Central Venous Catheter-Related Blood Stream Infection Rate

Patient Safety Indicators #23
Technical Specifications
Area-Level Indicator
AHRQ Quality Indicators, Version 4.3, August 2011

Numerator

Discharges, 18 years and older or MDC 14 (pregnancy, childbirth, and puerperium), with selected infections defined by specific ICD-9-CM codes in any diagnosis field among all medical and surgical discharges defined by specific DRGs or MS-DRGs.

For discharges prior to October 1, 2007:

ICD-9-CM Hospital-associated infection diagnosis codes:
99662 DUE TO OTHER VASCULAR DEVICE, IMPLANT, AND GRAFT
9993 OTHER INFECTION

For discharges on or after October 1, 2007:

ICD-9-CM Central line-associated blood stream infection diagnosis code:
99931 INFECTION DUE TO CENTRAL VENOUS CATHETER

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 any diagnosis or procedure code for immunocompromised state
- with any diagnosis of cancer
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing), county (PSTCO=missing)

See Patient Safety Indicators Appendices:
- Appendix H – Cancer Diagnosis Codes
- Appendix I – Immunocompromised State Diagnosis and Procedure Codes
Denominator

Discharges in the numerator are assigned to the denominator based on the Metro Area\(^1\) or county of the patient residence, not the Metro Area or county of the hospital where the discharge occurred.

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\(^1\) The term "metropolitan area" (MA) was adopted by the U.S. Census in 1990 and referred collectively to metropolitan statistical areas (MSAs), consolidated metropolitan statistical areas (CMSAs) and primary metropolitan statistical areas (PMSAs). In addition, “area” could refer to either 1) FIPS county, 2) modified FIPS county, 3) 1999 OMB Metropolitan Statistical Area or 3) 2003 OMB Metropolitan Statistical Area. Micropolitan Statistical Areas are not used in the QI software.