

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

July 2019

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 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-10-CM diagnosis codes for central venous catheter-related bloodstream infections (**IDTMC3D\***).

### DENOMINATOR

Surgical (**Appendix E: SURGI2R**) and medical discharges, (**Appendix C: MEDIC2R**) 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](#)

[Appendix E - Surgical Discharge MS-DRGs](#)

## DENOMINATOR EXCLUSIONS

Exclude cases:

- With a principal ICD-10-CM diagnosis code for central venous catheter-related bloodstream infection (**IDTMC3D\***)
- with any secondary ICD-10-CM diagnosis codes for central venous catheter-related bloodstream infections (**IDTMC3D\***), and among patients otherwise qualifying for numerator
- with length of stay less than 2 days
- with any listed ICD-10-CM diagnosis codes for cancer (**Appendix H: CANCEID**)
- with any listed ICD-10-CM diagnosis codes for immunocompromised state (**Appendix I: IMMUNID**)
- with any listed ICD-10-PCS procedure codes for immunocompromised state (**Appendix I: IMMUNIP**)
- 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](#)

\*See below for code list

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

T80211A    Bloodstream infection due to central  
              venous catheter, initial encounter