



Patient Safety Indicator 13 (PSI 13) Postoperative Sepsis Rate

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Provider-Level Indicator

Type of Score: Rate

Prepared by:

Agency for Healthcare Research and Quality

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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, 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.]

NUMERATOR

Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with any secondary ICD-10-CM diagnosis codes for sepsis (**SEPTI2D**^{*}).

DENOMINATOR

Elective surgical discharges (**Appendix E**) for patients ages 18 years and older, with any-listed ICD-10-PCS procedure codes for an operating room procedure (**Appendix A**). 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***^{*}), among patients otherwise qualifying for numerator
- with a principal ICD-10-CM diagnosis code (or secondary diagnosis present on admission) for infection (***Appendix F***), among patients otherwise qualifying for numerator
- 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)

[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 | | |