## Alphabetical Data Dictionary

The General Abstraction Guidelines explain the different sections of the data element definitions and provide direction for common questions and issues that arise in medical record abstraction. Instructions in the specific data elements in this Data Dictionary should **ALWAYS** supersede those found in the General Abstraction Guidelines.

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**Data Element Name:** *Administrative Contraindication to Care, Septic Shock*

**Collected For CMS:** SEP-1

**Definition:** Documentation of refusal of blood draw, IV fluid administration, or vasopressor administration within the specified time frame.

**Suggested Data Collection Question:** Is there documentation that the patient or authorized patient advocate refused either a blood draw, IV fluid administration, or vasopressor administration within the specified time frame?

**Format:**

**Length:** 1
**Type:** Alphanumeric
**Occurs:** 1

**Allowable Values:**

1 (Yes) There is documentation by a physician/APN/PA or nurse that the patient or authorized patient advocate has refused either blood draw, IV fluid administration, or vasopressor administration within the specified time frame.

2 (No) There is no physician/APN/PA or nurse documentation that the patient or authorized patient advocate has refused either blood draw, IV fluid administration, or vasopressor administration within the specified time frame, or unable to determine.

**Notes for Abstraction:**

- Only acceptable sources are physician/APN/PA or nursing documentation.
- The specified time frame for physician/APN/PA or nurse documentation is before or within six hours after the *Septic Shock Presentation Time.*
- Select Value "1" if there is specific documentation indicating patient or authorized patient advocate has refused the following:
  - Blood draws
  - IV or IO fluid administration
  - Vasopressors
- Select Value "1" if there is more general documentation of refusal of care (e.g. central line, PICC, IO access) or documentation of patient non-compliance with care (e.g., pulling out IV) that could result in the following not being administered within the specified time frame. Refusal or patient non-compliance is not required to actually result in one of the following not being administered.
  - Blood Draws
  - IV or IO fluid administration
  - Vasopressors
- For refusal of blood draws:
  - Documented refusal of blood draws is acceptable.
  - Refusal of specific blood draws or blood tests that do not impact the ability to meet the requirements of the SEP-1 measure data elements should not be used.

**Examples:**
Patient refused HIV blood test.
Patient refused arterial blood gas (ABG).

- For purposes of abstraction only, an authorized patient advocate is someone who is authorized to make decisions on behalf of the patient when the patient is not able to. This includes someone who is legally designated and empowered to make medical decisions on the patient's behalf when the patient is unable to themselves.
  **Examples**:
  - Family members
  - Medical power of attorney
  - Health care power of attorney
  - Durable power of attorney for health care
  - Someone documented as an agent for the patient
  - Attorney-in-fact
- Select Value "1" if there is a signed AMA form or documentation by a physician/APN/PA or nurse within the specified time frame indicating the patient left AMA.
  - Explicit "left against medical advice" documentation is not required.
    **Example:**
    "Patient is refusing to stay for continued care" select Value "1."
  - Documentation suggesting that the patient left before discharge instructions could be given does not count as leaving against medical advice.
  - An AMA form signed by the patient is not required, for the purposes of this data element.
  - Do not consider AMA documentation and other disposition documentation as "contradictory." Select Value "1" if any source states the patient left against medical advice, regardless of whether the AMA documentation was written last.
    **Example:**
    AMA form signed and discharge instruction sheet states "Discharged home with belongings" select Value "1."

**Suggested Data Sources:**

- Consultation reports
- History and physical
- Nursing Notes
- Physician/APN/PA notes

**Inclusion Guidelines for Abstraction:**

- Declined
- Does not want
- Refused
- Requests not to be given

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Administrative Contraindication to Care, Severe Sepsis*

**Collected For CMS:** SEP-1

**Definition:** Documentation of refusal of blood draw, IV fluid administration, or IV antibiotic administration within the specified time frame.

**Suggested Data Collection Question:** Is there documentation that the patient or authorized patient advocate refused either a blood draw, IV fluid administration, or IV antibiotic administration within the specified time frame?

**Format:**

**Length:** 1
**Type:** Alphanumeric
**Occurs:** 1

**Allowable Values:**

| | |
|---|---|
| 1 (Yes) | There is documentation by a physician/APN/PA or nurse that the patient or authorized patient advocate has refused either blood draw, IV fluid administration, or IV antibiotic administration within the specified time frame. |
| 2 (No) | There is no physician/APN/PA or nurse documentation that the patient or authorized patient advocate has refused either blood draw, IV fluid administration, or IV antibiotic administration within the specified time frame, or unable to determine. |

**Notes for Abstraction:**

- Only acceptable sources are physician/APN/PA or nursing documentation.
- The specified time frame for physician/APN/PA or nurse documentation is before or within six hours after the *Severe Sepsis Presentation Time.*
- Select Value "1" if there is specific documentation indicating patient or authorized patient advocate has refused the following:
  - Blood draws
  - IV or IO fluid administration
  - IV or IO antibiotic
- Select Value "1" if there is more general documentation of refusal of care or documentation of patient non-compliance with care (e.g., pulling out IV) that could result in the following not being administered within the specified time frame. Refusal or patient non-compliance is not required to actually result in one of the following not being administered.
  - Blood draws
  - IV or IO fluid administration
  - IV or IO antibiotic
- For refusal of blood draws:
  - Documented refusal of blood draws is acceptable.
  - Refusal of specific blood draws or blood tests that do not impact the ability to meet the requirements of the SEP-1 measure data elements should not be used.

**Examples:**
Patient refused HIV blood test.
Patient refused arterial blood gas (ABG).

- For purposes of abstraction only, an authorized patient advocate is someone who is authorized to make decisions on behalf of the patient when the patient is not able to. This includes someone who is legally designated and empowered to make medical decisions on the patient's behalf when the patient is unable to themselves.
  **Examples**:
  - Family members
  - Medical power of attorney
  - Health care power of attorney
  - Durable power of attorney for health care
  - Someone documented as an agent for the patient
  - Attorney-in-fact
- Select Value "1" if there is a signed AMA form or documentation by a physician/APN/PA or nurse within the specified time frame indicating the patient left AMA.
  - Explicit "left against medical advice" documentation is not required.
    **Example:**
    "Patient is refusing to stay for continued care" select Value "1."
  - Documentation suggesting that the patient left before discharge instructions could be given does not count as leaving against medical advice.
  - An AMA form signed by the patient is not required, for the purposes of this data element.
  - Do not consider AMA documentation and other disposition documentation as "contradictory." Select Value "1" if any source states the patient left against medical advice, regardless of whether the AMA documentation was written last.
    **Example:**
    AMA form signed and discharge instruction sheet states "Discharged home with belongings" select Value "1."

**Suggested Data Sources:**

- Consultation reports
- History and physical
- Nursing Notes
- Physician/APN/PA notes

**Inclusion Guidelines for Abstraction:**

- Declined
- Does not want
- Refused
- Requests not to be given

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Admission Date*

**Collected For CMS:** All Records

**Definition:** The month, day, and year of admission to acute inpatient care.

**Suggested Data Collection Question:** What is the date the patient was admitted to acute inpatient care?

**Format:**

**Length:** 10 – MM-DD-YYYY (includes dashes)
**Type:** Date
**Occurs: 1**

**Allowable Values:**

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (20xx)

Note: Only dates that are equal to or less than 120 days from the *Discharge Date* will be accepted into the CMS Clinical Data Warehouse.
Refer to the Data Transmission section of this manual for further guidance related to data transmission.

**Notes for Abstraction:**

- The intent of this data element is to determine the date that the patient was actually admitted to acute inpatient care. Because this data element is critical in determining the population for all measures, the abstractor should NOT assume that the claim information for the admission date is correct. If the abstractor determines through chart review that the date from billing is incorrect, for purposes of abstraction, she/he should correct and override the downloaded value.
- If using claim information, the 'Statement Covers Period' is not synonymous with the 'Admission Date' and should not be used to abstract this data element. These are two distinctly different identifiers:
  - The Admission Date is purely the date the patient was admitted as an inpatient to the facility.
  - The Statement Covers Period ("From" and "Through" dates) identifies the span of service dates included in a particular claim. The "From" Date is the earliest date of service on the claim.
- For patients who are admitted to Observation status and subsequently admitted to acute inpatient care, abstract the date that the determination was made to admit to acute inpatient care and the order was written. Do not abstract the date that the patient was admitted to Observation.

  **Example:**
  Medical record documentation reflects that the patient was admitted to observation on 04-05-20xx. On 04-06-20xx the physician writes an order to admit to acute inpatient effective 04-05-20xx. The *Admission Date* would be abstracted as 04-06-20xx; the date the determination was made to admit to acute inpatient care and the order was written.

- The admission date should not be abstracted from the earliest admission order without regards to substantiating documentation. If documentation suggests that the earliest admission order does not reflect the date the patient was admitted to inpatient care, this date should not be used.
  **Example:**
  Preoperative Orders are dated as 04-06-20xx with an order to admit to Inpatient. Postoperative Orders dated 05-01-20xx, state to admit to acute inpatient. All other documentation supports that the patient presented to the hospital for surgery on 05-01-20xx. The *Admission Date* would be abstracted as 05-01-20xx.
- If there are multiple inpatient orders, use the order that most accurately reflects the date that the patient was admitted.
- For newborns that are born within this hospital, the *Admission Date* would be the date the baby was born.

**Suggested Data Sources:**
Note: The physician order is the priority data source for this data element. If there is not a physician order in the medical record, use the other only allowable sources to determine the *Admission Date*.

ONLY ALLOWABLE SOURCES:
1. Physician orders
2. Face Sheet
3. UB-04

**Excluded Data Sources:**
UB-04 “From” and “Through” dates

**Inclusion Guidelines for Abstraction**:
None

**Exclusion Guidelines for Abstraction:**
- Admit to observation
- Arrival date

**Data Element Name:** *Birthdate*

**Collected For CMS:** All Records

**Definition:** The month, day, and year the patient was born.

**Note:** Patient's age (in years) is calculated by *Admission Date* minus *Birthdate*. The algorithm to calculate age must use the month and day portion of admission date and birthdate to yield the most accurate age.

**Suggested Data Collection Question:** What is the patient's date of birth?

**Format:**

**Length:** 10 – MM-DD-YYYY (includes dashes)
**Type:** Date
**Occurs:** 1

**Allowable Values:**

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (1880-Current Year)

**Notes for Abstraction:**
Because this data element is critical in determining the population for all measures, the abstractor should NOT assume that the claim information for the birthdate is correct. If the abstractor determines through chart review that the date is incorrect, she/he should correct and override the downloaded value. If the abstractor is unable to determine the correct birthdate through chart review, she/he should default to the date of birth on the claim information.

**Suggested Data Sources:**

- Emergency Department record
- Face sheet
- Registration form
- UB-04

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Blood Culture Collection*

**Collected For CMS:** SEP-1

**Definition:** Documentation of the collection of a blood culture.

**Suggested Data Collection Question:** Was a blood culture collected in the specified time frame?

**Format:**

**Length:** 1
**Type:** Alphanumeric
**Occurs:** 1

**Allowable Values:**

| | |
|---|---|
| 1 (Yes) | A blood culture was collected in the specified time frame. |
| 2 (No) | A blood culture was not collected in the specified time frame or unable to determine. |

**Notes for Abstraction:**

- If the Broad Spectrum or Other Antibiotic Administration Time **is not** within the 24 hours before the Severe Sepsis Presentation Time, the specified time frame is:
  - 24 hours before the *Severe Sepsis Presentation Date* and *Time* through three hours following the *Severe Sepsis Presentation Date* and *Time*.
- If the Broad Spectrum or Other Antibiotic Administration Time is within the 24 hours before the Severe Sepsis Presentation Time, the specified time frame is:
  - 24 hours before the *Broad Spectrum or Other Antibiotic Administration Time* through three hours following the *Severe Sepsis Presentation Date* and *Time*.
- Use documentation specifying a blood culture was actually drawn or collected. Do not use “Labs Drawn” or similar documentation, as it is not specific to blood culture.
- Select Value “1” if a blood culture was ordered and there was an attempt to collect it, but the attempt resulted in failure to collect the specimen (too dehydrated to get a vein) or the specimen was contaminated during or after the draw.
- Select Value “1” if there was documentation indicating that a blood culture was collected during the specified time frame (e.g., “BC sent to lab,” “blood culture received time”). Use the earliest mention of a blood culture.
- Do not use physician orders to determine a blood culture was collected, as they do not demonstrate collection of the blood culture.

**Suggested Data Sources:**

- Emergency Department record
- History and physical
- Laboratory report
- Microbiology report
- Nursing notes
- Physician/APN/PA Progress notes

**Inclusion Guidelines for Abstraction:**

- BC
- Blood cultures
- Blood cultures collected

**Exclusion Guidelines for Abstraction:**

- Blood sent to lab
- Lab here
- Labs drawn

**Data Element Name:** *Blood Culture Collection Acceptable Delay*

**Collected For CMS:** SEP-1

**Definition:** Documentation supporting there was an acceptable delay in the collection of a blood culture.

**Suggested Data Collection Question:** Is there documentation supporting an acceptable delay in collecting a blood culture?

**Format:**

**Length:** 1
**Type:** Alphanumeric
**Occurs:** 1

**Allowable Values:**

| | |
|---|---|
| 1 (Yes) | There is documentation supporting an acceptable delay in the collection of a blood culture. |
| 2 (No) | There is no documentation supporting an acceptable delay in the collection of a blood culture, or unable to determine. |

**Notes for Abstraction:**

- **Only** the following situations demonstrate an acceptable delay where the blood culture was drawn after the *Broad Spectrum or Other Antibiotic Administration Date* and *Time*. Select Value "1" if there is an acceptable delay.
  - Surgical patients who receive a pre-op or post-op prophylactic antibiotic within 24 hours before severe sepsis was identified and had a blood culture drawn after the prophylactic antibiotic was started.
  - Antibiotics were started in the hospital for an infection within 24 hours before severe sepsis was identified, and a blood culture was drawn sometime after the antibiotic dose was started.
  - Antibiotics were started prior to hospital arrival within 24 hours before severe sepsis was identified, and a blood culture was drawn after the pre-hospital antibiotics were started.
  - A physician/APN/PA documented reason for the delay that makes it clear that waiting to start the antibiotic would be detrimental to the patient.
    **Examples:**
    - ED Physician Note: Patient condition worsening, IV Vanco ordered stat, blood and urine cultures ordered, awaiting CXR.
    - Hospitalist Progress Note: Patient's deteriorating condition concern for rapidly advancing infection, starting IV antibiotics now, lab on way to collect blood cultures.
  - Obstetric patients given prophylactic antibiotics for ruptured membranes, group B strep, or prior to a caesarean section.
- Select Value "2" if there is no documentation supporting an acceptable delay in the collection of a blood culture.

**Suggested Data Sources:**

- Emergency Department record
- History and physical
- Laboratory report
- Medication Administration Records
- Microbiology report
- Nursing notes
- Progress notes

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
Oral (PO) Antibiotics

**Data Element Name:** *Blood Culture Collection Date*

**Collected For CMS:** SEP-1

**Definition:** The date on which a blood culture was collected within the specified time frame.

**Suggested Data Collection Question:** On what date was the blood culture collected?

**Format:**

**Length:** 10 – MM-DD-YYYY (includes dashes) or UTD
**Type:** Date
**Occurs:** 1

**Allowable Values:**

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (20xx)
UTD = Unable to Determine

**Notes for Abstraction:**

- Refer to the *Blood Culture Collection* data element for the specified time frame to abstract this data element.
- Use documentation specifying a blood culture was actually drawn or collected. Do not use "Labs Drawn" or similar documentation, as it is not specific to the blood culture.
- Use the date of documentation indicating that a blood culture was collected during the specified time frame (e.g., "BC sent to lab," "blood culture received time"). Use the date of the earliest mention of a blood culture.
- Do not use physician orders to determine that a blood culture was collected, as they do not demonstrate collection of the blood culture.
- Use the date of an unsuccessful attempt if there was a failure to collect the blood culture specimen (too dehydrated to get a vein) or the specimen was contaminated during or after the draw.
- Use the date of the earliest blood culture collection if multiple blood cultures were drawn or attempted within the specified time frame.

**Suggested Data Sources:**

- Laboratory documentation
- Nursing notes
- Physician/APN/PA Progress Notes

**Inclusion Guidelines for Abstraction:**

- Blood culture drawn
- Blood culture to lab
- Blood culture received

**Exclusion Guidelines for Abstraction:**

- Blood sent to lab

- Lab here
- Labs drawn

**Data Element Name:** *Blood Culture Collection Time*

**Collected For CMS:** SEP-1

**Definition:** The time at which a blood culture was collected within the specified time frame.

**Suggested Data Collection Question:** What time was the blood culture collected?

**Format:**

**Length:** 5 - HH:MM (with or without colon) or UTD
**Type:** Time
**Occurs:** 1

**Allowable Values:**

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unable to Determine

Time must be recorded in military time format.
With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|---|---|
| Midnight – 00:00 | Noon – 12:00 |
| 5:31 am – 05:31 | 5:31 pm – 17:31 |
| 11:59 am – 11:59 | 11:59 pm – 23:59 |

**Notes for Abstraction:**

- Refer to the *Blood Culture Collection* data element for the specified time frame to abstract this data element.
- Use documentation specifying a blood culture was actually drawn or collected. Do not use “Labs Drawn” or similar documentation, as it is not specific to the blood culture.
- Use the time of documentation indicating that a blood culture was collected during the specified time frame (e.g., “BC sent to lab,” “blood culture received time”). Use the time of the earliest mention of a blood culture.
- Do not use physician orders to determine that a blood culture was collected, as they do not demonstrate collection of the blood culture.
- Use the time of an unsuccessful attempt if there was a failure to collect the blood culture specimen (too dehydrated to get a vein) or the specimen was contaminated during or after the draw.
- Use the time of the earliest blood culture collection if multiple blood cultures were drawn or attempted within the specified time frame.

