849	GRAM-NEG SEPTICEMIA NEC
0388	SEPTICEMIA NEC
0389	SEPTICEMIA NOS
99591	SEPSIS
99592	SEVERE SEPSIS

*Valid for discharges prior to October 1, 2011

¹ Italicized codes are not active in the current fiscal year.

² Bolded codes are new to the current fiscal year.