



# Patient Safety Indicator 13 (PSI 13) Postoperative Sepsis Rate

## July 2020

### Hospital-Level Indicator

#### Type of Score: Rate

#### Prepared by:

Agency for Healthcare Research and Quality

U.S. Department of Health and Human Services

[www.qualityindicators.ahrq.gov](http://www.qualityindicators.ahrq.gov)

#### DESCRIPTION

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, 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), obstetric discharges.

*[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 sepsis (**SEPTI2D**<sup>\*</sup>).

#### DENOMINATOR

Elective surgical discharges (**Appendix E: SURGI2R**) for patients ages 18 years and older, with any-listed ICD-10-PCS procedure codes for an operating room procedure (**Appendix A: ORPROC**). Elective surgical discharges are defined by specific MS-DRG codes with admission type recorded as elective (SID ATYPE=3).

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

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

## **DENOMINATOR EXCLUSIONS**

Exclude cases:

- with a principal ICD-10-CM diagnosis code (or secondary diagnosis present on admission) for sepsis (*SEPTI2D* \*)
- with a principal ICD-10-CM diagnosis code (or secondary diagnosis present on admission) for infection (*Appendix F: INFECID*)
- MDC 14 (pregnancy, childbirth, and puerperium)
- with an ungroupable DRG (DRG=999)
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), or principal diagnosis (DX1=missing)

### [Appendix F - Infection Diagnosis Codes](#)

\* See below for code list

**Sepsis diagnosis codes : (SEPTI2D)**

A021	Salmonella sepsis	A4150	Gram-Negative sepsis, unspecified
A227	Anthrax sepsis	A4151	Sepsis due to escherichia coli [E. coli]
A267	Erysipelothrix sepsis	A4152	Sepsis due to pseudomonas
A327	Listerial sepsis	A4153	Sepsis due to serratia
A400	Sepsis due to streptococcus, group A	A4159	Other gram-negative Sepsis
A401	Sepsis due to streptococcus, group B	A4181	Sepsis due to enterococcus
A403	Sepsis due to streptococcus pneumoniae	A4189	Other specified Sepsis
A408	Other streptococcal sepsis	A419	Sepsis, unspecified organism
A409	Streptococcal sepsis, unspecified	A427	Actinomycotic Sepsis
A4101	Sepsis due to methicillin susceptible staphylococcus aureus	A5486	Gonococcal Sepsis
A4102	Sepsis due to methicillin resistant staphylococcus aureus	B377	Candidal Sepsis
A411	Sepsis due to other specified staphylococcus	R6520	Severe Sepsis without septic shock
A412	Sepsis due to unspecified staphylococcus	R6521	Severe Sepsis with septic shock
A413	Sepsis due to hemophilus influenzae	T8112XA	Postprocedural septic shock, initial encounter
A414	Sepsis due to anaerobes	T8144XA	Sepsis following a procedure, initial encounter