**Suggested Data Sources:**

- Laboratory documentation
- Nursing notes
- Physician/APN/PA Progress Notes

**Inclusion Guidelines for Abstraction:**

- Blood culture drawn
- Blood culture received
- Blood culture to lab

**Exclusion Guidelines for Abstraction:**

- Blood sent to lab
- Lab here
- Labs drawn

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

**Collected For CMS:** SEP-1

**Definition:** Documentation of administration of a broad spectrum or other antibiotic within the specified time frame.

**Suggested Data Collection Question:** Was a broad spectrum or other antibiotic administered within the specified time frame?

**Format:**

**Length:** 1
**Type:** Alphanumeric
**Occurs:** 1

**Allowable Values:**

| | |
|---|---|
| 1 (Yes) | A broad spectrum or other antibiotic was administered within the specified time frame. |
| 2 (No) | No antibiotic was administered within the specified time frame, or unable to determine. |

**Notes for Abstraction:**

- The specified time frame for administration of a broad spectrum or other antibiotic is 24 hours before or three hours after the *Severe Sepsis Presentation Time*.
  **EXCEPTION:**
  Select Value "1" if antibiotics were administered via intramuscular (IM) or intraosseous (IO) within the specified time frame and there is documentation indicating IV access could not be established.
- Select Value "1" if the patient started on an antibiotic within the 24 hours before or three hours after the *Severe Sepsis Presentation Date and Time.*
- Select Value "2" if no antibiotic was started within the 24 hours before or three hours after the *Severe Sepsis Presentation Date and Time.*
- Only abstract antibiotic administration information from documentation that demonstrates actual administration of the antibiotic (i.e., antibiotic name, route, date and time).
- A physician/APN/PA order for antibiotics is not sufficient unless the antibiotic ordered was marked as "started" with date/time noted.
- Do not cross reference between different sources to infer that an antibiotic was started if it was documented only with name/date/time given but no route was indicated. You cannot use the route on the MAR for an antibiotic.
- The method of designation of administration on hand-written or pre-printed forms such as MARs or eMARs, with pre-printed scheduled times for administration, must be clearly designated as started.
- Do not abstract test doses of antibiotics.
- Do not abstract antibiotics from sources that do not represent actual administration.
  **Examples** that ***do not*** represent actual administration:
  - Pre-Op Checklist states:

        - IV Started at 1730
        - Preop Antibiotic Given at 1800
    - Operative report states:
        - IV antibiotics were given prior to procedure.
        - IV antibiotics given at 0900 prior to incision.
- Do not abstract antibiotics from narrative charting unless there is no other documentation that reflects that the same antibiotic was given during the specified time frame.
- Do not use an antibiotic dose if the antibiotic name, route, date or time is missing.
- You may use pre-hospital records (e.g., ambulance records, nursing home records) that are considered part of the medical record for abstracting antibiotics.

**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 notes
- Pre-arrival documentation that is part of the medical record

**Inclusion Guidelines for Abstraction:**

- 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

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

**Collected For CMS:** SEP-1

**Definition:** The earliest date on which an antibiotic was started within the specified time frame.

**Suggested Data Collection Question:** What was the earliest date on which an antibiotic was started within the specified time frame?

**Format:**

**Length:** 10 – MM-DD-YYYY (includes dashes) or UTD
**Type:** Date, Numeric
**Occurs:** 1

**Allowable Values:**

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (20xx)
UTD = Unable to Determine

**Notes for Abstraction:**

- The specified time frame for the administration of a broad spectrum or other antibiotic is 24 hours before or three hours after the *Severe Sepsis Presentation Time*.
  **EXCEPTION:**
  Use the date of antibiotic administered via intramuscular (IM) or intraosseous (IO) started within the specified time frame if there is documentation indicating IV access could not be established.
- Use the date of the earliest dose if one or more antibiotic were started in the 24 hours before the *Severe Sepsis Presentation Time* and none of those same antibiotics were started more than 24 hours before presentation.
- Use the earliest date an antibiotic was started if one or more antibiotics were administered within 24 hours before the *Severe Sepsis Presentation Time*. This may be the same date as the date of presentation or may be a date before presentation. Do not review for antibiotic doses started more than 72 hours before *Severe Sepsis Presentation Time*.

**Examples:**

| More than 24 hours Before Presentation (Max. lookback 72 hrs.) | 24 hours Before Presentation | Severe Sepsis | 3 Hours After Presentation | Antibiotic Dose to Abstract |
|---|---|---|---|---|
| | ***A*** A A | | | First dose of A |
| | ***B*** C C | | | Antibiotic B |
| G | ***A*** A A | | | First dose of A |
| ***B*** | B B | | | First dose of B |
| ***C*** | D C C | | | First dose of C |

- Use the date of the dose started closest to the *Severe Sepsis Presentation* Time if one or more antibiotics were started within the three hours after presentation of severe sepsis and no antibiotics were started in the 24 hours before severe sepsis presentation.

**Examples:**

| More than 24 hours Before Presentation (Max. lookback 72 hrs. from presentation) | 24 hours Before Presentation | Severe Sepsis | 3 Hours After Presentation | Antibiotic Dose to Abstract |
|---|---|---|---|---|
| E | | | ***L*** | Antibiotic L |
| K | | | ***K*** A | Dose of K in 3 hr. period |

- Use the date of the earliest antibiotic started if antibiotics were administered both 24 hours before and within three hours after the *Severe Sepsis Presentation Time*. This may be the same date as the date of presentation or may be a date before presentation. Do not review for antibiotic doses started more than 72 hours before the *Severe Sepsis Presentation Time*.

Examples:

| More than 24 hours Before Presentation (Max. lookback 72 hrs. from presentation) | 24 hours Before Presentation | Severe Sepsis | 3 Hours After Presentation | Antibiotic Dose to Abstract |
|---|---|---|---|---|
| | ***D*** D | | D | First dose of D |
| | ***E*** | | F | Antibiotic E |
| ***E*** | E E | | L | First dose of E |
| M | ***A*** B A | | M | First dose of A |
| ***M*** | A B M A | | M | First dose of M |

- Stop abstracting three hours after the presentation of severe sepsis.
- Select "UTD" if no antibiotic was started in the 24 hours before or three hours after the severe sepsis presentation.

- Do not cross reference between different sources to infer that an antibiotic was started if it was documented only with name/date/time given but no route indicated. The route on the MAR for an antibiotic cannot be used as the route for a dose of the same antibiotic on another form.
- Do not use an antibiotic dose if the antibiotic name, route, date or time is missing.
- Only abstract antibiotic administration information from documentation that demonstrates actual administration of the specific antibiotic within the specified time frame.
  **Examples:**
  - A physician order for IV antibiotics is not sufficient unless the antibiotic ordered was marked as "started" with date/time noted.
  - Do not collect antibiotics documented on an operative report unless the surgeon states that the surgeon actually administered the dose.
- Specific documentation by one person that another person administered the antibiotic is acceptable for determining the date and time of administration.
  **Example:**
  OR nurse, S. Smith RN, documents, "Cefazolin 1 gm IV given on 1/7/20xx at 0500 per J Doe RN." You can abstract this dose as given if it is not documented by the person that gave the dose.
- The method of designation of administration on hand-written or pre-printed forms such as MARs or eMARs, with pre-printed scheduled times for administration, must be clearly designated as started.
- Do not abstract test doses of antibiotics.
- Do not abstract antibiotics from sources that do not represent actual administration.
  **Examples** that ***do not*** represent actual administration:
  Pre-Op Checklist states:
  X IV Started at 1730
  X Preop Antibiotic Given at 1800
  X Lab on Chart
  Operative report states: IV antibiotics were given prior to procedure.
- Do not abstract antibiotics from narrative charting unless there is no other documentation that reflects that the same antibiotic was started during the specified time frame.
  **Example:**
  Narrative states: "Ancef 1 gram given IV prior to incision." No other doses of Ancef are documented. You should abstract the dose in the narrative using UTD for missing data (no date and time).
- You may use pre-hospital records (e.g., ambulance records, nursing home records) that are considered part of the medical record for abstracting antibiotics.

**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 notes
- Pre-arrival documentation that is part of the medical record

**Inclusion Guidelines for Abstraction:**
- 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

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

**Collected For CMS:** SEP-1

**Definition:** The earliest time at which an antibiotic was started within the specified time frame.

**Suggested Data Collection Question:** What was the earliest time at which an antibiotic was started within the specified time frame?

**Format:**

**Length:** 5 – HH:MM (with or without colon) or UTD
**Type:** Time
**Occurs:** 1

**Allowable Values:**

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unable to Determine

Time must be recorded in military time format.
With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|---|---|
| Midnight – 00:00 | Noon – 12:00 |
| 5:31 am – 05:31 | 5:31 pm – 17:31 |
| 11:59 am – 11:59 | 11:59 pm – 23:59 |

**Notes for Abstraction:**

- The specified time frame for the administration of a broad spectrum or other antibiotic is 24 hours before or three hours after the Severe Sepsis Presentation Time.
  **EXCEPTION:**
  Use the time of antibiotics administered via intramuscular (IM) or intraosseous (IO) started within the specified time frame if there is documentation indicating IV access could not be established.
- Use the time of the earliest dose started if one or more antibiotic were started in the 24 hours before the *Severe Sepsis Presentation Time* and none of those same antibiotics were started more than 24 hours before presentation.
- Use the earliest time an antibiotic was started if one or more antibiotics were administered within 24 hours before the *Severe Sepsis Presentation Time*. This may be the same time as the time of presentation or may be a time before presentation. Do not review for antibiotic doses started more than 72 hours before the *Severe Sepsis Presentation Time*.

Examples:

| More than 24 hours Before Presentation (Max. lookback 72 hrs.) | 24 hours Before Presentation | Severe Sepsis | 3 Hours After Presentation | Antibiotic Dose to Abstract |
|---|---|---|---|---|
| | ***A*** A A | | | First dose of A |
| | ***B*** C C | | | Antibiotic B |
| G | ***A*** A A | | | First dose of A |
| ***B*** | B B | | | First dose of B |
| ***C*** | D C C | | | First dose of C |

- Use the time of the dose started closest to the *Severe Sepsis Presentation Time* if one or more antibiotics were started within the three hours after the presentation of severe sepsis and no antibiotics were started in the 24 hours before severe sepsis presentation.

Examples:

| More than 24 hours Before Presentation (Max. lookback 72 hrs. from presentation) | 24 hours Before Presentation | Severe Sepsis | 3 Hours After Presentation | Antibiotic Dose to Abstract |
|---|---|---|---|---|
| E | | | ***L*** | Antibiotic L |
| K | | | ***K*** A | Dose of K in 3 hr. period |

- Use the time of the earliest antibiotic started if antibiotics were administered both 24 hours before and within three hours after the time of presentation of severe sepsis. This may be the same time as the time of presentation or may be a time before presentation. Do not review for antibiotic doses started more than 72 hours before the *Severe Sepsis Presentation Time*.

Examples:

| More than 24 hours Before Presentation (Max. lookback 72 hrs. from presentation) | 24 hours Before Presentation | Severe Sepsis | 3 Hours After Presentation | Antibiotic Dose to Abstract |
|---|---|---|---|---|
| | ***D*** D | | D | First dose of D |
| | ***E*** | | F | Antibiotic E |
| ***E*** | E E | | L | First dose of E |
| M | ***A*** B A | | M | First dose of A |
| ***M*** | A B M A | | M | First dose of M |

- Stop abstracting three hours after the presentation of severe sepsis.

- Select "UTD" if no antibiotic was started in the 24 hours before or three hours after the Severe Sepsis Presentation Time.
- Do not cross reference between different sources to infer that an antibiotic was started if it was documented only with name/date/time given but no route indicated. Do not use the route on the MAR for an antibiotic as the route for a dose of the same antibiotic on another form.
- Do not use an antibiotic dose if the antibiotic name, route, date or time is missing.
- Only abstract antibiotic administration information from documentation that demonstrates actual administration of the specific antibiotic within the specified time frame.
  **Examples:**
  - A physician order for IV antibiotics is not sufficient unless the antibiotic ordered was marked as "started" with date/time noted.
  - Do not collect antibiotics documented on an operative report unless the surgeon states that the surgeon actually administered the dose.
- Specific documentation by one person that another person administered the antibiotic is acceptable for determining the date and time of administration.
  **Example:**
  OR nurse, S. Smith RN, documents, "Cefazolin 1 gm IV given on 1/7/20xx at 0500 per J Doe RN." You can abstract this dose as given if it is not documented by the person that gave the dose.
- The method of designation of administration on hand-written or pre-printed forms such as MARs or eMARs, with pre-printed scheduled times for administration, must be clearly designated as started.
- Do not abstract test doses of antibiotics.
- Do not abstract antibiotics from sources that do not represent actual administration.
  **Examples** that ***do not*** represent actual administration:
  Pre-Op Checklist states:
  X IV Started at 1730
  X Preop Antibiotic Given at 1800
  X Lab on Chart
  Operative report states: IV antibiotics were given prior to procedure
- Do not abstract antibiotics from narrative charting unless there is no other documentation that reflects that the same antibiotic was started during the specified time frame.
  **Example:**
  Narrative states: "Ancef 1 gram given IV prior to incision." No other doses of Ancef are documented. You should abstract the dose in the narrative using "UTD" for missing data (no date and time).
- You may use pre-hospital records (e.g., ambulance records, nursing home records) that are considered part of the medical record for abstracting antibiotics.

**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 notes
- Pre-arrival documentation that is part of the medical record

**Inclusion Guidelines for Abstraction:**
- 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

**Data Element Name:** *Clinical Trial*

**Collected For CMS:** SEP-1

**Definition:** Documentation that during this hospital stay the patient was enrolled in a clinical trial in which patients with the same condition as the measure set were being studied.

**Suggested Data Collection Question:** During this hospital stay, was the patient enrolled in a clinical trial in which patients with the same condition as the measure set were being studied?

**Format:**

**Length:** 1
**Type:** Alphanumeric
**Occurs:** 1

**Allowable Values:**

| | |
|---|---|
| Y (Yes) | There is documentation that during this hospital stay the patient was enrolled in a clinical trial in which patients with the same condition as the measure set were being studied. |
| N (No) | There is no documentation that during this hospital stay the patient was enrolled in a clinical trial in which patients with the same condition as the measure set were being studied, or unable to determine from medical record documentation. |

**Notes for Abstraction:**

- To select "Yes" to this data element, BOTH of the following must be true:
  1. **There must be a signed consent form for clinical trial**. For the purposes of abstraction, a clinical trial is defined as an **experimental study** in which research subjects are recruited and assigned a treatment/intervention and their outcomes are measured based on the intervention received. Treatments/interventions most often include use of drugs, surgical procedures, and devices. Often a control group is used to compare with the treatment/intervention. Allocation of different interventions to participants is usually randomized.
  2. **There must be documentation on the signed consent form that during this hospital stay the patient was enrolled in a clinical trial in which patients with the same condition as the measure set were being studied.** Patients may either be newly enrolled in a clinical trial during the hospital stay or enrolled in a clinical trial prior to arrival and continued active participation in that clinical trial during this hospital stay.
- In the following situations, select "No":

1. There is a signed patient consent form for an observational study only. Observational studies are non-experimental and involve no intervention (e.g., registries). Individuals are observed (perhaps with lab draws, interviews, etc.), data is collected, and outcomes are tracked by investigators. Although observational studies may include the assessment of the effects of an intervention, the study participants are not allocated into intervention or control groups.
2. It is not clear whether the study described in the signed patient consent form is experimental or observational.
3. It is not clear which study population the clinical trial is enrolling. Assumptions should not be made if it is not specified.

- Only capture patients enrolled in clinical trials studying patients with sepsis, severe sepsis or septic shock (treatment and interventions).

**Suggested Data Sources:**
ONLY ACCEPTABLE SOURCES
Signed consent form for clinical trial

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Crystalloid Fluid Administration*

**Collected For CMS:** SEP-1

**Definition:** Documentation of initiation of crystalloid fluids within the specified time frame AND complete infusion of the target ordered volume.

**Suggested Data Collection Question:** Were crystalloid fluids inititated within the specified time frame AND completely infused based on the target ordered volume?

**Format:**

**Length:** 1
**Type:** Alphanumeric
**Occurs:** 1

**Allowable Values:**

| | |
|---|---|
| 1 (Yes) | Target volume of crystalloid fluids were ordered AND initiated within the specified time frame. Additionally, the target ordered volume was completely infused. |
| 2 (No) | Less than the target volume of crystalloid fluids were ordered OR initiated within the specified time frame. The target ordered volume was not completely infused. |
| 3 (No) | The target volume of crystalloid fluids was NOT initiated within the specified time frame, or unable to determine. |
| 4 (No) | There is documentation the patient has an implanted Ventricular Assist Device (VAD) OR documentation of the patient or authorized patient advocate refusal of IV fluids. |

**Notes for Abstraction:**

- The specified time frame for abstraction of crystalloid fluids is within six hours prior through three hours after either of the following trigger events. If both are present, use the earliest trigger event within the specified time frame.
  - Initial Hypotension Date and Time
  - Septic Shock Presentation Date and Time
- Crystalloid fluid volumes ordered that are equivalent to 30 mL/kg are the target ordered volume.
- If a crystalloid fluid volume equivalent to 30 mL/kg is not ordered, an ordered volume within 10% less than 30 mL/kg is acceptable for the target ordered volume.
  Example:
  2000 mL of normal saline was ordered and initiated in the ED. The patient's weight is not available or documented at the time of the order. After admission to critical care a weight is obtained of 74 kg. Based on this weight 30 mL/kg is 2220 mL. The target ordered volume is 2000 mL because it is within 10% less than 2220 mL (2220 mL – 222 mL = 1998 mL).

- Select Value “1” if less than 30 mL/kg were ordered and given, and if all the following criteria were met:
  - The ordering physician/APN/PA must have documented within a single note in the medical record:
    - that administration of 30 mL/kg of crystalloid fluids would be detrimental or harmful for the patient despite having hypotension, a lactate >= 4 mmol/L, or documentation of septic shock;
    - AND that the patient has one of the following conditions, OR that a portion of the crystalloid fluid volume was administered as colloids (if a portion consisted of colloids, there must be an order and documentation that colloids were started or noted as given);
      - advanced or end-stage heart failure (with documentation of NYHA class III or symptoms with minimal exertion, OR NYHA class IV or symptoms at rest or with any activity)
      - advanced or end-stage chronic renal disease (with documentation of stage IV or GFR 15-29 mL/min, OR stage V or GFR < 15 mL/min or ESRD)
    - AND the volume of crystalloid fluids in place of 30 mL/kg the patient was to receive;
    - AND an order for the volume of fluids in place of 30 mL/kg to be administered;
  - All other applicable requirements for the *Crystalloid Fluid Administration* data element are met.

