



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

**Patient Safety Indicators #13 (PSI #13)  
Postoperative Sepsis Rate**

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Provider-Level Indicator  
Type of Score: Rate**

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## PSI #13 Postoperative Sepsis Rate

DESCRIPTION
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Postoperative sepsis cases (secondary diagnosis) per 1,000 elective surgical discharges for patients ages 18 years and older. Excludes cases with a principal diagnosis of sepsis or pressure ulcer, cases with a secondary diagnosis of sepsis present on admission, cases with a principal diagnosis of infection, cases with a secondary diagnosis of infection present on admission (only if they also have a secondary diagnosis of sepsis), cases with an immunocompromised state, cases with cancer, obstetric discharges, cases with stays less than four (4) days, and cases with missing values as listed in denominator section.

*[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.]*

### PSI #13 Postoperative Sepsis Rate

NUMERATOR			
Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with any secondary ICD-9-CM or ICD-10 diagnosis codes for sepsis.			
<i>Sepsis diagnosis codes: (SEPTID and SEPTI2D)</i>			
<i>For discharges prior to FY2012: (SEPTID)</i>			
ICD-9-CM	Description	ICD-10-CM	Description
0380	STREPTOCOCCAL SEPTICEMIA	<i>Not applicable; no equivalent ICD-10 code</i>	
0381	STAPHYLOCOCCAL SEPTICEMIA		
03810	STAPHYLOCOCCAL SEPTICEMIA, UNSPECIFIED		
03811	METH SUSC STAPH AUR SEPT		
03812	MRSA SEPTICEMIA		
03819	OTHER STAPHYLOCOCCAL SEPTICEMIA		
0382	PNEUMOCOCCAL SEPTICEMIA (STREPTOCOCCUS		
0383	SEPTICEMIA DUE TO ANAEROBES		
03840	GRAM-NEGATIVE ORGANISM, UNSPECIFIED		
03841	HEMOPHILUS INFLUENZAE		
03842	ESCHERICHIA COLI		
03843	PSEUDOMONAS		
03844	SERRATIA		
03849	SEPTICEMIA DUE TO OTHER GRAM-NEGATIVE ORGANISMS		
0388	OTHER SPECIFIED SEPTICEMIAS		
0389	UNSPECIFIED SEPTICEMIA		
78552	SEPTIC SHOCK		
78559	SHOCK W/O TRAUMA NEC		
99591	SYSTEMIC INFLAMMATORY RESPONSE SYNDROME DUE		
99592	SYSTEMIC INFLAMMATORY RESPONSE SYNDROME DUE		
9980	POSTOPERATIVE SHOCK		
99800	POSTOPERATIVE SHOCK, UNSPECIFIED		

99802 SHOCK FOLLOWING TRAUMA OR SURGERY, SEPTIC

**For discharges in FY2012 and later: (SEPTI2D)**

ICD-9-CM	Description	ICD-10-CM	Description
0380	STREPTOCOCCAL SEPTICEMIA	A021	Salmonella sepsis
0381	STAPHYLOCOCCAL SEPTICEMIA	A227	Anthrax sepsis
03810	STAPHYLOCOCCAL SEPTICEMIA, UNSPECIFIED	A267	Erysipelothrix sepsis
03811	METH SUSC STAPH AUR SEPT	A327	Listerial sepsis
03812	MRSA SEPTICEMIA	A400	Sepsis due to streptococcus, group A
03819	OTHER STAPHYLOCOCCAL SEPTICEMIA	A401	Sepsis due to streptococcus, group B
0382	PNEUMOCOCCAL SEPTICEMIA (STREPTOCOCCUS	A403	Sepsis due to Streptococcus pneumoniae
0383	SEPTICEMIA DUE TO ANAEROBES	A408	Other streptococcal sepsis
03840	GRAM-NEGATIVE ORGANISM, UNSPECIFIED	A409	Streptococcal sepsis, unspecified
03841	HEMOPHILUS INFLUENZAE	A4101	Sepsis due to Methicillin susceptible Staphylococcus aureus
03842	ESCHERICHIA COLI	A4102	Sepsis due to Methicillin resistant Staphylococcus aureus
03843	PSEUDOMONAS	A411	Sepsis due to other specified staphylococcus
03844	SERRATIA	A412	Sepsis due to unspecified staphylococcus
03849	SEPTICEMIA DUE TO OTHER GRAM-NEGATIVE ORGANISMS	A413	Sepsis due to Hemophilus influenzae
0388	OTHER SPECIFIED SEPTICEMIAS	A414	Sepsis due to anaerobes
0389	UNSPECIFIED SEPTICEMIA	A4150	Gram-negative sepsis, unspecified
78552	SEPTIC SHOCK	A4151	Sepsis due to Escherichia coli [E. coli]
99591	SYSTEMIC INFLAMMATORY RESPONSE SYNDROME DUE TO INFECTIOUS PROCESS WITHOUT ORGAN DYSFUNCTION	A4152	Sepsis due to Pseudomonas
99592	SYSTEMIC INFLAMMATORY RESPONSE SYNDROME DUE TO INFECTIOUS PROCESS WITH ORGAN DYSFUNCTION	A4153	Sepsis due to Serratia
9980	POSTOPERATIVE SHOCK	A4159	Other Gram-negative sepsis
99802	SHOCK FOLLOWING TRAUMA OR SURGERY, SEPTIC	A4181	Sepsis due to Enterococcus

A4189	Other specified sepsis
A419	Sepsis, unspecified organism
A427	Actinomycotic sepsis
A5486	Gonococcal sepsis
B377	Candidal sepsis
R6520	Severe sepsis without septic shock
R6521	Severe sepsis with septic shock
T8110XA	Postprocedural shock unspecified, initial encounter
T8112XA	Postprocedural septic shock, initial encounter

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### PSI #13 Postoperative Sepsis Rate

<b>NUMERATOR EXCLUSIONS</b>
<i>Not Applicable</i>

**PSI #13 Postoperative Sepsis Rate****DENOMINATOR**

Elective surgical discharges, for patients ages 18 years and older, with any-listed ICD-9-CM or ICD-10-PCS procedure codes for an operating room procedure. Elective surgical discharges are defined by specific DRG or MS-DRG codes with admission type recorded as elective (SID ATYPE=3).

[Appendix A - Operating Room Procedure Codes](#)

[Appendix D - Surgical Discharge DRGs](#)

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

## PSI #13 Postoperative Sepsis Rate

### DENOMINATOR EXCLUSIONS

Exclude cases:

- with a principal ICD-9-CM or ICD-10-CM diagnosis code (or secondary diagnosis present on admission) for sepsis (see above)
- with a principal ICD-9-CM or ICD-10-CM diagnosis code (or secondary diagnosis present on admission<sup>1</sup>) for infection or pressure ulcer.
- 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 any-listed ICD-9-CM or ICD-10-CM diagnosis codes for cancer
- with length of stay of less than 4 days
- MDC 14 (pregnancy, childbirth, and puerperium)
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), or principal diagnosis (DX1=missing)

<sup>1</sup>Only for cases that otherwise qualify for the numerator

[Appendix F - Infection Diagnosis Codes](#)

[Appendix H - Cancer Diagnosis Codes](#)

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