



NQI #3 Neonatal Blood Stream Infections

Provider-Level Indicator

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 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 codes:

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

AND one of the following secondary diagnosis codes:

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 and 3) 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 4 or 5), if the infant experienced death (DISP=20), major surgery, mechanical ventilation, or transfer to an acute care facility (DISP=2).

See *Pediatric Quality Indicators Appendices*:

- Appendix A – Operating Room Procedure Codes
- Appendix I – Definitions of Neonate, Newborn, Normal Newborn, and Outborn

Low Birth Weight categories:

Less than 500 grams - Birth Weight Category 1	
76401	LIGHT-FOR-DATES <500G
76411	LT-FOR-DATE W/MAL <500G
76421	FETAL MALNUTRITION <500G
76491	FET GROWTH RETARD <500G
76501	EXTREME IMMATUR <500G
76511	PRETERM NEC <500G
V2131	LOW BIRTHWGT STATUS <500G
500 to 999 grams - Birth Weight Category 2	
76402	LT-FOR-DATES 500-749G
76412	LT-DATE W/MAL 500-749G
76422	FETAL MALNUTR 500-749G
76492	FET GROWTH RET 500-749G
76502	EXTREME IMMATUR 500-749G
76512	PRETERM NEC 500-749G
76403	LT-FOR-DATES 750-999G
76413	LT-DATE W/MAL 750-999G
76423	FETAL MAL 750-999G
76493	FET GROWTH RET 750-999G
76503	EXTREME IMMATUR 750-999G
76513	PRETERM NEC 750-999G
V2132	LOW BIRTHWGT 500-999G
1000 to 1499 grams - Birth Weight Category 3	
76404	LT-FOR-DATES 1000-1249G
76414	LT-DATE W/MAL 1000-1249G
76424	FETAL MAL 1000-1249G
76494	FET GRWTH RET 1000-1249G
76504	EXTREME IMMATUR 1000-1249G
76514	PRETERM NEC 1000-1249G
76405	LT-FOR-DATES 1250-1499G

76415	LT-DATE W/MAL 1250-1499G
76425	FETAL MAL 1250-1499G
76495	FET GRWTH RET 1250-1499G
76505	EXTREME IMMATUR 1250-1499G
76515	PRETERM NEC 1250-1499G
V2133	LOW BIRTHWGT 1000-1499G
1500 to 1999 grams - Birth Weight Category 4	
76406	LT-FOR-DATES 1500-1749G
76416	LT-DATE W/MAL 1500-1749G
76426	FETAL MAL 1500-1749G
76496	FET GRWTH RET 1500-1749G
76506	EXTREME IMMATUR 1500-1749G
76516	PRETERM NEC 1500-1749G
76407	LT-FOR-DATES 1750-1999G
76417	LT-DATE W/MAL 1750-1999G
76427	FETAL MALNUTR 1750-1999G
76497	FET GRWTH RET 1750-1999G
76507	EXTREME IMMATUR 1750-1999G
76517	PRETERM NEC 1750-1999G
V2134	LOW BIRTHWGT 1500-1999G
2000 to 2499 grams - Birth Weight Category 5	
76408	LT-FOR-DATES 2000-2499G
76418	LT-DATE W/MAL 2000-2499G
76428	FETAL MALNUTR 2000-2499G
76498	FET GRWTH RET 2000-2499G
76508	EXTREME IMMATUR 2000-2499G
76518	PRETERM NEC 2000-2499G
V2135	LOW BIRTHWGT 2000-2500G

ICD-9-CM Gestation Age 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 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

ICD-9-CM Sepsis diagnosis codes

0380	STREPTOCOCCAL SEPTICEMIA
0381	STAPHYLOCOCCAL SEPTICEMIA
03810	STAPHYLOCOCCAL SEPTICEMIA, UNSPECIFIED
03811	METHICILLIN SUSCEPTIBLE STAPHYLOCOCCUS AUREUS SEPTICEMIA OCT08-
03812	METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS SEPTICEMIA OCT08-
03819	OTHER STAPHYLOCOCCAL SEPTICEMIA
0382	PNEUMOCOCCAL SEPTICEMIA (STREPTOCOCCUS PNEUMONIAE SEPTICEMIA)
0383	SEPTICEMIA DUE TO ANAEROBES
78552	SEPTIC SHOCK
78559*	SHOCK WITHOUT MENTION OF TRAUMA, OTHER
9980	POSTOPERATIVE SHOCK

Septicemia due to:

03840	GRAM-NEGATIVE ORGANISM, UNSPECIFIED
03841	HEMOPHILUS INFLUENZAE
03842	ESCHERICHIA COLI
03843	PSEUDOMONAS
03844	SERRATIA
03849	SEPTICEMIA DUE TO OTHER GRAM- NEGATIVE ORGANISMS
0388	OTHER SPECIFIED SEPTICEMIAS
0389	UNSPECIFIED SEPTICEMIA
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