    **Example:**

    Physician documentation: Lactate 5.0, advanced CHF symptomatic with minimal exertion, concerned 30 mL/kg NS may be harmful despite significant lactate elevation, 20 mL/kg NS now, then reevaluate.

    Orders: NS 0.9% IV, 20 mL/kg over 2 hours.

    MAR: NS 0.9% IV 20 mL/kg, Start time 1500, Completed time 1700

    Select Value “1” based on the physician documentation meeting the requirements and identifying 20 mL/kg as the target ordered volume of crystalloid fluids for this patient.
- The target ordered volume must be ordered and initiated within the specified time frame if initial hypotension or septic shock is present.
- To select Value “1,” the target ordered volume must be documented as completely infused.
- The target ordered volume does NOT need to be completely infused within the specified time frame.
- If the target ordered volume is not completely infused, select Value “2.”
- To determine the target ordered volume:
  - Use the patient weight in kilograms (kg) if documented.
  - If not documented in kg, divide the weight in pounds by 2.2; that yields the weight in kg. Round the weight to the nearest whole number.
  - Multiply the weight in kg by 30; the result is the number of mL of IV fluid that should be specified in the physician/APN/PA order(s).
  - Round the volume of IV fluid (mL) to the nearest whole number.

    **Examples:**

    - Patient weight is 160 pounds. 160/2.2 = 72.72 kg. Round to 73 kg. 73 x 30 = 2190 (mL). Physician order is “Infuse 2400 mL 0.9% Normal Saline over the next two hours.” This is acceptable because 2400 mL is greater than 2190.
    - Patient weight is 160 pounds. 160/2.2 = 72.72 kg. Round to 73 kg. 73 x 30 = 2190 (mL). Physician order is “Give 1000 mL Lactated Ringers over the next 4 hours.” This is not acceptable because 1000 mL is less than 2190.
- To calculate the appropriate target ordered volume use the actual or estimated weight in the following priority order.
    - Weight documented in the crystalloid fluid order
    - Weight documented closest to and prior to the order for crystalloid fluids
    - Weight documented closest to and after the order for crystalloid fluids
- Physician/APN/PA can use ideal body weight (IBW) to determine the target ordered volume if all of the following conditions are met. Other acceptable weight terms include predicted weight, dosing weight, and adjusted body weight.
    - Physician/APN/PA documents the patient is obese (defined as BMI >30).
    - Physician/APN/PA documents IBW is used to determine target ordered volume.
    - IBW is present in the medical record, abstractors should not calculate the IBW.
- If the total volume of crystalloid fluids ordered is less than the target ordered volume, select Value “2.”
- If there is documentation the infusion was stopped prior to reaching the target ordered volume, select Value “2.”
- Documentation of fluid initiation:
    - Medical record documentation must be clear that crystalloid fluids were initiated (i.e., date and time of administration is noted).
    - Do not use physician/APN/PA orders as equivalent to actual initiation of fluids as they are not specific to initiation.
- Crystalloid fluid orders:
    - Physician/APN/PA orders are required for the fluids.
    - The order must include the type of fluid, the volume of fluid, and a rate or time over which the fluids are to be given.
    - The terms bolus, wide-open, or open are acceptable for a rate or infusion duration.
    - If the type of fluid, volume of fluid, rate or infusion duration is missing, do not use the order toward the target ordered volume.
    - The target ordered volume may be in a single order or a series of multiple orders.
    - If crystalloid fluids are initiated via multiple physician/APN/PA orders, only abstract crystalloid fluids initiated within the specified time frame.
- **Exception for Prior to Arrival:** Documentation of crystalloid fluids administered prior to arrival to the hospital (e.g., ambulance, nursing home) that are part of the medical record are acceptable if the documentation of fluid administration contains the type, volume, start time, and either a rate, duration, or end time of the fluid infusion. A physician/APN/PA order for fluids administered prior to arrival is not required.

- **Exception for Operating Room (OR):** Crystalloid fluids administered in the OR by a physician/APN/PA are acceptable without an order if a fluid type, an infusion start time, and an infusion rate or infusion end time is documented.
- To determine if the target ordered volume was completely infused, one of the following must be documented along with the infusion start time. If one of the following is not documented, do not use the fluids toward the target ordered volume:
  - Infusion rate (e.g., 1000 mL/hr)
  - Infusion duration or time over which to infuse (e.g., 1000 mL over 30 minutes)
  - Infusion end or completion time (e.g., MAR documentation of 1000 mL End Time 12:00)

    **Examples:**
    - Order for 1500 mL (30 mL/kg) of normal saline over 1 hour started at 08:00. There is no infusion end time documented, and no documentation indicating the 1500 mL was not infused. The infusion end time can be determined based on the duration in the order. Select Value "1."
    - Order for 1000 mL (30 mL/kg) normal saline bolus started at 09:30. The nurse documented an infusion rate of 1000 mL/hour. There is no fluid bolus end time documented, and no documentation indicating the 1000 mL was not infused. The infusion end time can be determined based on the rate. Select Value "1."
    - Order for 2000 mL (30 mL/kg) normal saline bolus started at 08:30. There is no infusion rate documented and no fluid bolus end time documented. An infusion end time cannot be determined. Choose Value "2."
- If the ordered rate or duration to infuse fluids is different from the rate or duration over which the fluids were actually administered, use the rate, duration, or end time over which the fluids were actually administered.

  **Example:**
  - Fluid Order: 0.9% NS 1000 mL bolus at 150 mL/hr
  - Nurse documents a start time of 1500 and end time of 1800 for the 1000 mL bolus
    - Use the start and stop time documented by nursing that reflects the duration over which the fluids were actually administered.
- Only include crystalloid fluids given at a rate greater than 125 mL/hour towards the target ordered volume. Do not use crystalloid fluids given at 125 mL/hr or less toward the target ordered volume.
- Acceptable fluids are crystalloid or balanced crystalloid solutions.
- Crystalloid fluids or balanced crystalloid fluids that are given to dilute medications may be used toward the target ordered volume. If the volume infused without dilution fluids is the same as the target ordered volume, fluids used for diluting medications do not need to be counted.
- Crystalloid fluid volumes to which the following electrolytes have been added may be counted toward the target ordered volume requirement: potassium, magnesium, calcium, lactate, acetate, or gluconate.
- Only abstract fluids administered through the intravenous or intraosseous route.

- Select Value “3” if no crystalloid fluids were ordered or initiated within the specified time frame or the volume is unable to be determined.
- Select Value “4” if there is documentation that the patient has an implanted ventricular assist device (VAD) prior to or at the time of identifying the need for crystalloid fluids, regardless of the volume and rate of crystalloid fluids ordered.
- Select Value “4” if physician/APN/PA or nursing documentation indicates patient or authorized patient advocate has refused IV fluid administration prior to or within six hours following presentation of septic shock.
- For purposes of abstraction only, an authorized patient advocate is someone who is authorized to make decisions on behalf of the patient when the patient is not able to. This includes someone who is legally designated and empowered to make medical decisions on the patient's behalf when the patient is unable to themselves. Examples:
  - Family members
  - Medical power of attorney
  - Health care power of attorney
  - Durable power of attorney for health care
  - Someone documented as an agent for the patient
  - Attorney-in-fact

**Suggested Data Sources:**
- Ambulance or transport vehicle records
- Entire ED record
- Input and Output (I&O) flowsheet
- IV therapy record
- Medication Administration Record
- Patient weight record
- Physician/APN/PA orders

**Inclusion Guidelines for Abstraction:**
- 0.9% saline solution
- 0.9% Sodium Chloride Solution
- Isolyte
- Lactated Ringers Solution
- normal saline
- Normosol
- PlasmaLyte

**Exclusion Guidelines for Abstraction:**
Crystalloid solutions that are given to flush other medications or IV lines

**Data Element Name:** *Crystalloid Fluid Administration Date*

**Collected For CMS:** SEP-1

**Definition:** The earliest date on which crystalloid fluids were initiated within the specified time frame.

**Suggested Data Collection Question:** What was the earliest date on which crystalloid fluids were initiated within the specified time frame?

**Format:**

**Length:** 10 – MM-DD-YYYY (includes dashes) or UTD
**Type:** Date
**Occurs:** 1

**Allowable Values:**

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (20xx)
UTD = Unable to Determine

**Notes for Abstraction:**

- Crystalloid fluid volumes ordered that are equivalent to 30 mL/kg, within 10% less than 30 mL/kg, or a volume less than 30 mL/kg with the required physician/APN/PA documentation are considered the target ordered volume.
- The specified time frame for abstraction of crystalloid fluids is within six hours prior through three hours after either of the following trigger events. If both are present the specified time frame is determined by the earliest trigger.
  - Initial Hypotension Date and Time
  - Septic Shock Presentation Date and Time
- If a single order is written for the target ordered volume, use the date the crystalloid solution was started as an IV infusion.
- If a single order is written for the target ordered volume and the infusion is given over multiple infusions, use the start date of the first crystalloid fluid infusion.
- If using multiple orders toward the target ordered volume, use the start date of the crystalloid fluid infusion that completed the target ordered volume.
- If multiple infusions end on the same date, and complete the target ordered volume, use the start date of the infusion that was started last.
  **Example**:
  30 mL/kg = 2500 mL
  Order 1: NS 2000 mL over 2 hours - started 1/2/2021
  Order 2: NS 500 mL over 30 minutes - started 1/3/2021
  Because both infusions end on 1/3/2021, use 1/3/2021, the date of the infusion that was started last, for the *Crystalloid Fluid Administration Date*.
- If a crystalloid infusion is running at a maintenance rate (125 mL/hour or less) and the rate is increased to administer the target ordered volume, use the date the infusion rate is increased.

- Do not abstract the date that fluids were ordered or the date that IV access was started. Abstract the date that the crystalloid fluid infusion began.
- Do not use physician orders as fluid administration start date and time; use the date and time that the fluid infusion was initiated.
- Documentation of crystalloid fluids administered prior to arrival to the hospital (e.g., ambulance, nursing home) that are part of the medical record are acceptable if the documentation of fluid administration contains the type, volume, start time, and rate, duration, or end time of the fluid infusion. A physician/APN/PA order for fluids administered prior to arrival is not required.

**Suggested Data Sources:**
- Ambulance or transport vehicle records
- Entire ED record
- IV therapy records or flow sheet
- Medication Administration Record

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Crystalloid Fluid Administration Time*

**Collected For CMS:** SEP-1

**Definition:** The earliest time at which crystalloid fluids were initiated within the specified time frame.

**Suggested Data Collection Question:** What was the earliest time at which crystalloid fluids were initiated within the specified time frame?

**Format:**

**Length:** 5 - HH:MM (with or without colon) or UTD
**Type:** Time
**Occurs:** 1

**Allowable Values:**

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unable to Determine

Time must be recorded in military time format.
With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|---|---|
| Midnight – 00:00 | Noon – 12:00 |
| 5:31 am – 05:31 | 5:31 pm – 17:31 |
| 11:59 am – 11:59 | 11:59 pm – 23:59 |

**Notes for Abstraction:**

- Crystalloid fluid volumes ordered that are equivalent to 30 mL/kg, within 10% less than 30 mL/kg, or a volume less than 30 mL/kg with the required physician/APN/PA documentation are considered the target ordered volume.
- The specified time frame for abstraction of crystalloid fluids is within six hours prior through three hours after either of the following trigger events. If both are present the specified time frame is determined by the earliest trigger.
  - Initial Hypotension Date and Time
  - Septic Shock Presentation Date and Time
- If a single order is written for the target ordered volume, use the time the crystalloid solution was started as an IV infusion.
- If a single order is written for the target ordered volume and the infusion is given over multiple infusions, use the start time of the first crystalloid fluid infusion.
- If using multiple orders toward the target ordered volume, use the start time of the crystalloid fluid infusion that completed the target ordered volume.
- If multiple infusions end at the same time, and complete the target ordered volume, use the start time of the infusion that was started last.
  Example:

30 mL/kg = 2500 mL
Order 1: NS 2000 mL over 2 hours - started 0800
Order 2: NS 500 mL over 30 minutes - started 0930
Because both infusions end at 10:00, use 09:30, the time of the infusion that was started last, for the *Crystalloid Fluid Administration Time*.

- If a crystalloid infusion is running at a maintenance rate (125 mL/ hour or less) and the rate is increased to administer the target ordered volume, use the time the infusion rate is increased.
- Do not abstract the time that fluids were ordered or the time that IV access was started. Abstract the time that the crystalloid fluid infusion began.
- Do not use physician orders as fluid administration start date and time; use the date and time that the fluid infusion was initiated.
- Documentation of crystalloid fluids administered prior to arrival to the hospital (e.g., ambulance, nursing home) that are part of the medical record are acceptable if the documentation of fluid administration contains the type, volume, start time, and rate, duration, or end time of the fluid infusion. A physician/APN/PA order for fluids administered prior to arrival is not required.

**Suggested Data Sources:**

- Ambulance or transport vehicle records
- Entire ED record
- IV therapy records or flow sheet
- Medication Administration Record

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Directive for Comfort Care or Palliative Care, Septic Shock*

**Collected For CMS:** SEP-1

**Definition:** Physician/APN/PA documentation of comfort measures only, palliative care, or another acceptable inclusion term within the specified time frame.

Comfort Care refers to medical treatment of a dying person where the natural dying process is permitted to occur while assuring maximum comfort. It includes attention to the psychological and spiritual needs of the patient and support for both the dying patient and the patient's family. It is not equivalent to a physician order to withhold emergency resuscitative measures such as Do Not Resuscitate (DNR).

Palliative Care is the identification, prevention, and treatment of suffering by means of assessment of the physical, psychosocial, intellectual, and spiritual needs of the patient with a goal of supporting and optimizing the patient's quality of life. Palliative care ensures a partnership between practitioner, patient, and family to provide support in decision making at any stage in the patient's care.

**Suggested Data Collection Question:** Is there physician/APN/PA documentation of comfort measures only, palliative care, or another inclusion term?

**Format:**

**Length:** 1
**Type:** Alphanumeric
**Occurs:** 1

**Allowable Values:**

| | |
|---|---|
| 1 (Yes) | There is physician/APN/PA documentation of an inclusion term within an acceptable context within the specified time frame . |
| 2 (No) | There is not physician/APN/PA documentation of an inclusion term within an acceptable context within the specified time frame or unable to determine from medical record documentation. |

**Notes for Abstraction:**

- The specified time frame for physician/APN/PA documentation of comfort measures only, palliative care, or another inclusion term is before or within six hours after the presentation of septic shock.
- Only accept terms identified in the list of inclusions. Do not accept any other terminology.
- Only use physician/APN/PA documentation of an inclusion term documented in the following contexts:
  - Comfort measures only recommendation
  - Order for consultation or evaluation by a hospice care service
  - Patient or patient representative request for comfort measures only
  - Plan for comfort measures only
  - Referral to hospice care service

- Do not use documentation of an inclusion term if it is not documented in one of the acceptable contexts.
  **Examples** of unacceptable contexts:
  - "Discussion of comfort measures"
  - "Consider palliative care"
- State-authorized portable orders (SAPOs):
  - SAPOs are specialized forms or identifiers authorized by state law that translate a patient's preferences about specific end-of-life treatment decisions into portable medical orders.
    **Examples:**
    - DNR-Comfort Care form
    - MOLST (Medical Orders for Life-Sustaining Treatment)
    - POLST (Physician Orders for Life-Sustaining Treatment)
    - Out-of-Hospital DNR (OOH DNR)
  - Select Value "1" if there is an SAPO in the record that is dated and signed prior to arrival with an option in which an inclusion term is found that is checked.
  - Select Value "1" if an SAPO lists different options for CMO and any CMO option is checked.
  - Use the most recent SAPO if one or more dated SAPOs are included in the record (and signed by the physician/APN/PA). Do not use undated SAPOs.
  - For cases where there is a SAPO in the record with a CMO option selected:
    - Do not use the SAPO if there is documentation on the day of arrival up to septic shock presentation indicating the patient or patient representative does not want CMO, and there is no other documentation regarding CMO found in the record.
      **Example:**
      Patient has a POLST dated prior to arrival in his chart and ED physician states in current record "Patient is refusing comfort measures, wants to receive full treatment and be a full code."
- Do not use an inclusion term documented in the following situations. Continue to review the remaining physician/APN/PA documentation for acceptable inclusion terms. Select Value "2" if the **ONLY** documentation found is an inclusion term in the following situations.
  - Documentation (other than SAPOs) that is dated prior to arrival or documentation which refers to the pre-arrival time period.
    **Examples:**
    - Comfort measures only or palliative care order in previous hospitalization record.
    - "Pt. on hospice at home" in MD ED note.
  - Inclusion term clearly described as negative or conditional.
    **Examples**:
    - "No comfort care"
    - "Not appropriate for hospice care"
    - "Comfort care would also be reasonable - defer decision for now"
    - "DNRCCA" (Do Not Resuscitate – Comfort Care Arrest)
    - "Family requests comfort measures only should the patient arrest."

        - "Family requests comfort measures only should the patient arrest."
    - Do not use documentation of "CMO" if documentation makes clear it is not being used as an acronym for Comfort Measures Only (e.g., "hx dilated CMO" – Cardiomyopathy context).
- Select Value"1" if there is physician/APN/PA documentation of an acceptable inclusion term in one source that indicates the patient is Comfort Measures Only or Palliative Care, AND there is physician/APN/PA documentation of an inclusion term in another source that indicates the patient is NOT CMO or Palliative Care. Use the source that indicates the patient is CMO or Palliative Care.

