Patient Safety Indicator 07 (PSI 07) Central Venous Catheter-Related Blood Stream Infection Rate

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Provider-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 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 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 codes: (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 codes: (IDTMC3D_PSI)*

99932  Bloodstream infection due to central venous catheter
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 MS-DRG codes.

*Appendix C - Medical Discharge MS-DRGs (for discharges on or after October 1, 2007)*
*Appendix E - Surgical Discharge MS-DRGs (for discharges on or after October 1, 2007)*
DENOMINATOR EXCLUSIONS

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
• 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)

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