

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

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Hospital-Level Indicator

Type of Score: Rate

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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

Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with any secondary ICD-10-CM diagnosis codes for central venous catheter-related bloodstream infections (**IDTMC3D***).

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

DENOMINATOR OVERALL

Surgical (**Appendix C: SURGI2R**) and medical (**Appendix E: MEDIC2R**) discharges, for patients ages 17 years and younger. Surgical and medical discharges are defined by specific MS-DRG codes.

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

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

DENOMINATOR OVERALL EXCLUSIONS

Exclude cases:

- with a principal ICD-10-CM diagnosis code, or secondary ICD-10-CM diagnosis code present on admission, for central venous catheter-related bloodstream infection (**IDTMC3D***)
- normal newborns (**Appendix I**)
- neonates (**Appendix I**) with birth weight less than 500 grams (Birth Weight Category 1) (**Appendix L**)
- with length of stay less than two (2) days
- with a major diagnostic category for pregnancy, childbirth and puerperium, (MDC 14)
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing)

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

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

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

Discharges are stratified into risk categories based on highest severity diagnosis or procedure. Risk Categories are mutually exclusive. Discharges cannot qualify for more than one stratum.

DENOMINATOR HIGH RISK CATEGORY

Patients otherwise qualifying for overall denominator with either:

- any-listed ICD-10-CM diagnosis codes for high-risk immunocompromised state (**Appendix F: IMMUNHD**)
- any-listed ICD-10-PCS procedure codes for high-risk immunocompromised state (transplant) (**Appendix F: TRANSPP**)
- any-listed ICD-10-CM diagnosis codes for cancer (**Appendix M: CANITD**)

[Appendix F - High-Risk Immunocompromised State Diagnosis and Procedure Codes](#)

[Appendix M - Cancer diagnosis codes](#)

DENOMINATOR INTERMEDIATE RISK CATEGORY

Patients otherwise qualifying for overall denominator, with either:

- any-listed ICD-10-CM diagnosis codes for intermediate-risk immunocompromised state; (**Appendix G: IMMUITD**)
- any-listed ICD-10-CM diagnosis codes for cirrhosis (**Appendix G: HEPFA2D**) and hepatic failure; (**Appendix G: HEPFA3D**)
- any-listed ICD-10-CM diagnosis codes for cystic fibrosis; (**ACSCYFD***)
- any-listed ICD-10-CM diagnosis codes for hemophilia (**HEMOPHD***)

[Appendix G - Intermediate-Risk Immunocompromised State Diagnosis Code](#)

DENOMINATOR LOW RISK CATEGORY

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

* See below for code list

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

T80211A Bloodstream infection due to central venous
 catheter, initial encounter

Cystic fibrosis diagnosis codes: (ACSCYFD)

E840	Cystic fibrosis with pulmonary	E848	Cystic fibrosis with other
E8411	Meconium ileus in cystic fibrosis	E849	Cystic fibrosis, unspecified
E8419	Cystic fibrosis with other intestinal		

Hemophilia diagnosis codes: (HEMOPHD)

D66	Hereditary factor VIII deficiency	D681	Hereditary factor XI deficiency
D67	Hereditary factor IX deficiency	D682	Hereditary deficiency of other clotting factors
D680	Von Willebrand's disease		