**Suggested Data Sources:**
PHYSICIAN/APN/PA DOCUMENTATION ONLY
- Consultation notes
- Discharge summary
- DNR/MOLST/POLST forms
- Emergency Department record
- History and physical
- Physician orders
- Progress notes

**Excluded Data Sources:**
Restraint order sheet

**Inclusion Guidelines for Abstraction:**
- Brain dead
- Brain death
- Comfort care
- Comfort measures
- Comfort measures only (CMO)
- Comfort only
- DNR-CC
- End of life care
- Hospice
- Hospice care
- Organ harvest
- Palliative Care
- Palliative Consult
- Terminal care
- Terminal extubation
- Withdraw care
- Withhold care

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Directive for Comfort Care or Palliative Care, Severe Sepsis*

**Collected For CMS:** SEP-1

**Definition:** Physician/APN/PA documentation of comfort measures only, palliative care, or another acceptable inclusion term before or within the specified time frame.

Comfort Care refers to medical treatment of a dying person where the natural dying process is permitted to occur while assuring maximum comfort. It includes attention to the psychological and spiritual needs of the patient and support for both the dying patient and the patient's family. It is not equivalent to a physician order to withhold emergency resuscitative measures such as Do Not Resuscitate (DNR).

Palliative Care is the identification, prevention, and treatment of suffering by means of assessment of the physical, psychosocial, intellectual, and spiritual needs of the patient with a goal of supporting and optimizing the patient's quality of life. Palliative care ensures a partnership between practitioner, patient, and family to provide support in decision making at any stage in the patient's care.

**Suggested Data Collection Question:** Is there physician/APN/PA documentation of comfort measures only, palliative care, or another inclusion term?

**Format:**

**Length:** 1
**Type:** Alphanumeric
**Occurs:** 1

**Allowable Values:**

| | |
|---|---|
| 1 (Yes) | There is physician/APN/PA documentation of an inclusion term within an acceptable context within the specified time frame. |
| 2 (No) | There is not physician/APN/PA documentation of an inclusion term within an acceptable context within the specified time frame, or unable to determine from medical record documentation. |

**Notes for Abstraction:**

- The specified time frame for physician/APN/PA documentation of comfort measures only, palliative care, or another inclusion term is before or within six hours after the presentation of severe sepsis.
- Only accept terms identified in the list of inclusions. Do not accept any other terminology.
- Only use physician/APN/PA documentation of an inclusion term documented in the following contexts:
  - Comfort measures only recommendation
  - Order for consultation or evaluation by a hospice care service
  - Patient or patient representative request for comfort measures only
  - Plan for comfort measures only
  - Referral to hospice care service

- Do not use documentation of an inclusion term if it is not documented in one of the acceptable contexts.
  **Examples** of unacceptable contexts:
  - "Discussion of comfort measures"
  - "Consider palliative care"
- State-authorized portable orders (SAPOs):
  - SAPOs are specialized forms or identifiers authorized by state law that translate a patient's preferences about specific end-of-life treatment decisions into portable medical orders.
    **Examples:**
    - DNR-Comfort Care form
    - MOLST (Medical Orders for Life-Sustaining Treatment)
    - POLST (Physician Orders for Life-Sustaining Treatment)
    - Out-of-Hospital DNR (OOH DNR)
  - Select Value "1" if there is an SAPO in the record that is dated and signed prior to arrival with an option in which an inclusion term is found that is checked.
  - Select Value "1" if an SAPO lists different options for CMO and any CMO option is checked.
  - Use the most recent SAPO if one or more dated SAPOs are included in the record (and signed by the physician/APN/PA). Do not use undated SAPOs.
  - For cases where there is a SAPO in the record with a CMO option selected: Do not use the SAPO if there is documentation on the day of arrival up to septic shock presentation indicating the patient or patient representative does not want CMO, and there is no other documentation regarding CMO found in the record.
    **Example:**
    Patient has a POLST dated prior to arrival in his chart and ED physician states in current record "Patient is refusing comfort measures, wants to receive full treatment and be a full code."
- Do not use an inclusion term documented in the following situations. Continue to review the remaining physician/APN/PA documentation for acceptable inclusion terms. Select Value "2" if the **ONLY** documentation found is an inclusion term in the following situations.
  - Documentation (other than SAPOs) that is dated prior to arrival or documentation which refers to the pre-arrival time period.
    **Examples:**
    - Comfort measures only or palliative care order in previous hospitalization record.
    - "Pt. on hospice at home" in MD ED note.
  - Inclusion term clearly described as negative or conditional.
    **Examples**:
    - "No comfort care"
    - "Not appropriate for hospice care"
    - "Comfort care would also be reasonable - defer decision for now"
    - "DNRCCA" (Do Not Resuscitate – Comfort Care Arrest)
    - "Family requests comfort measures only should the patient arrest."

- Do not use documentation of "CMO" if documentation makes clear it is not being used as an acronym for Comfort Measures Only (e.g., "hx dilated CMO" – Cardiomyopathy context).

- Select Value "1" if there is physician/APN/PA documentation of an inclusion term in one source that indicates the patient is Comfort Measures Only or Palliative Care, AND there is physician/APN/PA documentation of an inclusion term in another source that indicates the patient is NOT CMO or Palliative Care. Use the source that indicates the patient is CMO or Palliative Care would be used.

**Suggested Data Sources:**
PHYSICIAN/APN/PA DOCUMENTATION ONLY
- Consultation notes
- Discharge summary
- DNR/MOLST/POLST forms
- Emergency Department record
- History and physical
- Physician orders
- Progress notes

**Excluded Data Sources:**
Restraint order sheet

**Inclusion Guidelines for Abstraction:**
- Brain dead
- Brain death
- Comfort care
- Comfort measures
- Comfort measures only (CMO)
- Comfort only
- DNR-CC
- End of life care
- Hospice
- Hospice care
- Organ harvest
- Palliative Care
- Palliative Consult
- Terminal care
- Terminal extubation
- Withdraw care
- Withhold care

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Discharge Date*

**Collected For CMS:** All Records

**Definition:** The month, day, and year the patient was discharged from acute care, left against medical advice, or expired during this stay.

**Suggested Data Collection Question:** What is the date the patient was discharged from acute care, left against medical advice (AMA), or expired?

**Format:**

**Length:** 10 – MM-DD-YYYY (includes dashes)
**Type:** Date
**Occurs:** 1

**Allowable Values:**

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (20xx)

**Note:** The CMS Clinical Data Warehouse only allows data containing dates applicable to a specified quarter of data transmission. Data submitted for discharge quarters outside of the current submission deadline will be rejected.

Refer to the Data Transmission section of this manual for further guidance related to data transmission.

**Notes for Abstraction:**
Because this data element is critical in determining the population for many measures, the abstractor should NOT assume that the claim information for the discharge date is correct. If the abstractor determines through chart review that the date is incorrect, she/he should correct and override the downloaded value. If the abstractor is unable to determine the correct discharge date through chart review, she/he should default to the discharge date on the claim information.

**Suggested Data Sources:**

- Discharge summary
- Face sheet
- Nursing discharge notes
- Physician orders
- Progress notes
- Transfer note
- UB-04

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Discharge Disposition*

**Collected For CMS:** SEP-1

**Definition:** The final place or setting to which the patient was discharged on the day of discharge.

**Suggested Data Collection Question:** What was the patient's discharge disposition on the day of discharge?

**Format:**

**Length:** 1
**Type:** Alphanumeric
**Occurs:** 1

**Allowable Values:**

1 Home

2 Hospice - Home

3 Hospice – Health Care Facility

4 Acute Care Facility

5 Other Health Care Facility

6 Expired

7 Left Against Medical Advice/AMA

8 Not Documented or Unable to Determine (UTD)

**Notes for Abstraction:**

- Only use documentation written on the day prior to discharge through 30 days after discharge when abstracting this data element.
  **Example:**
  Documentation in the Discharge Planning notes on 04-01-20xx state that the patient will be discharged back home. On 04-06-20xx the physician orders and nursing discharge notes on the day of discharge reflect that the patient was being transferred to skilled care. The documentation from 04-06-20xx would be used to select Value "5" (Other Health Care Facility).
- The medical record must be abstracted as documented (taken at "face value"). Inferences should not be made based on internal knowledge.
- If there is documentation that further clarifies the level of care that documentation should be used to determine the correct value to abstract. If documentation is contradictory, use the latest documentation.
  **Examples:**
  - Discharge summary dictated two days after discharge states patient went "home." Physician note on day of discharge further clarifies that the patient will be going "home with hospice." Select Value "2" ("Hospice - Home").

  - Discharge planner note from day before discharge states “XYZ Nursing Home.” Discharge order from day of discharge states “Discharge home.” Contradictory documentation use latest. Select Value “1” (“Home”).
  - Physician order on discharge states “Discharge to ALF.” Discharge instruction sheet completed after the physician order states patient discharged to “SNF.” Contradictory documentation, use latest. Select Value “5” (“Other Health Care Facility”).
- If documentation is contradictory, and you are unable to determine the latest documentation, select the disposition ranked highest (top to bottom) in the following list. See Inclusion lists for examples.
  - Acute Care Facility
  - Hospice – Health Care Facility
  - Hospice – Home
  - Other Health Care Facility
  - Home
- Hospice (Values “2” and “3”) includes discharges with hospice referrals and evaluations.
- If the medical record states only that the patient is being discharged to another hospital and does not reflect the level of care that the patient will be receiving, select Value “4” (“Acute Care Facility”).
- If the medical record states the patient is being discharged to assisted living care or an assisted living facility (ALF) and the documentation also includes nursing home, intermediate care or skilled nursing facility, select Value “1” (“Home”).
- If the medical record states the patient is being discharged to nursing home, intermediate care or skilled nursing facility without mention of assisted living care or assisted living facility (ALF), select Value “5” (“Other Health Care Facility”).
- If the medical record identifies the facility the patient is being discharged to by name only (e.g., “Park Meadows”), and does not reflect the type of facility or level of care, select Value “5” (“Other Health Care Facility”).
- If the medical record states only that the patient is being “discharged” and does not address the place or setting to which the patient was discharged, select Value “1” (“Home”).
- When determining whether to select Value “7” (“Left Against Medical Advice/AMA”):
  - Explicit “left against medical advice” documentation is not required. E.g., “Patient is refusing to stay for continued care” – Select Value “7.”
  - Documentation suggesting that the patient left before discharge instructions could be given does not count.
  - A signed AMA form is not required, for the purposes of this data element.
  - Do not consider AMA documentation and other disposition documentation as “contradictory.” If any source states the patient left against medical advice, select Value “7,” regardless of whether the AMA documentation was written last. E.g., AMA form signed and discharge instruction sheet states “Discharged home with belongings” – Select “7.”

**Suggested Data Sources:**

- Discharge instruction sheet
- Discharge planning notes

- Discharge summary
- Nursing discharge notes
- Physician orders
- Progress notes
- Social service notes
- Transfer record

**Excluded Data Sources:**
- Any documentation prior to the last two days of hospitalization
- Coding documents
- UB-04

**Inclusion Guidelines for Abstraction:**
Home (Value 1):
- Assisted Living Facilities (ALFs) – Includes ALFs and assisted living care at: nursing home, intermediate care, and skilled nursing facilities
- Court/Law Enforcement – includes detention facilities, jails, and prison
- Home – includes board and care, foster or residential care, group or personal care homes, retirement communities, and homeless shelters
- Home with Home Health Services
- Outpatient Services including outpatient procedures at another hospital, Outpatient Chemical Dependency Programs and Partial Hospitalization

Hospice – Home (Value 2):
- Hospice in the home (or other "Home" setting as above in Value 1)

Hospice – Health Care Facility (Value 3):
- Hospice - General Inpatient and Respite
- Hospice - Residential and Skilled Facilities
- Hospice - Other Health Care Facilities

Acute Care Facility (Value 4):
- Acute Short Term General and Critical Access Hospitals
- Cancer and Children's Hospitals
- Department of Defense and Veteran's Administration Hospitals

Other Health Care Facility (Value 5):
- Extended or Intermediate Care Facility (ECF/ICF)
- Long Term Acute Care Hospital (LTACH)
- Nursing Home or Facility including Veteran's Administration Nursing Facility
- Psychiatric Hospital or Psychiatric Unit of a Hospital
- Rehabilitation Facility including, but not limited to: Inpatient Rehabilitation Facility/Hospital, Rehabilitation Unit of a Hospital, Chemical Dependency/Alcohol Rehabilitation Facility
- Skilled Nursing Facility (SNF), Sub-Acute Care or Swing Bed
- Transitional Care Unit (TCU)
- Veterans Home

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Discharge Time*

**Collected For CMS:** SEP-1

**Definition:** The time the patient was discharged from acute care, left against medical advice (AMA), or expired during this stay.

**Suggested Data Collection Question:** What time was the patient discharged?

**Format:**

**Length:** 5 - HH:MM (with or without colon) or UTD
**Type:** Time
**Occurs:** 1

**Allowable Values:**

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unable to Determine

Time must be recorded in military time format.
With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|---|---|
| Midnight – 00:00 | Noon – 12:00 |
| 5:31 am – 05:31 | 5:31 pm – 17:31 |
| 11:59 am – 11:59 | 11:59 pm – 23:59 |

**Notes for Abstraction:**

- Abstract the earliest documented time of the following:
  - Discharge from acute inpatient care
  - Left against medical advice (AMA)
  - Expired
- If the time the patient was discharged from acute inpatient care, left AMA, or expired is unable to be determined from medical record documentation, enter "UTD."
- The medical record must be abstracted as documented (taken at "face value"). When the time documented is obviously in error (not a valid time/format) **and** no other documentation is found that provides this information, the abstractor should select "UTD."
  **Example:**
  Documentation indicates the patient expired at **3300**. No other documentation in the medical record provides a valid time. Since the Time Expired is outside of the range listed in the Allowable Values for "Hour," it is not a valid time and the abstractor should select "UTD."
- If the patient expired and there are multiple times, such as a time the patient was pronounced in physician notes and an administrative time the patient was discharged, use the time the patient was pronounced.

- If the patient expired and there is not a pronounced time but there is a discharge time, use the discharge time.
- If the patient was discharged from acute inpatient care, left AMA, or transferred out to another facility, use the time the patient actually left, not the time the order was written.
- If there are multiple times documented when the patient was discharged from acute inpatient care or left AMA, use the earliest time.

**Suggested Data Sources:**
- Death certificate
- Discharge summary
- Nurses Notes
- Progress Notes
- Resuscitation records

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *First Name*

**Collected For CMS:** All Records (Optional Element)

**Definition:** The patient's first name.

**Suggested Data Collection Question:** What is the patient's first name?

**Format:**

**Length:** 30
**Type:** Character
**Occurs:** 1

**Allowable Values:**

Enter the patient's first name. Up to 30 letters, numbers, and/or special characters can be entered.

**Note:** Only the following special characters will be allowed:
~ ! @ # $ % ^ * ( ) _ + { } | : ? ` - = [ ] \ ; ' . , / and space

**Notes for Abstraction:**
None

**Suggested Data Sources:**

- Emergency Department record
- Face sheet
- History and physical

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Hispanic Ethnicity*

**Collected For CMS:** All Records

**Definition:** Documentation that the patient is of Hispanic, Latino, or Spanish ethnicity.

**Suggested Data Collection Question:** Is the patient of Hispanic, Latino, or Spanish Ethnicity?

**Format:**

**Length:** 1
**Type:** Character
**Occurs:** 1

**Allowable Values:**

| | |
|---|---|
| Y (Yes) | Patient is of Hispanic, Latino, or Spanish ethnicity. |
| N (No) | Patient is not of Hispanic, Latino, or Spanish ethnicity or unable to determine from medical record documentation. |

**Notes for Abstraction:**
The data element, *Race*, is required in addition to this data element.

**Suggested Data Sources:**

- Emergency Department record
- Face sheet
- History and physical
- Nursing admission assessment
- Progress notes

**Inclusion Guidelines for Abstraction:**
A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. The term “Spanish origin” can be used in addition to “Hispanic or Latino.”

Examples:

- Black-Hispanic
- Chicano
- Columbian
- Ecuadorian
- Dominican
- Guatemalan
- H
- Hispanic
- Latin American
- Latino/Latina
- Mexican-American

- Salvadoran
- Spaniard
- Spanish
- White-Hispanic

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *ICD-10-CM Other Diagnosis Codes*

**Collected For CMS:** All Records

**Definition:** The other or secondary ICD-10-CM codes associated with the diagnosis for this hospitalization.

**Suggested Data Collection Question:** What were the ICD-10-CM other diagnosis codes selected for this medical record?

**Format:**

**Length:** 3-7 (without decimal point or dot)
**Type:** Character (upper or lower case)
**Occurs:** 24

**Allowable Values:**

Any valid diagnosis code as per the CMS ICD-10-CM master code table (Code Descriptions in Tabular Order):
https://www.cms.gov/Medicare/Coding/ICD10/index.html

**Notes for Abstraction:**
None

**Suggested Data Sources:**
- Discharge summary
- Face sheet
- UB-04

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *ICD-10-PCS Other Procedure Codes*

**Collected For CMS:** All Records

**Definition:** The other or secondary ICD-10-PCS codes identifying all significant procedures other than the principal procedure.

**Suggested Data Collection Question:** What were the ICD-10-PCS code(s) selected as other procedure(s) for this record?

**Format:**

**Length:** 3-7 (without decimal point or dot)
**Type:** Character (upper or lower case)
**Occurs:** 24

**Allowable Values:**
Any valid procedure code as per the CMS ICD-10-PCS master code table (PCS Long and Abbreviated Titles): https://www.cms.gov/Medicare/Coding/ICD10/index.html

**Notes for Abstraction:**
None

**Suggested Data Sources:**
- Discharge summary
- Face sheet
- UB-04

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *ICD-10-PCS Other Procedure Dates*

**Collected For CMS:** All Records

**Definition:** The month, day, and year when the associated procedure(s) was (were) performed.

**Suggested Data Collection Question:** What were the date(s) the other procedure(s) were performed?

**Format:**

**Length:** 10 – MM-DD-YYYY (includes dashes) or UTD
**Type:** Date
**Occurs:** 24

**Allowable Values:**

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (20xx)
UTD = Unable to Determine

**Notes for Abstraction:**

- If the procedure date for the associated procedure is unable to be determined from medical record documentation, select "UTD."
- The medical record must be abstracted as documented (taken at "face value"). When the date documented is obviously in error (not a valid format/range or outside of the parameters of care [after *Discharge Date*]) **and** no other documentation is found that provides this information, the abstractor should select "UTD."

