



**AHRQ Quality Indicators™ (AHRQ QI™)
ICD-9-CM and ICD-10-CM/PCS
Specification Enhanced Version 5.0**

**Patient Safety Indicators #23 (PSI #23)
Central Venous Catheter-Related
Blood Stream Infection Rate**

**October 2015
Area-Level Indicator
Type of Score: Rate**

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PSI #23 Central Venous Catheter-Related Blood Stream Infection Rate

DESCRIPTION

Central venous catheter-related bloodstream infections per 100,000 population, ages 18 years and older. Excludes cases with an immunocompromised state and cases with cancer.

[NOTE: The software provides the rate per population. However, common practice reports the measure as per 100,000 population. The user must multiply the rate obtained from the software by 100,000 to report events per 100,000 population.]

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NUMERATOR

Surgical and medical discharges, for patients ages 18 years and older or MDC 14 (pregnancy, childbirth, and puerperium), with any-listed ICD-9-CM or ICD-10-CM diagnosis codes for selected infections. Surgical and medical discharges are defined by specific DRG or MS-DRG codes.

[Appendix B – Medical Discharge DRGs](#)

[Appendix C – Medical Discharge MS-DRGs](#)

[Appendix D – Surgical Discharge DRGs](#)

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

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

Hospital-associated infection diagnosis codes: (IDTMCID)

ICD-9-CM	Description	ICD-10-CM	Description
99662	DUE TO OTHER VASCULAR DEVICE, IMPLANT, AND GRAFT	<i>Not applicable; no equivalent ICD-10-CM codes</i>	
9993	OTHER INFECTION		

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 code: (IDTMC2D)

ICD-9-CM	Description	ICD-10-CM	Description
99931	INFECTION DUE TO CENTRAL VENOUS CATHETER	<i>Not applicable; no equivalent ICD-10-CM codes</i>	

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

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

ICD-9-CM	Description	ICD-10-CM	Description
99932	BLOODSTREAM INFECTION DUE TO CENTRAL VENOUS CATHETER	T80211A	Bloodstream infection due to central venous catheter, initial encounter

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NUMERATOR EXCLUSIONS

Exclude cases:

- with any-listed ICD-9-CM or ICD-10-CM diagnosis codes for cancer
- with any-listed ICD-9-CM or ICD-10-CM diagnosis codes or any-listed ICD-9-CM or ICD-10-PCS procedure codes for immunocompromised state
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), principal diagnosis (DX1=missing), or county (PSTCO=missing)

[Appendix H – Cancer Diagnosis Codes](#)

[Appendix I – Immunocompromised State Diagnosis and Procedure Codes](#)

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DENOMINATOR

Population ages 18 years and older in metropolitan area[†] or county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence, not the metropolitan area or county of the hospital where the discharge occurred.

[†] 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 4) 2003 OMB Metropolitan Statistical Area. Micropolitan Statistical Areas are not used in the QI software.

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DENOMINATOR EXCLUSIONS
<i>Not Applicable</i>