

**Data Element Name:** *Broad Spectrum or Other Antibiotic Administration Selection*

**Collected For CMS:** SEP-1

**Definition:** The selection of the antibiotic administered within 3 hours following *Severe Sepsis Presentation Date and Time*.

**Suggested Data Collection Question:** Was the antibiotic administered within 3 hours after the *Severe Sepsis Presentation Date and Time* consistent with antibiotic selection guidelines detailed in the Notes for Abstraction?

**Format:**

**Length:** 1

**Type:** Alphanumeric

**Occurs:** 1

**Allowable Values:**

- 1 (Yes) The antibiotic that was given within 3 hours following the presentation of severe sepsis is consistent with antibiotic selection guidelines.
- 2 (No) The antibiotic that was given within 3 hours following the presentation of severe sepsis is not consistent with antibiotic selection guidelines.

**Notes for Abstraction:**

- Only IV antibiotic(s) administered within 3 hours after the *Severe Sepsis Presentation Time* are acceptable.
  - EXCEPTION:**  
If there is documentation indicating IV access could not be established, antibiotics administered via intramuscular (IM) or intraosseous (IO) started within 3 hours after the *Severe Sepsis Presentation Time* are acceptable to select Value “1.”
- Antibiotic administration information should only be abstracted from documentation that demonstrates actual administration within the appropriate time frame.
- If there is one antibiotic started within 3 hours after presentation of severe sepsis that is on the monotherapy table in Appendix C, Table 5.0, choose Value “1.”
- If the administered antibiotics were NOT on Table 5.0, determine if the antibiotics are on Table 5.1 in Appendix C.
  - Determine the class the administered antibiotics belong to, based on the class name in the shaded row above the antibiotic names.
  - Next, refer to the following Combination Antibiotic Therapy Table to determine if an antibiotic from a class in both Column A and Column B were given.
  - There must be at least one from a class in column A and at least one from a class in column B administered to select Value “1.”
  - Review the chart to see that both drugs were started within 3 hours of severe sepsis presentation and if so, choose Value “1.”
  - If both drugs were not started within 3 hours, choose Value “2.”

**Example:**

Severe Sepsis Presentation Time 1200

Ciprofloxacin initiated at 1230

Vancomycin initiated at 1330

Combination Antibiotic Therapy Table:

Ciprofloxacin is in column A

Vancomycin is in column B

Both antibiotics were initiated within 3 hours of the Severe Sepsis

Presentation Time, therefore value "1" should be selected.

**Combination Antibiotic Therapy Table**

Column A	+	Column B
Aminoglycosides OR Aztreonam OR Ciprofloxacin	+	Cephalosporins (1st and 2nd Generation) OR Clindamycin IV OR Daptomycin OR Glycopeptides OR Linezolid OR Macrolides OR Penicillins

- If IV antibiotic(s) from Table 5.0 or an appropriate combination of IV antibiotics from Table 5.1 are not started within the 3 hours following presentation of severe sepsis, and the following conditions are met, choose value "1."
  - There is Physician/APN/PA documentation referencing the results of a culture from within 5 days prior to the antibiotic start time. The documentation must:
    - Identify the date of the culture results (must be within 5 days prior to the antibiotic start time).
    - Identify the suspected causative organism from the culture result and its antibiotic susceptibility.
  - The IV antibiotic(s) identified as appropriate per the physician/APN/PA documentation is started within 3 hours following the presentation of severe sepsis.

**Examples:**

- Acceptable physician/APN/PA documentation: "Urine culture results from 9/10/17 show enterococcus, sensitive to vancomycin."
- The patient has severe sepsis with criteria met on 9/15/17 at 15:00 and the only antibiotic started is IV vancomycin at 15:30.
- If the patient has C. difficile, and IV antibiotic(s) from Table 5.0 or an appropriate combination of IV antibiotics from Table 5.1 are not started within the 3 hours following presentation of severe sepsis, and the following conditions are met, choose value "1."
  - There is physician/APN/PA documentation within 24 hours prior to the antibiotic start time identifying the presence of C. difficile.
  - Any one of the treatments below is initiated within 3 hours following severe sepsis presentation:
    - Oral vancomycin with or without oral or IV metronidazole (Flagyl)
    - Rectal vancomycin with or without IV metronidazole (Flagyl)
    - IV metronidazole (Flagyl) monotherapy

**Suggested Data Sources:**

- Anesthesia record
- Entire Emergency Department record
- ICU flow sheet
- IV flow sheet
- Medication administration record
- Nurses notes
- Operating room record
- PACU/recovery room record
- Perfusion record
- Physician/APN/PA progress notes

**Inclusion Guidelines for Abstraction:**

- Intravenous:
- Antibiotic administered via intravenous route
- Intramuscular or IM
- Intraosseous or IO
- Intravenous
- IV bolus
- IV infusion

**Exclusion Guidelines for Abstraction:**

- Give antibiotic stat
- Hang antibiotic
- Order for xx antibiotic