  **Examples:**

  - Documentation indicates the *ICD-10-PCS Other Procedure Dates* was 02-**42-**20xx. No other documentation in the medical record provides a valid date. Since the *ICD-10-PCS Other Procedure Dates* is outside of the range listed in the Allowable Values for "Day," it is not a valid date and the abstractor should select "UTD."
  - Patient expires on 02-12-20xx and documentation indicates the *ICD-10-PCS Other Procedure Dates* was 03-12-20xx. Other documentation in the medical record supports the date of death as being accurate. Since the *ICD-10-PCS Other Procedure Dates* is after the *Discharge Date* (death), it is outside of the parameters of care and the abstractor should select "UTD."

  **Note:**Transmission of a case with an invalid date as described above will be rejected from the CMS Clinical Data Warehouse. Use of "UTD" for *ICD-10-PCS Other Procedure Dates* allows the case to be accepted into the warehouse.

**Suggested Data Sources:**

- Consultation notes
- Diagnostic test reports
- Discharge summary
- Face sheet
- Operative notes
- Procedure notes
- Progress notes
- UB-04

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *ICD-10-CM Principal Diagnosis Code*

**Collected For CMS:** All Records

**Definition:** The ICD-10-CM diagnosis code that is primarily responsible for the admission of the patient to the hospital for care during this hospitalization.

**Suggested Data Collection Question:** What was the ICD-10-CM code selected as the principal diagnosis for this record?

**Format:**

**Length:** 3-7 (without decimal point or dot)
**Type:** Character (upper or lower case)
**Occurs:** 1

**Allowable Values:**

Any valid diagnosis code as per the CMS ICD-10-CM master code table (Code Descriptions in Tabular Order):
https://www.cms.gov/Medicare/Coding/ICD10/index.html

**Notes for Abstraction:**
None

**Suggested Data Sources:**
- Discharge summary
- Face sheet
- UB-04

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *ICD-10-PCS Principal Procedure Code*

**Collected For CMS:** All Records

**Definition:** The principal procedure is the procedure performed for definitive treatment rather than diagnostic or exploratory purposes, or which is necessary to take care of a complication.

**Suggested Data Collection Question:** What was the ICD-10-PCS code selected as the principal procedure for this record?

**Format:**

**Length:** 3-7 (without decimal point or dot)
**Type:** Character (upper or lower case)
**Occurs:** 1

**Allowable Values:**

Any valid procedure code as per the CMS ICD-10-PCS master code table (PCS Long and Abbreviated Titles):
https://www.cms.gov/Medicare/Coding/ICD10/index.html

**Notes for Abstraction:**
None

**Suggested Data Sources:**
- Discharge summary
- Face sheet
- UB-04

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *ICD-10-PCS Principal Procedure Date*

**Collected For CMS:** All Records

**Definition:** The month, day, and year when the principal procedure was performed.

**Suggested Data Collection Question:** What was the date the principal procedure was performed?

**Format:**

**Length:** 10 – MM-DD-YYYY (includes dashes) or UTD
**Type:** Date
**Occurs:** 1

**Allowable Values:**

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (20xx)
UTD = Unable to Determine

**Notes for Abstraction:**

- If the principal procedure date is unable to be determined from medical record documentation, select "UTD."
- The medical record must be abstracted as documented (taken at "face value"). When the date documented is obviously in error (not a valid date/format or is outside of the parameters of care [after Discharge Date]) and no other documentation is found that provides this information, the abstractor should select "UTD."

  **Examples:**

  - Documentation indicates the *ICD-10-PCS Principal Procedure Date* was 02-**42-**20xx. No other documentation in the medical record provides a valid date. Since the *ICD-10-PCS Principal Procedure Date* is outside of the range listed in the Allowable Values for "Day," it is not a valid date and the abstractor should select "UTD."
  - Patient expires on 02-12-20xx and documentation indicates the *ICD-10-PCS Principal Procedure Date* was 03-12-20xx. Other documentation in the medical record supports the date of death as being accurate. Since the *ICD-10-PCS Principal Procedure Date* is after the *Discharge Date* (death), it is outside of the parameter of care and the abstractor should select "UTD."

  **Note:** Transmission of a case with an invalid date as described above will be rejected from the CMS Clinical Data Warehouse. Use of "UTD" for *ICD-10-PCS Principal Procedure Date* allows the case to be accepted into the warehouse.

**Suggested Data Sources:**

- Consultation notes
- Diagnostic test reports
- Discharge summary
- Face sheet
- Operative notes
- Procedure notes
- Progress notes
- UB-04

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Initial Hypotension*

**Collected For CMS:** SEP-1

**Definition:** Documentation of the presence of initial hypotension within the specified time frame and prior to the completion of the target ordered volume of crystalloid fluids.

**Suggested Data Collection Question:** Was initial hypotension present within the specified time frame?

**Format:**

**Length:** 1
**Type:** Alphanumeric
**Occurs:** 1

**Allowable Values:**

1 (Yes) Initial Hypotension was present within the specified time frame.

2 (No) Initial Hypotension was not present within the specified time frame or unable to determine from medical record documentation.

**Notes for Abstraction:**

- The specified time frame for assessing *Initial Hypotension* is six hours before to six hours following the *Severe Sepsis Presentation Date* and *Time.*
- Determine *Initial Hypotension* using the following criteria:
  - Two hypotensive blood pressure readings from measurements taken at different times within the specified time frame. The hypotensive blood pressure readings do not need to be consecutive but need to be within three hours of each other. Acceptable readings are:
    - systolic blood pressures <90, or
    - mean arterial pressures (MAP) <65 or
    - a decrease in systolic blood pressure by >40 mm/Hg. Physician/APN/PA documentation must be present in the medical record indicating a >40 mmHg decrease in SBP has occurred and is related to infection or severe sepsis and not to other causes.
- Use the time the hypotensive blood pressures were taken or obtained. If time taken or obtained is not available, use recorded or documented time. Do not abstract hypotensive values from narrative charting unless no other documentation reflects the time that the same hypotensive values were obtained.
- **Do not use** hypotensive BPs obtained in the operating room (OR), in interventional radiology, during active delivery, during cardiopulmonary arrest (code), or during procedural/conscious sedation**.**
- **Do not use** hypotensive BPs documented from an orthostatic BP evaluation.
- **Do not use** hypotensive BPs documented during a dialysis procedure.
- For the following, physician/APN/PA documentation before or within 24 hours after *Severe Sepsis Presentation Time* **is required**.

- If hypotension (SBP <90 mmHg or MAP <65 mmHg) is due to the following, **do not use it**. Do not make inferences. The abnormal value or reference to the abnormal value must be in the same documentation (i.e., same sentence or paragraph).
  - Normal for that patient
  - Is due to a chronic condition
  - Is due to a medication

    **Example:**

    "Hypotensive after pain meds"
- If a hypotensive value is due to an acute condition that has a non-infectious source/process**, do not use it** (refer to *Severe Sepsis Present* criterion "a" to determine if the source of the acute condition is an infection).

  **Examples:**
  - "BP 85/50 r/t blood loss" and "2 liters lost via GI bleed" (blood loss is the acute condition and GI bleed is the non-infectious source).
  - "Hypotension, related to dehydration, not sepsis" (dehydration is the acute condition and "not sepsis" is the non-infectious source).
- If a hypotensive value should not be used based on the above guidance, **do not use any** instances of less severe values.

  **Example:**

  "BP 80/50 secondary to Lasix" (systolic blood pressures ≥ 80 would not be used).
- If a hypotensive value is due to the following, **use** the criterion value**.**
  - Acute condition

    **Example:**

    Progress Note: "Hypotension r/t dehydration."
  - Acute on chronic condition

    **Example:**

    H&P: "Hypotension due to acute exacerbation of chronic heart failure."
  - Infection

    **Example:**

    Physician Note: "Sepsis, hypotensive."

- Physician/APN/PA documentation of a term that is defined by an SBP <90 mmHg or MAP <65 mmHg is acceptable in place of an abnormal value when the term is documented as normal for the patient, due to a chronic condition, due to a medication, or due to an acute condition that has a non-infectious source/process.

  **Example:**

  Hypotension (Systolic blood pressure <90 mmHg).
- Use the criterion value if there is conflicting documentation within the same physician/APN/PA documentation indicating hypotension is:
  - normal for the patient, due to a chronic condition or medication, or due to an acute condition with a non-infectious source

    AND
  - due to or possibly due to an infection, severe sepsis, or septic shock**.**

    **Example:**

    "Hypotensive post medications, possibly r/t sepsis."

    In this example, use the hypotensive readings.

- Abstract based on the latest piece of documentation within 24 hours after *Severe Sepsis Presentation Time* if there is conflicting information within **two or more separate** pieces of physician/APN/PA documentation indicating hypotension is:
  - normal for the patient, due to a chronic condition or medication, or due to an acute condition with a non-infectious source
    AND
  - due to or possibly due to an infection, severe sepsis, or septic shock

  **Example:**
  Note 1200: "Antihypertensive discontinued due to hypotension."
  Note 1600: "Sepsis with hypotension and SIRS criteria.
    - In this example, use the hypotensive readings.
- Abstract based on the documentation closest to the *Severe Sepsis Presentation Time* if there is conflicting information before the *Severe Sepsis Presentation Time* within two or more separate pieces of physician/APN/PA documentation indicating hypotension is:
  - normal for the patient, due to a chronic condition or medication, or due to an acute condition with a non-infectious source
    AND
  - due to or possibly due to an infection, severe sepsis, or septic shock
- Select Value "2" if the target ordered volume of crystalloid fluids was completely infused before the hypotensive readings.
- Select Value "1" if the hypotension readings were present within six hours prior to or within six hours following *Severe Sepsis Presentation Date and Time*.
- Select Value "2" if the hypotension readings were not present within six hours prior to or within six hours following *Severe Sepsis Presentation Date and Time*.
- If within 24 hours of the *Severe Sepsis Presentation Time* there is physician/APN/PA or nursing documentation indicating a hypotensive reading is invalid, erroneous or questionable, **do not use** that reading when determining the presence of *Initial Hypotension*.
- If there is physician/APN/PA documentation indicating the patient does not have hypotension and the documentation is referencing a specific time period in which there was one or more hypotensive values recorded, **do not use** the hypotensive value(s). The documentation must be within 24 hours following the low blood pressure value(s).

  **Example:**
  - Progress note: "Not hypotensive in ED."
    - Do not use hypotensive values from the ED.
- To determine the presence of *Initial Hypotension*, you may use documentation in pre-hospital records (e.g., ambulance records, nursing home records) that are considered part of the medical record. Select Value "2" if the criteria for determining *Initial Hypotension* were met prior to arrival and the first blood pressure reading upon arrival to the ED or hospital was not hypotensive.

**Suggested Data Sources:**
- Entire ED record
- Nurses notes
- Physician/APN/PA notes
- Vital signs record or flow sheet

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Initial Hypotension Date*

**Collected For CMS:** SEP-1

**Definition:** The date of the documentation of initial hypotension in the six hours prior to or within six hours following *Severe Sepsis Presentation Date and Time* and prior to the completion of the target ordered volume (30 mL/kg or up to10% less than 30 mL/kg) of crystalloid fluids.

**Suggested Data Collection Question:** On which date was initial hypotension present six hours prior to or within six hours following *Severe Sepsis Presentation Date and Time*?

**Format:**

**Length:** 10 – MM-DD-YYYY (includes dashes) or UTD
**Type:** Date
**Occurs:** 1

**Allowable Values:**

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (20xx)
UTD = Unable to Determine

**Notes for Abstraction:**

- Use the earliest date of the second hypotensive blood pressure documented within the time period of six hours prior to or within six hours following *Severe Sepsis Presentation Date and Time* (to determine the second hypotensive blood pressure, see the *Initial Hypotension* data element).
- For patients with more than two hypotensive blood pressures in the time period of six hours prior to or within six hours following *Severe Sepsis Presentation Date and Time,* use the date of the second hypotensive blood pressure documented within the time period.
- Use the date documented for when hypotensive blood pressure was taken or obtained. If date taken or obtained is not available, use recorded or documented date.
- **Exception for Prior to Arrival:**
  - For patients who met criteria for *Initial Hypotension* prior to arrival and remain hypotensive when they arrive at the Emergency Department (ED), use the earliest documented ED arrival date.
  - For patients who met criteria for *Initial Hypotension* prior to arrival and remain hypotensive when they arrive to the hospital, use the earliest documented date when the patient arrives to floor or unit.

**Suggested Data Sources:**

- Entire ED record
- Nurses notes

- Physician/APN/PA notes
- Vital signs record or flow sheet

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Initial Hypotension Time*

**Collected For CMS:** SEP-1

**Definition:** The time of the documentation of initial hypotension in the six hours prior to or within six hours following *Severe Sepsis Presentation Date and Time* and prior to the completion of the target ordered volume (30 mL/kg or up to10% less than 30 mL/kg) of crystalloid fluids.

**Suggested Data Collection Question:** At which time was initial hypotension present six hours prior to or within six hours following *Severe Sepsis Presentation Date and Time*?

**Format:**

**Length:** 5 - HH:MM (with or without colon) or UTD
**Type:** Time
**Occurs:** 1

**Allowable Values:**

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unable to Determine

Time must be recorded in military time format.
With the exception of midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|---|---|
| Midnight – 00:00 | Noon – 12:00 |
| 5:31 am – 05:31 | 5:31 pm – 17:31 |
| 11:59 am – 11:59 | 11:59 pm – 23:59 |

**Notes for Abstraction:**

- Use the earliest time of the second hypotensive blood pressure documented within the time period of six hours prior to or within six hours following *Severe Sepsis Presentation Date and Time* (to determine the second hypotensive blood pressure, see the *Initial Hypotension* data element).
- For patients with more than two hypotensive blood pressures in the time period of six hours prior to or within six hours following *Severe Sepsis Presentation Date and Time,* use the time of the second hypotensive blood pressure documented within the time period.
- Use the time documented for when hypotensive blood pressure was taken or obtained. If time taken or obtained is not available, use recorded or documented time.
- **Exception for Prior to Arrival:**

- For patients who met criteria for *Initial Hypotension* prior to arrival and remain hypotensive when they arrive at the Emergency Department (ED), use the earliest documented ED arrival time.
- For patients who met criteria for *Initial Hypotension* prior to arrival and remain hypotensive when they arrive to the hospital, use the earliest documented time when the patient arrives to floor or unit.

**Suggested Data Sources:**
- Entire ED record
- Nurses notes
- Physician/APN/PA notes
- Vital signs record or flow sheet

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Initial Lactate Level Collection*

**Collected For CMS:** SEP-1

**Definition:** Documentation of collection of an initial lactate level within the specified time frame.

**Suggested Data Collection Question:** Was an initial lactate level drawn within the specified time frame?

**Format:**

**Length:** 1
**Type:** Alphanumeric
**Occurs:** 1

**Allowable Values:**

1 (Yes) An initial lactate level was drawn within the specified time frame.

2 (No) An initial lactate level was not drawn within the specified time frame, or unable to determine.

**Notes for Abstraction:**

- The specified time frame within which an initial lactate must be drawn is within six hours prior through three hours following severe sepsis presentation.
  - If multiple lactate levels are drawn within the specified time frame, use the highest lactate level drawn from the *Severe Sepsis Presentation Time* to six hours before. Use a lactate level drawn at the same time as the *Severe Sepsis Presentation Time* if it has the highest level.
  - If multiple lactate levels are drawn ONLY in the three hours after the *Severe Sepsis Presentation Time*, use the lactate drawn with the HIGHEST level within this time frame.
- If there is more than one time of documentation for the *Initial Lactate Level Collection,* use the following order to determine which time to abstract.
  1. Laboratory documentation indicating date and time lactate was drawn.
  2. Date and Time the lactate is documented as drawn in a non-narrative location (e.g., sepsis flowsheet, checklist, screening).
  3. Narrative note indicating lactate is drawn with an associated date and time.
- If there is no documentation indicating a lactate was drawn or collected, but there is supportive documentation that a lactate was drawn, use the earliest supportive documentation (e.g., lactate sent to lab, lactate received, lactate result).
- If within 24 hours of the *Severe Sepsis Presentation Time* there is physician/APN/PA or nursing documentation that a lactate value is invalid, erroneous or questionable, disregard that value.
- Use documentation specifying a lactate was actually drawn or collected. Do not use documentation such as “Labs Drawn” as it is not specific for lactate level.
- Do not use a physician order for lactate levels as it does not specify that lactate level was drawn; however, you may use a physician order that has a notation “drawn” or “collected” next to it.

- If a lactate level is ordered and there is an attempt to collect it, but the attempt results in failure to collect the specimen (too dehydrated to get a vein) or the specimen was contaminated during or after the draw, select Value “1.”
- If a lactate level is drawn but there are no results in the record, choose Value “1.”

**Suggested Data Sources:**
- Laboratory Reports
- Nursing Notes
- Physician/APN/PA notes or orders

**Inclusion Guidelines for Abstraction:**
- Lactate drawn
- Lactate level collected
- Lactic acid drawn

**Exclusion Guidelines for Abstraction:**
Labs drawn

**Data Element Name:** *Initial Lactate Level Date*

**Collected For CMS:** SEP-1

**Definition:** The date on which the initial lactate level was drawn.

**Suggested Data Collection Question:** What was the date on which the initial lactate level was drawn?

**Format:**

**Length:** 10 – MM-DD-YYYY (includes dashes) or UTD
**Type:** Date
**Occurs:** 1

**Allowable Values:**

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (20xx)
UTD = Unable to Determine

**Notes for Abstraction:**

- If there is more than one date of documentation for the *Initial Lactate Level Collection,* use the following order to determine which date to abstract.
  1. Laboratory documentation indicating date lactate was drawn.
  2. Non-narrative location indicating lactate was drawn with an associated date (e.g., sepsis flowsheet, checklist, screening).
  3. Narrative note indicating lactate is drawn with an associated date.
- If there is not a lactate draw or collected date documented, but there is supportive documentation that a lactate was drawn, use the date of the earliest supportive documentation (e.g., lactate sent to lab, lactate received date, lactate result date).
- Use documentation specifying the date a lactate was actually drawn or collected. Do not use documentation such as “Labs Drawn” as it is not specific for lactate level.
- Do not use a physician order for lactate levels as it does not specify that lactate level was drawn or reported, unless there is a notation of “drawn” or “collected” next to the order, including a date.
- If a lactate level is ordered and there is an attempt to collect it, but the attempt results in failure to collect the specimen (too dehydrated to get a vein) or the specimen was contaminated during or after the draw, use the date of attempted lactate level collection.

