



Pediatric Quality Indicator 12 (PDI 12) Central Venous Catheter-Related Blood Stream Infection Rate

August 2017

Provider-Level Indicator

Type of Score: Rate

Prepared by:

Agency for Healthcare Research and Quality

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DESCRIPTION

Central venous catheter-related bloodstream infections (secondary diagnosis) per 1,000 medical and surgical discharges for patients ages 17 years and younger. Includes metrics for discharges grouped by risk category. Excludes cases with a principal diagnosis of a central venous catheter-related bloodstream infection, cases with a secondary diagnosis of a central venous catheter-related bloodstream infection present on admission, normal newborns, neonates with a birth weight of less than 500 grams, cases with stays less than two (2) days, and obstetric cases.

[NOTE: The software provides the rate per hospital discharge. However, common practice reports the measure as per 1,000 discharges. The user must multiply the rate obtained from the software by 1,000 to report events per 1,000 hospital discharges.]

NUMERATOR OVERALL

Note: The Numerator definition is identical for High, Intermediate, and Low Risk Categories and Overall.

Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with any secondary ICD-9-CM diagnosis codes for central venous catheter-related bloodstream infections.

For discharges on or after October 1, 2007, but before October 1, 2011, the selected infection is:

Central venous catheter-related blood stream infection diagnosis code: (IDTMC2D)

99931 Infection Due To Central Venous
 Catheter

For discharges on or after October 1, 2011, the selected infection is:

Central venous catheter-related blood stream infection diagnosis code: (IDTMC3D)

99932 Bloodstream Infection Due To Central
 Venous Catheter

DENOMINATOR OVERALL

Surgical and medical discharges, for patients ages 17 years and younger. Surgical and medical discharges are defined by specific MS-DRG codes

[*Appendix C - Surgical MS-DRGS*](#)

[*Appendix E - Medical MS-DRGS*](#)

DENOMINATOR EXCLUSIONS

Note: The Denominator Exclusions are identical for Overall, High, Intermediate and Low Risk Categories.

Exclude cases:

- with a principal ICD-9-CM diagnosis code (or secondary diagnosis present on admission) for central venous catheter-related bloodstream infection, among patients otherwise qualifying for numerator
- normal newborns
- neonates with birth weight less than 500 grams (Birth Weight Category 1)
- with length of stay less than two (2) days
- MDC 14 (pregnancy, childbirth, and puerperium)
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing)

[*Appendix I - Definitions of Neonate, Newborn, Normal Newborn, and Outborn*](#)

[*Appendix L - Low Birth Weight Categories*](#)

Note: Strata are mutually exclusive. Patients cannot qualify for more than one stratum.

DENOMINATOR HIGH RISK CATEGORY

Patients otherwise qualifying for overall denominator, with any-listed ICD-9-CM diagnosis codes for high-risk immunocompromised state or any-listed ICD-9-CM procedure codes for high-risk immunocompromised state (transplant) or any-listed ICD-9-CM diagnosis codes for cancer.

[*Appendix F - High-Risk Immunocompromised States*](#)

[*Appendix M - Cancer*](#)

DENOMINATOR INTERMEDIATE RISK CATEGORY

Patients otherwise qualifying for overall denominator, with either

- any-listed ICD-9-CM diagnosis codes for intermediate-risk immunocompromised state
- any-listed ICD-9-CM diagnosis codes for cirrhosis and hepatic failure
- any-listed ICD-9-CM diagnosis codes for cystic fibrosis
- any-listed ICD-9-CM diagnosis codes for hemophilia

[Appendix G - Intermediate-Risk Immunocompromised States](#)

Cirrhosis diagnosis codes: (HEPFA2D)

5712	Alcoholic Cirrhosis Of Liver	5716	Biliary Cirrhosis
5715	Cirrhosis Of Liver Without Mention Of Alcohol		

Hepatic failure diagnosis codes: (HEPFA3D)

5722	Hepatic Coma	5724	Hepatorenal Syndrome
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Cystic fibrosis diagnosis codes: (ACSCYFD)

27700	Cystic Fibros W/O Ileus	27703	Cystic Fibrosis W Gi Man
27701	Cystic Fibros W Ileus	27709	Cystic Fibrosis Nec
27702	Cystic Fibros W Pul Man		

Hemophilia diagnosis codes: (HEMOPHD)

2860	Cong Factor Viii Diord	2863	Cong Def Clot Factor Nec
2861	Cong Factor Ix Disorder	2864	Von Willebrands Disease
2862	Cong Factor Xi Disorder		

DENOMINATOR LOW RISK CATEGORY

Patients otherwise qualifying for the overall denominator, not meeting the inclusion criteria for the High Risk Category or the Intermediate Risk Category.