

Central Venous Catheter-Related Blood Stream Infection Rate

Technical Specifications

Patient Safety Indicators 07 (PSI 07)

AHRQ Quality Indicators™, Version 5.0

March 2015

Provider-Level Indicator

Type of Score: Rate

Description

Central venous catheter-related bloodstream infections (secondary diagnosis) per 1,000 medical and surgical discharges for patients ages 18 years and older or obstetric cases. 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, cases with stays less than 2 days, cases with an immunocompromised state, and cases with cancer,

[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-9-CM diagnosis codes for selected infections.

For discharges prior to October 1, 2007, the selected infections are:

ICD-9-CM Hospital-associated infection diagnosis codes:

99662 REACT-OTH VASC DEV/GRAFT 9993 OTHER INFECTION (end 2007)

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

ICD-9-CM Central venous catheter-related blood stream infection diagnosis code:

99931 OTH/UNS INF-CEN VEN CATH

For discharges on or after October 1, 2011, the selected infections are:

ICD-9-CM Central venous catheter-related blood stream infection diagnosis codes:

99932 BLOOD INF DT CEN VEN CTH

Denominator

Surgical and medical discharges, for patients ages 18 years and older or MDC 14 (pregnancy, childbirth, and puerperium). Surgical and medical discharges are defined by specific DRG or MS-DRG codes.

See *Patient Safety Indicators Appendices*:

- Appendix B – Medical Discharge DRGs
- Appendix C – Medical Discharge MS-DRGs
- Appendix D – Surgical Discharge DRGs
- Appendix E – Surgical Discharge MS-DRGs

Exclude cases:

- with a principal ICD-9-CM diagnosis code (or secondary diagnosis present on admission) for selected infections (as defined by the numerator, see above)
- with length of stay less than 2 days
- with any-listed ICD-9-CM diagnosis codes for cancer
- with any-listed ICD-9-CM diagnosis codes or any-listed ICD-9-CM procedure codes for immunocompromised state
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), or principal diagnosis (DX1=missing)

See *Patient Safety Indicators Appendices*:

- Appendix H – Cancer Diagnosis Codes
- Appendix I – Immunocompromised State Diagnosis and Procedure Codes