**Suggested Data Sources:**

- Laboratory Reports
- Nursing Notes
- Physician/APN/PA notes or orders

**Inclusion Guidelines for Abstraction:**

- Lactate level collected
- Lactate level drawn
- Lactic acid drawn

**Exclusion Guidelines for Abstraction:**

Labs drawn

**Data Element Name:** *Initial Lactate Level Result*

**Collected For CMS:** SEP-1

**Definition:** Documentation of the initial lactate level result.

**Suggested Data Collection Question:** What was the initial lactate level result?

**Format:**

**Length:** 1
**Type:** Alphanumeric
**Occurs:** 1

**Allowable Values:**

| | |
|---|---|
| 1 (<=2) | The initial lactate level was less than or equal to 2 mmol/L, or there is no result in the chart, or unable to determine the result. |
| 2 (>2 and <4.0) | The initial lactate level was greater than 2 mmol/L and less than 4 mmol/L. |
| 3 (>=4) | The initial lactate level was 4 mmol/L or more. |

**Notes for Abstraction:**

- Lactate levels may be reported as mmol/L or mg/dL. Use the following to cross reference mmol/L and mg/dL equivalents.
  - 2 mmol/L is equivalent to 18 mg/dL
  - 4 mmol/L is equivalent to 36 mg/dL
- Use the result for the initial lactate level drawn in the data element *Initial Lactate Level Collection*.
- Select Value “1” if there was an initial lactate level collected but there is no result, or the result cannot be determined.
- If point of care (POC) results and laboratory results were obtained from the same sample, use the results that are recorded first.
- For the following, physician/APN/PA documentation before or within 24 hours after *Severe Sepsis Presentation Time* **is required**.
  - If the elevated lactate is due to the following, **do not use it**. Do not make inferences. The abnormal value or reference to the abnormal value must be in the same documentation (i.e., same sentence or paragraph).
    - Normal for that patient
    - Is due to a chronic condition
    - Is due to a medication
  - If the elevated lactate is due to an acute condition that has a non-infectious source/process, **do not use it** (refer to *Severe Sepsis Present* criterion “a” to determine if the source of the acute condition is an infection).
    **Example:**
    - “Lactate 4.3 r/t seizure” and “Seizure post brain injury” (seizure is the acute condition and brain injury is the non-infectious source).

- If the elevated lactate should not be used based on the above guidance, **do not use any** instances of less severe values.
- If the elevated lactate is due to the following, **use** the lactate value**.**
  - Acute condition
  - Acute on chronic condition
  - Infection

- Physician/APN/PA documentation of a term that is defined by an elevated lactate is acceptable in place of an abnormal value when the term is documented as normal for the patient, due to a chronic condition, due to a medication, or due to an acute condition that has a non-infectious source/process.
  **Examples**:
  - Hyperlactatemia
  - Lactic Acidosis
- Use the lactate value if there is conflicting documentation within the same physician/APN/PA documentation indicating the elevated lactate is:
  - normal for the patient due to a chronic condition or medication, or due to an acute condition with a non-infectious source
    And
  - due to or possibly due to an infection, severe sepsis, or septic shock
- Abstract based on the latest piece of documentation within 24 hours after *Severe Sepsis Presentation Time* if there is conflicting information within **two or more separate** pieces of physician/APN/PA documentation indicating the elevated lactate is:
  - normal for the patient due to a chronic condition or medication, or due to an acute condition with a non-infectious source
    And
  - due to or possibly due to an infection, severe sepsis, or septic shock
- Abstract based on the documentation closest to the *Severe Sepsis Presentation Time* if there is conflicting information before the *Severe Sepsis Presentation Time* within two or more separate pieces of physician/APN/PA documentation indicating the elevated lactate is:
  - normal for the patient, due to a chronic condition or medication, or due to an acute condition with a non-infectious source
    AND
  - due to or possibly due to an infection, severe sepsis, or septic shock

**Suggested Data Sources:**
- Laboratory results
- Physician/APN/PA notes

**Inclusion Guidelines for Abstraction:**
- Lactate results
- Lactic acid results

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Initial Lactate Level Time*

**Collected For CMS:** SEP-1

**Definition:** The time at which the initial lactate level was drawn.

**Suggested Data Collection Question:** What was the time at which the initial lactate level was drawn?

**Format:**

**Length:** 5 - HH:MM (with or without colon) or UTD
**Type:** Time
**Occurs:** 1

**Allowable Values:**

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unable to Determine

Time must be recorded in military time format.
With the exception of midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|---|---|
| Midnight – 00:00 | Noon – 12:00 |
| 5:31 am – 05:31 | 5:31 pm – 17:31 |
| 11:59 am – 11:59 | 11:59 pm – 23:59 |

**Notes for Abstraction:**

- If there is more than one time of documentation for the *Initial Lactate Level Collection,* use the following order to determine which time to abstract.
  1. Laboratory documentation indicating time lactate was drawn.
  2. Non-narrative location indicating lactate was drawn with an associated time (e.g., sepsis flowsheet, checklist, screening).
  3. Narrative note indicating lactate is drawn with an associated time.
- If there is not a lactate draw or collected time documented, but there is supportive documentation that a lactate was drawn, use the time of the earliest supportive documentation (e.g., lactate sent to lab, lactate received time, lactate result time).
- Use documentation specifying the time a lactate was actually drawn or collected. Do not use documentation such as “Labs Drawn” as it is not specific for lactate level.
- Do not use a physician order for lactate levels as it does not specify that lactate level was drawn, unless there is a notation next to the lactate level order indicating it was drawn or collected, with a time noted.

- If a lactate level is ordered and there is an attempt to collect it, but the attempt results in failure to collect the specimen (too dehydrated to get a vein) or the specimen was contaminated during or after the draw, use the time of attempted lactate level collection.

**Suggested Data Sources:**
- Laboratory Reports
- Nursing Notes
- Physician/APN/PA notes or orders

**Inclusion Guidelines for Abstraction:**
- Lactate level collected
- Lactate level drawn
- Lactic acid drawn

**Exclusion Guidelines for Abstraction:**
Labs drawn

**Data Element Name:** *Last Name*

**Collected For CMS:** All Records (Optional Element)

**Definition:** The patient's last name.

**Suggested Data Collection Question:** What is the patient's last name?

**Format:**

Length: 60
**Type:** Character
Occurs: 1

**Allowable Values:**

Enter the patient's last name. Up to 60 letters, numbers, and/or special characters can be entered.
**Note:** Only the following special characters will be allowed:
~ ! @ # $ % ^ * ( ) _ + { } | : ? ` - = [ ] \ ; ' . , / and space

**Notes for Abstraction:**
None

**Suggested Data Sources:**
- Emergency Department record
- Face sheet
- History and physical

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Measure Category Assignment*

**Collected For CMS:** Informational only

Notes:

- Episode of care records that calculate with a *Measure Category Assignment* of ”X” (missing data) for one or more measures will be rejected by the CMS Clinical Data Warehouse. Refer to the Missing and Invalid data section in this manual for more information.
- Files transmitted to the CMS Clinical Data Warehouse that contain *Measure Category Assignment* will be rejected.

**Definition:** Calculated measures results for each episode of care (EOC) that is processed through a measure algorithm.

Used to summarize the outcome for an EOC that is processed through a specific measure algorithm.

**Suggested Data Collection Question:** Not Applicable

**Format:** Not Applicable

**Allowable Values:**

B Category B - Not in Measure Population
For rate-based and continuous variable measures: EOC record is not a member of a measure's population.

D Category D - In Measure Population
For rate-based measures: EOC record is a member of the measure's population and there has not been an occurrence of the measure.

**Note:** For measures for which better quality is associated with a lower score or numerator, i.e., PC-01, a *Measure Category Assignment* of “D” means that the appropriate care was provided and the intent of the measure was met. For aggregate data, the EOC record will be included in the measure denominator only.

For continuous variable measures: EOC record is a member of the measure's population and has sufficient accurate and valid data to compute the measurement.

E Category E - In Numerator Population
For rate-based measures: EOC record is a member of the measure's population and there has been an occurrence of the measure.

**Note:** For measures for which better quality is associated with a lower score or numerator, i.e., PC-01, a *Measure Category Assignment* of “E” means that the appropriate care was not provided and the intent of the measure

was not met. For aggregate data, the EOC record will be included in both the measure numerator and denominator.

For continuous variable measures: Does not apply.

X Category X – Data Are Missing
For rate-based and continuous variable measures: Data are missing that is required to calculate the measure. The record will be rejected by the CMS Clinical Data Warehouse.

Y Category Y – UTD Allowable Value Does Not Allow Calculation of The Measure
For rate-based measures: Does not apply.

For continuous variable measures: EOC record contains a Date, Time, or Numeric data element with a Value of “UTD.”

**Notes for Abstraction:**
None

**Suggested Data Sources:**
Not Applicable

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Patient Identifier*

**Collected For CMS:** All Records

**Note:** Refer to the Hospital Clinical Data XML File Layout in the Transmission section of this manual.

**Definition:** The number used by the hospital to identify this patient's stay. The number provided will be used to identify the patient in communications with the hospital, e.g., Medical Record Number, Account Number, Unique Identifiable Number as determined by the facility, etc.

A patient identifier is required for data submitted to the CMS Clinical Data Warehouse.

**Suggested Data Collection Question:** What was the number used by the hospital to identify this patient's stay?

**Format:**

**Length:** 40
**Type:** Character
**Occurs:** 1

**Allowable Values:**

Up to 40 letters, numbers, and/or characters.

**Note:** The only characters that will be allowed are spaces, hyphens, dashes and under-scores.

**Notes for Abstraction:**
None

**Suggested Data Sources:**
None

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Payment Source*

**Collected For CMS:** All Records

**Definition:** The source of payment for this episode of care.

**Suggested Data Collection Question:** What is the patient's source of payment for this episode of care?

**Format:**

**Length:** 1
**Type:** Alphanumeric
**Occurs:** 1

**Allowable Values:**

1 Source of payment is Medicare.

2 Source of payment is Non-Medicare.

**Notes for Abstraction:**

- If Medicare is listed as the primary, secondary, tertiary, or even lower down on the list of payers, select "1."
- If the patient has Medicaid only or Medicaid and another insurance type, other than Medicare, select "2." If the patient has Medicaid and Medicare, select "1."
- If the patient is an Undocumented Alien or Illegal immigrant, select "1." Undocumented Alien: Section 1011 of the Medicare Modernization Act of 2003 allows for reimbursement for services rendered to patients who are:
  - Undocumented aliens
  - Aliens paroled into a United States port of entry for the purpose of receiving eligible services
  - Mexican citizens permitted to enter the United States for not more than 72 hours under the authority of a laser visa, issued in accordance with the requirements of regulations prescribed under the Immigration and Nationality Act

**Suggested Data Sources:**

- Face sheet
- UB-04

**Inclusion Guidelines for Abstraction:**

Medicare includes, but is not limited to:

- Black Lung
- End Stage Renal Disease (ESRD)
- Medicare Fee for Service (includes DRG or PPS)
- Medicare HMO/Medicare Advantage
- Medicare Part A, B, C, D, F, G, K, L, M, and N
- Medicare Secondary Payer

- Railroad Retirement Board (RRB)

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Persistent Hypotension*

**Collected For CMS:** SEP-1

**Definition:** Documentation of the presence of persistent hypotension or new onset of hypotension following the administration of the target ordered volume of crystalloid fluids.

**Suggested Data Collection Question:** Was persistent hypotension or new onset of hypotension present within one hour of when the target ordered volume of crystalloid fluids was completely infused?

**Format:**

**Length:** 1
**Type:** Alphanumeric
**Occurs:** 1

**Allowable Values:**

| | |
|---|---|
| 1 (Yes) | Persistent hypotension or new onset of hypotension was present within one hour of when the target ordered volume of crystalloid fluids was completely infused. |
| 2 (No or UTD) | Persistent hypotension or new onset of hypotension was not present within one hour of when the target ordered volume of crystalloid fluids was completely infused or unable to determine. |
| 3 (No) | The patient was not assessed for persistent hypotension or new onset of hypotension within one hour of when the target ordered volume of crystalloid fluids was completely infused. |
| 4 (Not applicable) | Crystalloid fluids were administered but at a volume less than the target ordered volume. |

**Notes for Abstraction:**

- Persistent hypotension or new onset of hypotension can be determined by the following criteria:
  - In the one hour following conclusion of administration of the target ordered volume of crystalloid fluids, two consecutive documented blood pressure readings of either:
    - systolic blood pressure <90, or
    - mean arterial pressure (MAP) <65 or
    - a decrease in systolic blood pressure by >40 mm/Hg. Physician/APN/PA documentation must be present in the medical record indicating a >40 mmHg decrease in SBP has occurred and is related to infection, severe sepsis or septic shock and not to other causes.
- Use the time the hypotensive blood pressures were taken or obtained. If time taken or obtained is not available, use recorded or documented time. Do not abstract hypotensive values from narrative charting unless no other documentation reflects the time that the same hypotensive values were obtained.

- **Do not use** hypotensive BPs obtained in the operating room (OR), in interventional radiology, during active delivery, during cardiopulmonary arrest (code), or during procedural/conscious sedation**.** Select Value "2" if the patient is in one of these settings during the hour-long window to assess for *Persistent Hypotension.*
- **Do not use** hypotensive BPs documented from an orthostatic BP evaluation.
- **Do not use** hypotensive BPs documented during a dialysis procedure.
- Determining presence of persistent hypotension (low is SBP <90 or MAP <65):
  - If there were no blood pressures or only one blood pressure recorded within the hour:
    - Select Value "2" if the only blood pressure within the hour is normal.
    - Select Value "3" if there is no blood pressure or the only blood pressure within the hour is low.
  - If two or more blood pressures are documented, refer to the last two consecutive blood pressures within the hour:
    - Select Value "2" if there is a normal blood pressure followed by another normal blood pressure.
    - Select Value "2" if there is a normal blood pressure followed by a low blood pressure.
    - Select Value "2" if there is a low blood pressure followed by a normal blood pressure.
    - Select Value "1" if there is a low blood pressure followed by another low blood pressure.
- Select Value "1" if two or more blood pressures were documented within the time frame and *Persistent Hypotension* is unable to be determined and a vasopressor was administered.
  Example:
  One-hour time frame: 0800 to 0900
  Blood pressures documented at 0830 of 95/60 and at 0845 of 86/54
  MAR: Vasopressin started at 0930
  Select Value "1"
- Select Value "1" if only one blood pressure was documented within the time frame that was low and a vasopressor was administered.
  Example:
  One-hour time frame: 1300 to 1400
  Only blood pressure documented at 1425 was 87/53
  MAR: Levophed started at 1500
  Select Value "1"
- Select Value "2" if *Persistent Hypotension* presentation is more than six hours after the *Septic Shock Presentation Time.*
- For the following, physician/APN/PA documentation before or within 24 hours after *Severe Sepsis Presentation Time* **is required**.
  - If hypotension (SBP <90 mmHg or MAP <65 mmHg) is due to the following, **do not use it**. Do not make inferences. The abnormal value or reference to the abnormal value must be in the same documentation (i.e., same sentence or paragraph).
    - Normal for that patient
    - Is due to a chronic condition
    - Is due to a medication

**Example:**
"Hypotensive after pain meds."

- If a hypotensive value is due to an acute condition that has a non-infectious source/process**, do not use it** (refer to *Severe Sepsis Present* criterion "a" to determine if the source of the acute condition is an infection).
  **Examples**:
  - "BP 85/50 r/t blood loss" and "2 liters lost via GI bleed" (blood loss is the acute condition and GI bleed is the non-infectious source.
  - "Hypotension, related to dehydration, not sepsis" (dehydration is the acute condition and "not sepsis" is the non-infectious source).
- If a hypotensive value should not be used based on the above guidance, **do not use any** instances of less severe values.
  **Example**:
  "BP 80/50 secondary to Lasix" (systolic blood pressures ≥ 80 would not be used).
- If a hypotensive value is due to the following, **use** the criterion value**.**
  - Acute condition
    **Example:**
    Progress Note: "Hypotension r/t dehydration."
  - Acute on chronic condition
    **Example:**
    H&P: "Hypotension due to acute exacerbation of chronic heart failure."
  - Infection
    **Example:**
    Physician Note: "Sepsis, hypotensive."

- Physician/APN/PA documentation of a term that is defined by an SBP <90 mmHg or MAP <65 mmHg is acceptable in place of an abnormal value when the term is documented as normal for the patient, due to a chronic condition, due to a medication, or due to an acute condition that has a non-infectious source/process.
  **Example:**
  Hypotension (Systolic blood pressure <90 mmHg).
- Use the hypotensive value if there is conflicting documentation within the same physician/APN/PA documentation indicating hypotension is:
  - normal for the patient, due to a chronic condition or medication, or due to an acute condition with a non-infectious source
    And
  - due to or possibly due to an infection, severe sepsis, or septic shock
    **Example:**
    "Hypotensive post medications, possibly r/t sepsis."
    In this example, use the hypotensive readings.
- Abstract based on the latest piece of documentation within 24 hours after *Severe Sepsis Presentation Time* if there is conflicting information within **two or more separate** pieces of physician/APN/PA documentation indicating hypotension is:
  - normal for the patient due to a chronic condition or medication, or due to an acute condition with a non-infectious sourc
    And
  - due to or possibly due to an infection, severe sepsis, or septic shock

**Example:**
Note 1200: “Antihypertensive discontinued due to hypotension.”
Note 1600: “Sepsis with hypotension and SIRS criteria.”
- In this example, use the hypotensive readings.

- Abstract based on the documentation closest to the *Severe Sepsis Presentation Time* if there is conflicting information before the *Severe Sepsis Presentation Time* within two or more separate pieces of physician/APN/PA documentation indicating hypotension is:
  - normal for the patient, due to a chronic condition or medication, or due to an acute condition with a non-infectious source
    AND
  - due to or possibly due to an infection, severe sepsis, or septic shock
- Begin abstracting at the time the target ordered volume is completely infused; abstract for the time period that follows for the next hour only.
- Select Value “1” if persistent hypotension or new onset of hypotension was present.
- Select Value “2” if persistent hypotension or new onset of hypotension was not present.
- If the completion time of the target ordered volume is documented in the medical record use that time as the start of the one-hour window to determine the presence of persistent hypotension or new onset of hypotension.
- If the completion time of the target ordered volume is not documented in the medical record, use the following criteria to determine the completion time.
  - If the order includes a time frame over which to infuse the crystalloid fluids, identify the time the fluids are started and add to that the duration identified in the order. This will represent the crystalloid fluids completion time.
    **Example:**
    An order for 1500 mL over one hour and the infusion is started at 10:00. Add one hour to the start time to determine infusion conclusion time of 11:00.
  - If the order includes a rate at which to infuse the crystalloid fluids, calculate the completion time based on the volume, the rate and the start time.
    **Example:**
    An order for 1500 mL at 1000 mL/hour and the infusion is started at 10:00. The time over which 1500 mL is infused is the volume divided by the rate. 1500 mL divided by 1000 mL/hour is 1.5 hours. Add 1.5 hours to the start time to determine infusion conclusion time of 11:30.
  - If the physician/APN/PA orders more than 30 mL/kg, 30 mL/kg will have been infused before the entire volume ordered is infused.
    **Example:**
    An order for 3000 mL over two hours, infusion started at 10:00. Patient weighs 80 kg, 30 mL/kg target volume is 2400 mL (as determined for *Crystalloid Fluid Administration*).
    1. Divide the total volume ordered by the infusion duration in minutes to determine the infusion rate (3000 mL/120 minutes = 25 mL/minute).
    2. Divide the 30 mL/kg target volume by the infusion rate to determine the number of minutes it takes to infuse the target volume (2400 mL/25 mL/min = 96 minutes).

3. Add the number of minutes to infuse the target volume to the infusion start time to determine the time 30 mL/kg was completed (10:00 + 96 minutes = 11:36).

- o If the order states “bolus” or “wide open” and does not include an infusion rate or time over which to infuse the fluids, an infusion rate recorded in the medical record by a nurse or fluid bolus completed time or end time can be used to determine when the target ordered volume was completed.

- To determine the presence of *Persistent Hypotension,* you may use documentation in pre-hospital records (e.g., ambulance records, nursing home records) that are considered part of the medical record.
- If there is physician/APN/PA or nursing documentation indicating a hypotensive reading is erroneous or questioning the validity of a hypotensive reading within 24 hours of the *Severe Sepsis Presentation Time*, **do not use** that reading for determining the presence of persistent or new onset of hypotension.

**Suggested Data Sources:**

- Entire ED record
- Nurses notes
- Physician/APN/PA notes
- Vital signs record or flow sheet

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Physician 1*

**Collected For CMS:** All Records (Optional Element)

**Definition:** The first physician identifier

**Suggested Data Collection Question:** What is the first physician identifier?

**Format:**

**Length:** 50
**Type:** Character
**Occurs:** 1

**Allowable Values:**

Enter the first physician identifier, as directed. Up to 50 letters, numbers, and/or special characters can be entered.

**Note:** Only the following special characters will be allowed:
~ ! @ # $ % ^ * ( ) _ + { } | : ? ` - = [ ] \ ; ‘ . , / and space

**Notes for Abstraction:**
This data element may be used to capture physician information that might be helpful in internal analysis. This information is for internal analysis only and will not be shared with any external parties in any data output.

**Suggested Data Sources:**
None

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Physician 2*

**Collected For CMS:** All Records (Optional Element)

**Definition:** A second physician identifier

**Suggested Data Collection Question:** What is the second physician identifier?

**Format:**

**Length:** 50
**Type:** Character
**Occurs:** 1

**Allowable Values:**

Enter the second physician identifier, as directed. Up to 50 letters, numbers, and/or special characters can be entered.

**Note:** Only the following special characters will be allowed:
~ ! @ # $ % ^ * ( ) _ + { } | : ? ` - = [ ] \ ; ‘ . , / and space

**Notes for Abstraction:**
This data element may be used to capture physician information that might be helpful in internal analysis. This information is for internal analysis only and will not be shared with any external parties in any data output.

**Suggested Data Sources:**
None

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Postal Code*

**Collected For CMS:** All Records

**Definition:** The postal code of the patient's residence. For the United States zip codes the hyphen is implied. If the patient is determined to not have a permanent residence, then the patient is considered homeless.

**Suggested Data Collection Question:** What is the postal code of the patient's residence?

**Format:**

**Length:** 9
**Type:** Character
**Occurs:** 1

**Allowable Values:**

Any valid five or nine digit postal code or "HOMELESS" if the patient is determined not to have a permanent residence. If the patient is not a resident of the United States, use "NON-US."

**Notes for Abstraction:**
If the postal code of the patient is unable to be determined from medical record documentation, enter the provider's postal code.

**Suggested Data Sources:**

- Face sheet
- UB-04

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Race*

**Collected For CMS:** All Records

**Definition:** Documentation of the patient's race.

**Suggested Data Collection Question:** What is the patient's race?

**Format:**

**Length:** 1
**Type:** Character
**Occurs:** 1

**Allowable Values:**

Select one:

1. **White:** Patient's race is White, or the patient has origins in Europe, the Middle East, or North Africa.

2. **Black or African American:** Patient's race is Black or African American.

3. **American Indian or Alaska Native:** Patient's race is American Indian/Alaska Native.

4. **Asian or Pacific Islander:** Patient's race is Asian/Pacific Islander.

5. **RETIRED VALUE** (effective 01-01-2021).

6. **RETIRED VALUE** (effective 07-01-05 discharges)

7. **UTD:** Unable to determine the patient's race or not stated (e.g., not documented, conflicting documentation or patient unwilling to provide).

**Notes for Abstraction:**

- The data element *Hispanic Ethnicity* is required in addition to this data element.
- If documentation indicates the patient has more than one race (e.g., Black-White, Indian-White), select the first listed race.
- Although the terms "Hispanic," "Latino," and "Spanish" are descriptions of the patient's ethnicity, it is not uncommon to find them referenced as race. If the patient's race is documented only as Hispanic, Latino, or Spanish select "White." If the race is documented as mixed Hispanic/Latino with another race, use whatever race is given (e.g., Black-Hispanic – select "Black"). Other terms for Hispanic, Latino, or Spanish include Chicano, Cuban, H (for Hispanic), Latin American, Latina, Mexican, Mexican-American, Puerto Rican, and South or Central American.

**Suggested Data Sources:**

- Emergency Department record
- Face sheet
- History and physical

- Nursing admission assessment
- Progress notes

**Inclusion Guidelines for Abstraction:**
**Black or African American:** A person having origins in any of the black racial groups of Africa(e.g., Jamaican, Haitian, Nigerian, Ethiopian, Somali, Negro).

**American Indian or Alaska Native:** A person having origins in any of the original peoples of North America (including Central America) and who maintains tribal affiliation or community attachment (e.g., any recognized tribal entity in North and Central America, Native American).

**Asian or Pacific Islander:** A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, the Pacific Islands, Native Hawaiin, Guam, Samoa, Thailand, and Vietnam.

**White:** A person having origins in any of the original peoples of Europe, the Middle East, or North Africa (e.g., German, Irish, English, Italian, Lebanese, Egyption).

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Repeat Lactate Level Collection*

**Collected For CMS:** SEP-1

**Definition:** Documentation of obtaining a repeat lactate level within the specified time window.

**Suggested Data Collection Question:** Was a repeat lactate level drawn within the specified time window?

**Format:**

**Length:** 1
**Type:** Alphanumeric
**Occurs:** 1

**Allowable Values:**

1 (Yes) A repeat lactate level was drawn within the specified time window.

2 (No) A repeat lactate level was not drawn within the specified time window, or unable to determine.

**Notes for Abstraction:**

- A repeat lactate level is the next lactate level drawn after the initial lactate level if the initial lactate is elevated (>2.0 mmol/L). The specified time window for the repeat lactate collection begins after the *Initial Lactate Level Collection Time* and ends six hours after the *Severe Sepsis Presentation Time.*
- If a repeat lactate level was drawn but not in the time window beginning after the *Initial Lactate Level Collection Time* and ending six hours after the *Severe Sepsis Presentation Time,* choose Value "2."
- Do not use documentation such as "Labs Drawn" as it is not specific for lactate level. Similarly, do not use a physician order for lactate levels as it does not specify that lactate level was drawn, unless there is a notation next to the order that it was drawn or collected.
- If there is no documentation indicating a repeat lactate was drawn or collected, it is acceptable to use supporting documentation indicating that a repeat lactate was drawn (e.g., lactate sent to lab, lactate received, lactate result). If there are multiple instances of supporting documentation, use the earliest.
- If a repeat lactate level is ordered and there is an attempt to collect it, but the attempt results in failure to collect the specimen (too dehydrated to get a vein) or the specimen was contaminated during or after the draw, select Value "1."

**Suggested Data Sources:**

- Laboratory Reports
- Nursing Notes
- Physician/APN/PA notes or orders

**Inclusion Guidelines for Abstraction:**

- Lactate drawn
- Lactate level collected

- Lactic acid drawn

**Exclusion Guidelines for Abstraction:**
Labs drawn

**Data Element Name:** *Repeat Lactate Level Date*

**Collected For CMS:** SEP-1

**Definition:** The date on which the repeat lactate level was drawn.

**Suggested Data Collection Question:** What was the earliest date on which the repeat lactate level was drawn?

**Format:**

**Length:** 10 – MM-DD-YYYY (includes dashes) or UTD
**Type:** Date
**Occurs:** 1

**Allowable Values:**

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (20xx)
UTD = Unable to Determine

**Notes for Abstraction:**

- A repeat lactate level is the next lactate level drawn after the initial lactate level if the initial lactate is elevated (>2.0 mmol/L). The specified time window for the repeat lactate collection begins after the *Initial Lactate Level Collection Time* and ends six hours after the *Severe Sepsis Presentation Time.*
- Do not use documentation such as “Labs Drawn” as it is not specific for lactate level. Similarly, do not use a physician order for lactate levels as it does not specify that lactate level was drawn, unless there is a notation next to the order that it was drawn or collected and there is a date noted.
- If there is no documentation indicating a repeat lactate was drawn or collected, it is acceptable to use supporting documentation indicating that a repeat lactate was drawn (e.g., lactate sent to lab, lactate received, lactate result). If there are multiple instances of supporting documentation, use the earliest.
- If a repeat lactate level is ordered and there is an attempt to collect it, but the attempt results in failure to collect the specimen (too dehydrated to get a vein) or the specimen was contaminated during or after the draw, enter the date of the attempted lactate collection.

**Suggested Data Sources:**

- Laboratory Reports
- Nursing Notes
- Physician/APN/PA notes or orders

**Inclusion Guidelines for Abstraction:**

- Lactate level collected
- Lactate level drawn
- Lactic acid drawn

**Exclusion Guidelines for Abstraction:**

- Labs drawn
- Labs reported

**Data Element Name:** *Repeat Lactate Level Time*

**Collected For CMS:** SEP-1

**Definition:** The earliest time at which a repeat lactate level was drawn.

**Suggested Data Collection Question:** What was the earliest time at which a repeat lactate level was drawn?

**Format:**

**Length:** 5 - HH:MM (with or without colon) or UTD
**Type:** Time
**Occurs:** 1

**Allowable Values:**

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unable to Determine

Time must be recorded in military time format.
With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|---|---|
| Midnight – 00:00 | Noon – 12:00 |
| 5:31 am – 05:31 | 5:31 pm – 17:31 |
| 11:59 am – 11:59 | 11:59 pm – 23:59 |

**Notes for Abstraction:**

- A repeat lactate level is the next lactate level drawn after the initial lactate level if the initial lactate is elevated (>2.0 mmol/L). The specified time window for the repeat lactate collection begins after the *Initial Lactate Level Collection Time* and ends six hours after the *Severe Sepsis Presentation Time.*
- Do not use documentation such as “Labs Drawn” as it is not specific for lactate level. Similarly, do not use a physician order for lactate levels as it does not specify that lactate level was drawn, unless there is a notation next to the order that it was drawn or collected and there is a time noted.
- If there is no documentation indicating a repeat lactate was drawn or collected, it is acceptable to use supporting documentation indicating that a repeat lactate was drawn (e.g., lactate sent to lab, lactate received, lactate result). If there are multiple instances of supporting documentation, use the earliest.
- If a repeat lactate level is ordered and there is an attempt to collect it, but the attempt results in failure to collect the specimen (too dehydrated to get a vein) or the specimen was contaminated during or after the draw, enter the time of the attempted lactate collection.

**Suggested Data Sources:**

- Laboratory Reports
- Nursing Notes
- Physician/APN/PA notes or orders

**Inclusion Guidelines for Abstraction:**

- Lactate level collected
- Lactate level drawn
- Lactic acid drawn

**Exclusion Guidelines for Abstraction:**

- Labs drawn
- Labs reported

**Data Element Name:** *Repeat Volume Status and Tissue Perfusion Assessment Performed*

**Collected For CMS:** SEP-1

**Definition:** Documentation indicating that a repeat volume status and tissue perfusion assessment was performed to assess the patient's response to the administration of crystalloid fluids.

**Suggested Data Collection Question:** Was a repeat volume status and tissue perfusion assessment documented in the appropriate time window?

**Format:**

**Length:** 1
**Type:** Alphanumeric
**Occurs:** 1

**Allowable Values:**

1 (Yes) Repeat Volume Status and Tissue Perfusion Assessment was documented in the appropriate time window.

2 (No) Repeat Volume Status and Tissue Perfusion Assessment was not documented in the appropriate time window, or unable to be determined.

**Notes for Abstraction:**

- Start abstracting at the crystalloid fluid administration date and time and stop abstracting six hours after the presentation of septic shock date and time. This is the appropriate time window.
- A repeat volume status and tissue perfusion assessment may consist of any one of the following three:
  - Physician/APN/PA documentation attesting to performing or completing a physical examination, perfusion (re-perfusion) assessment, sepsis (severe sepsis or septic shock) focused exam, or systems review.
    **Examples** of Physician/APN/PA documentation that is acceptable:
    - "I did the Sepsis reassessment"
    - Flowsheet question: "Sepsis focused exam performed?" and selection of "Yes"
    - "Review of systems completed"
    - "I have reassessed tissue perfusion after bolus given."
    - "Sepsis re-evaluation was performed"
    - "I have reassessed the patient's hemodynamic status"
  - Physician/APN/PA documentation indicating they performed or completed a review of at least five of the following eight parameters. Reference to the parameters must be made in physician/APN/PA documentation. Physician/APN/PA documentation does not need to reference all parameters within the same note.

- Arterial Oxygen Saturation
  - Must be documented as from an arterial source, referenced as arterial oxygen saturation, oxygen saturation, pulse oximetry, POx, or using the abbreviation SaO2 (arterial oxygen saturation) or SpO2 (oxygen saturation measured by pulse oximetry).
- Capillary Refill
  - Minimally includes documentation of a capillary refill test. (e.g., capillary refill three seconds, cap refill normal).
- Cardiopulmonary Assessment
  - Minimally includes description of heart rate and rhythm, and results of auscultation of lungs. (e.g., heart normal rate & rhythm and lungs clear to auscultation, patient tachycardic and lungs decreased in bases)
- Peripheral Pulses
  - Minimally includes documentation of presence or lack of presence of peripheral pulses (e.g., pulses present bilaterally, peripheral pulses faint, unable to palpate radial pulses).
- Shock Index (SI)
  - A shock index value is documented in the medical record, or there is physician/APN/PA documentation that they have reviewed the shock index.
- Skin Color or Condition
  - Minimally includes either a description of the skin color or condition (e.g., skin cool and clammy, peripheral cyanosis, skin pink and warm, patient appears pale, skin normal, skin normal for ethnicity).
- Urine Output (UO)
  - Physician/APN/PA documentation must reference urine output (e.g., increased or decreased urine output, oliguria, anuria, urine concentration, urine color).
  - Documentation of the urine output volume is not required.
- Vital Signs
  - Minimally includes documentation referencing heart rate (HR) respiratory rate (RR), blood pressure (BP) and temperature (temp or t).
  - Values for these vital signs are not required.

o Documentation demonstrating one of the following was measured or performed. This documentation can be met by physician/APN/PA or non-physician/APN/PA documentation of performance of the test, a result or value. Physician/APN/PA attestation to having reviewed the test is acceptable.
- Central Venous Pressure (CVP).
- Central Venous Oxygen Saturation (ScvO2 or SvO2).
  - If documentation indicates the oxygen saturation is not from a central line source such as a peripheral venous blood gas do not use it.
- Echocardiogram (Cardiac echo or cardiac ultrasound).

        - An order for an echocardiogram is not sufficient.
    - Fluid Challenge or Passive Leg Raise.
        - Documentation must explicitly indicate a “fluid challenge” or “passive leg raise” or “leg raise” was performed.
- If there are no repeat volume status and tissue perfusion assessment documented within the appropriate time window, choose Value “2.”

**Suggested Data Sources:**
- Cardiovascular ultrasound or echocardiogram report
- Consultation notes
- Critical Care flow sheet
- Emergency Department record
- History and physical
- Nurses notes
- Physician/APN/PA notes
- Procedure notes
- Respiratory Therapy notes or flow sheet
- Vital signs flow sheet

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Repeat Volume Status and Tissue Perfusion Assessment Performed Date*

**Collected For CMS:** SEP-1

**Definition:** Documentation of the date indicating a repeat volume status and tissue perfusion assessment was performed.

**Suggested Data Collection Question:** On what date was a repeat volume status and tissue perfusion assessment documented?

**Format:**

**Length:** 10 – MM-DD-YYYY (includes dashes) or UTD
**Type:** Date
**Occurs:** 1

**Allowable Values:**

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (20xx)
UTD = Unable to Determine

**Notes for Abstraction:**

- Documentation must occur or reflect the assessment was performed between Crystalloid Fluid Administration Date, Crystalloid Fluid Administration Time and six hours after Septic Shock Presentation Date, Septic Shock Presentation Time.
- Documentation of what constitutes or is acceptable for a repeat volume status and tissue perfusion assessment is defined in the *Repeat Volume Status and Tissue Perfusion Assessment Performed* data element.
- If there are multiple repeat volume status and tissue perfusion assessments performed, abstract the date of the earliest assessment documented within the appropriate time window.
- If the repeat volume status and tissue perfusion assessment is in a note without a specific date documented within the note, use the date the note was started or opened.

**Suggested Data Sources:**

- Cardiovascular ultrasound or echocardiogram report
- Consultation notes
- Critical Care flow sheet
- Emergency Department record
- History and physical
- Nurses notes
- Physician/APN/PA notes
- Procedure notes
- Respiratory Therapy notes or flow sheet
- Vital signs flow sheet

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Repeat Volume Status and Tissue Perfusion Assessment Performed Time*

**Collected For CMS:** SEP-1

**Definition:** Documentation of the time indicating a repeat volume status and tissue perfusion assessment was performed.

**Suggested Data Collection Question:** At what time was a repeat volume status and tissue perfusion assessment documented?

**Format:**

**Length:** 5 - HH-MM (with or without colon) or UTD
**Type:** Time
**Occurs:** 1

**Allowable Values:**

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unable to Determine

Time must be recorded in military time format.
With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|---|---|
| Midnight – 00:00 | Noon – 12:00 |
| 5:31 am – 05:31 | 5:31 pm – 17:31 |
| 11:59 am – 11:59 | 11:59 pm – 23:59 |

**Notes for Abstraction:**

- Documentation must occur or reflect the assessment was performed between Crystalloid Fluid Administration Date, Crystalloid Fluid Administration Time and six hours after Septic Shock Presentation Date, Septic Shock Presentation Time.
- Documentation of what constitutes or is acceptable for a repeat volume status and tissue perfusion assessment is defined in the *Repeat Volume Status and Tissue Perfusion Assessment Performed* data element.
- If there are multiple repeat volume status and tissue perfusion assessments performed, abstract the time of the earliest assessment documented within the appropriate time window.
- If the repeat volume status and tissue perfusion assessment is in a note without a specific time documented within the note, use the time the note was started or opened.

**Suggested Data Sources:**

- Cardiovascular ultrasound or echocardiogram report
- Consultation notes
- Critical Care flow sheet
- Emergency Department record
- History and physical
- Nurses notes
- Physician/APN/PA notes
- Procedure notes
- Respiratory Therapy notes or flow sheet
- Vital signs flow sheet

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Sample*

**Collected For CMS:** All Records

Notes:
Required for transmission of individual case data to the CMS Clinical Data Warehouse. Refer to the Hospital Clinical Data XML File Layout in the Transmission section of this manual.

**Definition:** Indicates if the data being transmitted for a hospital has been sampled, or represent an entire population for the specified time period.

**Suggested Data Collection Question:** Does this case represent part of a sample?

**Format:**

**Length:** 1
**Type:** Alphanumeric
**Occurs:** 1

**Allowable Values:**

| | |
|---|---|
| Y (Yes) | The data represents part of a sample. |
| N (No) | The data is not part of a sample; this indicates the hospital is performing 100 percent of the discharges eligible for this measure set. |

**Notes for Abstraction:**
When Sampling Frequency equals “3” (No, the hospital is not sampling) or “4” (N/A, submission of patient level data is not required), then abstract Sample as “No.”

**Suggested Data Sources:**
Not Applicable

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Septic Shock Present*

**Collected For CMS:** SEP-1

**Definition:** Documentation of the presence of septic shock.

**Suggested Data Collection Question:** Is there documentation of the presence of septic shock?

**Format:**

**Length:** 1
**Type:** Alphanumeric
**Occurs:** 1

**Allowable Values:**

1 (Yes) Septic shock is present.

2 (No) Septic shock is not present, or unable to determine.

**Notes for Abstraction:**

- Use clinical criteria **OR** physician/APN/PA documentation of septic shock to identify the presence of septic shock.
- To establish the presence of septic shock by clinical criteria, one of following two criteria (a or b) must be met:
  a. *Severe Sepsis Present*
  AND
  *Persistent Hypotension* evidenced by:
    - Persistent hypotension or new onset of hypotension was present within one hour after the target ordered volume of crystalloid fluids was completely infused.

  b. *Severe Sepsis Present*
  AND
  Tissue hypoperfusion evidenced by
    - *Initial Lactate Level Result* is >=4 mmol/L
- For evaluation of blood pressure parameters to establish whether or not hypotension persists after crystalloid fluid administration, begin abstracting at the time that crystalloid fluid administration concludes (refer to the *Persistent Hypotension* data element); abstract for the time period that follows for the next hour only.
- **Do not use** hypotensive BPs obtained in the operating room (OR), in interventional radiology, during active delivery, during cardiopulmonary arrest (code), or during procedural/conscious sedation**.**
- **Do not use** hypotensive BPs documented from an orthostatic BP evaluation.
- **Do not use** hypotensive BPs documented during a dialysis procedure.
- Use the time the hypotensive blood pressures were taken or obtained. If time taken or obtained is not available, use recorded or documented time. Do not abstract hypotensive values from narrative charting unless no other documentation reflects the time that the same hypotensive values were obtained.
- For the following, physician/APN/PA documentation before or within 24 hours after *Severe Sepsis Presentation Time* **is required**.

- If hypotension (SBP <90 mmHg or MAP <65 mmHg) is due to the following, **do not use** it. Do not make inferences. The abnormal value or reference to the abnormal value must be in the same documentation (i.e., same sentence or paragraph).
  - Normal for that patient
  - Is due to a chronic condition
  - Is due to a medication

    **Example:**

    "Hypotensive after pain meds"
- If a hypotensive value is due to an acute condition that has a non-infectious source/process, **do not use it** (refer to *Severe Sepsis Present* criterion "a" to determine if the source of the acute condition is an infection).

  **Examples:**
  - "BP 85/50 r/t blood loss" and "2 liters lost via GI bleed" (blood loss is the acute condition and GI bleed is the non-infectious source).
  - "Hypotension, related to dehydration, not sepsis" (dehydration is the acute condition and "not sepsis" is the non-infectious source).
- If a hypotensive value should not be used based on the above guidance, **do not use any** instances of less severe values.

  **Example:**

  "BP 80/50 secondary to Lasix" (systolic blood pressures ≥ 80 would not be used).
- If a hypotensive value is due to the following, **use** the criterion value**.**
  - Acute condition

    **Example:**

    Progress Note: "Hypotension r/t dehydration."
  - Acute on chronic condition

    **Example:**

    H&P: "Hypotension due to acute exacerbation of chronic heart failure."
  - Infection

    **Example:**

    Physician Note: "Sepsis, hypotensive."

- Physician/APN/PA documentation of a term that is defined by a SBP <90 mmHg or MAP <65 mmHg is acceptable in place of an abnormal value when the term is documented as normal for the patient, due to a chronic condition, due to a medication, or due to an acute condition that has a non-infectious source/process.

  **Example:**

  Hypotension (Systolic blood pressure <90 mmHg)
- Use the criterion value if there is conflicting documentation within the same physician/APN/PA documentation indicating hypotension is:
  - normal for the patient due to a chronic condition or medication, or due to an acute condition with a non-infectious source

    AND
  - due to or possibly due to an infection, severe sepsis, or septic shock

    **Example:**

    "Hypotensive post medications, possibly r/t sepsis."

    In this example, use the hypotensive readings.

- Abstract based on the latest piece of documentation within 24 hours after *Severe Sepsis Presentation Time* if there is conflicting information within **two or more separate** pieces of physician/APN/PA documentation indicating hypotension is:
  - normal for the patient, due to a chronic condition or medication, or due to an acute condition with a non-infectious source
    AND
  - due to or possibly due to an infection, severe sepsis, or septic shock
    **Example:**
    - Note 1200: "Antihypertensive discontinued due to hypotension."
      Note 1600: "Sepsis with hypotension and SIRS criteria."
      In this example, use the hypotensive readings.
- Abstract based on the documentation closest to the *Severe Sepsis Presentation Time* if there is conflicting information before the *Severe Sepsis Presentation Time* within two or more separate pieces of physician/APN/PA documentation indicating hypotension is:
  - normal for the patient, due to a chronic condition or medication, or due to an acute condition with a non-infectious source
    AND
  - due to or possibly due to an infection, severe sepsis, or septic shock
- If within 24 hours after the *Severe Sepsis Presentation Time* there is physician/APN/PA or nursing documentation that a hypotensive reading is invalid, erroneous or questionable, **do not use** that reading when determining the presence of septic shock.
- Select Value "2" if septic shock presentation is more than six hours after *Severe Sepsis Presentation Time.*
- Select Value "2" if the only physician/APN/PA documentation of septic shock indicates that septic shock is due to a viral, fungal, or parasitic infection.
- Disregard documentation of septic shock in a discharge note, discharge summary, or documented after the time of discharge.
- Do not use the title or heading of an order set, protocol, checklist, alert, screening tool, etc. to meet septic shock.
- Use documentation of a criterion or septic shock ***within an*** order set, protocol, checklist, alert, screening tool, etc., if the following is true:
  - The documentation or value and recorded date and time is present and it is the earliest date and time recorded for the criterion.
- To determine the presence of septic shock, you may use documentation in pre-hospital records (e.g., ambulance records, nursing home records) that are considered part of the medical record.
- Select Value "2" if at the same time or within six hours after meeting clinical criteria or physician/APN/PA documentation of septic shock there is additional physician/APN/PA documentation indicating:
  - Patient is not septic
  - Patient does not have sepsis, severe sepsis, septic shock
  - Septic shock is due to a viral, fungal or parasitic infection
- For documentation of septic shock accompanied by a qualifier, use the table below. Use documentation containing a positive qualifier to meet criteria. Do not use documentation containing a negative qualifier to meet criteria. Do not use documentation containing both a positive and negative qualifier to meet criteria.

| Positive Qualifiers | Negative Qualifiers |
|---|---|
| Possible | Impending |
| Rule out (r/o) | Unlikely |
| Suspected | Doubt |
| Likely | Risk for |
| Probable | Ruled out |
| Differential Diagnosis | Evolving |
| Suspicious for | Questionable |
| Concern for | |

**Suggested Data Sources:**

- Any physician/APN/PA documentation
- Entire ED record
- Hourly output record
- Intake/Output record
- Laboratory results
- Nurses notes
- Vital signs record or flow sheet

**Inclusion Guidelines for Abstraction:**

- Septic shock
- Severe sepsis with shock

**Exclusion Guidelines for Abstraction:**

- Bacteremia
- Septicemia
- Shock (not referenced as related to severe sepsis or septic shock)

**Data Element Name:** *Septic Shock Presentation Date*

**Collected For CMS:** SEP-1

**Definition:** The earliest date on which the final criterion was met to establish the presence of septic shock.

**Suggested Data Collection Question:** What was the date on which the last criterion was met to establish the presence of septic shock?

**Format:**

**Length:** 10 – MM-DD-YYYY (includes dashes) or UTD
**Type:** Date
**Occurs:** 1

**Allowable Values:**

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (20xx)
UTD = Unable to Determine

**Notes for Abstraction:**

- Use the earliest date on which the final criterion for septic shock was noted (see *Septic Shock Present* data element for criteria list) or the earliest date the physician/APN/PA documented septic shock.
- Septic shock identified by Severe Sepsis Present and Persistent Hypotension (Septic Shock Present criteria a):
  - Use the later date of either severe sepsis presentation or persistent hypotension.
  - For persistent hypotension, use the date of the last consecutive blood pressure reading that identifies the presence of persistent hypotension.
    - If persistent hypotension was identified by either of the following, use the date of the latest hypotensive reading in the hour for the date of persistent hypotension.
      - Two or more blood pressures were documented within the time frame and persistent hypotension is unable to be determined and a vasopressor was administered.
      - Only one blood pressure was documented within the time frame that was hypotensive and a vasopressor was administered.
- Septic shock identified by severe sepsis present and initial lactate >=4 (*Septic Shock Present* criteria b):
  - Use the later date of either severe sepsis presentation or the initial lactate level result.
  - To determine the date of the *Initial Lactate Level Result* for *Septic Shock Present* criteria, use the following sources in priority order.
    1. Primary source: Lactate result date from lab
  - Supporting sources in priority order if primary source not available:

1. Date within a narrative note that is directly associated with the lactate result
2. Date the lactate result is documented in a non-narrative location (e.g., sepsis flowsheet)
3. *Initial Lactate Level Collection Date*
4. Physician/APN/PA or nursing narrative note open date

- For patients with multiple septic shock presentation dates, only abstract the earliest presentation date.
- If septic shock is documented multiple times within the same note, use the earliest specified date.
- Use the earliest documented arrival date for patients who enter the Emergency Department with the following:
  - Septic shock clinical criteria met in pre-hospital records
  - Physician/APN/PA documentation of septic shock in pre-hospital records
  - Physician/APN/PA documentation that septic shock was present on arrival
- Use the earliest documented date patient arrives to floor or unit for patients who are direct hospital admits and one of the following is present:
  - Septic shock clinical criteria met in pre-hospital records
  - Physician/APN/PA documentation of septic shock in pre-hospital records
  - Earliest documentation is in a physician/APN/PA note that states septic shock was present on admission
- If physician/APN/PA documentation states septic shock was present on admission or indicates the patient was admitted with septic shock, use the earliest date of the following for the physician/APN/PA documentation of septic shock:
  - Physician/APN/PA note
  - Admit order
  - Disposition to inpatient
  - Arrival to floor or unit
- If septic shock is in a physician/APN/PA note without a specific date documented within the note or documented using the acronym POA, the following apply:
  - If it is the only documentation of septic shock in the note, use the date the note was started or opened.
    - If a timestamp reflecting the note opened or started date is unavailable, use the following sources in priority order.
      1. Provider Patient Care Initiated date (e.g. Seen date, Contact date, etc.)
      2. Scribe date
      3. Earliest date at the beginning of the note reflecting when the note was opened or started.

**Suggested Data Sources:**

- Any physician/APN/PA documentation
- Entire ED record
- Hourly output record
- Intake/Output record
- Laboratory results
- Nurses notes
- Vital signs record or flow sheet

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Septic Shock Presentation Time*

**Collected For CMS:** SEP-1

**Definition:** The earliest time at which the final criterion was met to establish the presence of septic shock.

**Suggested Data Collection Question:** What was the time at which the last criterion was met to establish the presence of septic shock?

**Format:**

**Length:** 5 - HH:MM (with or without colon) or UTD
**Type:** Time
**Occurs:** 1

**Allowable Values:**

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unable to Determine

Time must be recorded in military time format.
With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|---|---|
| Midnight – 00:00 | Noon – 12:00 |
| 5:31 am – 05:31 | 5:31 pm – 17:31 |
| 11:59 am – 11:59 | 11:59 pm – 23:59 |

**Notes for Abstraction:**

- Use the earliest time at which the final criterion for septic shock was noted (see *Septic Shock Present* data element for criteria list) or the earliest time the physician/APN/PA documented septic shock.
- Septic shock identified by Severe Sepsis Present and Persistent Hypotension (Septic Shock Present criteria a):
  - Use the later time of either severe sepsis presentation or persistent hypotension.
  - For persistent hypotension, use the time of the last consecutive blood pressure reading that identifies the presence of persistent hypotension.
    - If persistent hypotension was identified by either of the following, use the time of the latest hypotensive reading in the hour for the time of persistent hypotension.
      - Two or more blood pressures were documented within the time frame and persistent hypotension is unable to be determined and a vasopressor was administered.

        - Only one blood pressure was documented within the time frame that was hypotensive and a vasopressor was administered.
- Septic shock identified by severe sepsis present and initial lactate >=4 (*Septic Shock Present* criteria b):
    - Use the later time of either severe sepsis presentation or the initial lactate level result.
    - To determine the time of the *Initial Lactate Level Result* for *Septic Shock Present* criteria, use the following sources in priority order.
        1. Primary source: Lactate result time from lab
    - Supporting sources in priority order if primary source not available:
        1. Time within a narrative note that is directly associated with the lactate result
        2. Time the lactate result is documented in a non-narrative location (e.g., sepsis flowsheet)
        3. *Initial Lactate Level Collection Time*
        4. Physician/APN/PA or nursing narrative note open time
- For patients with multiple septic shock presentation times, only abstract the earliest presentation time.
- If septic shock is documented multiple times within the same note, use the earliest specified time.
- Use the earliest documented arrival time for patients who enter the Emergency Department with the following:
    - Septic shock clinical criteria met in pre-hospital records
    - Physician/APN/PA documentation of septic shock in pre-hospital records
    - Physician/APN/PA documentation that septic shock was present on arrival
- Use the earliest documented time patient arrives to floor or unit for patients who are direct hospital admits and one of the following is present:
    - Septic shock clinical criteria met in pre-hospital records
    - Physician/APN/PA documentation of septic shock in pre-hospital records
    - Earliest documentation is in a physician/APN/PA note that states septic shock was present on admission
- If physician/APN/PA documentation states septic shock was present on admission or indicates the patient was admitted with septic shock, use the earliest time of the following for the physician/APN/PA documentation of septic shock:
    - Physician/APN/PA note
    - Admit order
    - Disposition to inpatient
    - Arrival to floor or unit
- If septic shock is in a physician/APN/PA note without a specific time documented within the note or documented using the acronym POA, the following applies:
    - If it is the only documentation of Septic Shock in the note, use the time the note was started or opened.
        - If a timestamp reflecting the note opened or started time is unavailable, use the following sources in priority order.
            1. Provider Patient Care Initiated Time (e.g. Seen Time, Contact Time, etc.)
            2. Scribe Time

3. Earliest time at the beginning of the note reflecting when the note was opened or started.

**Suggested Data Sources:**
- Any physician/APN/PA documentation
- Entire ED record
- Hourly output record
- Intake/Output record
- Laboratory results
- Nurses notes
- Vital signs record or flow sheet

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Severe Sepsis Present*

**Collected For CMS:** SEP-1

**Definition:** Documentation of the presence of severe sepsis.

**Suggested Data Collection Question:** Was severe sepsis present?

**Format:**

**Length:** 1
**Type:** Alphanumeric
**Occurs:** 1

**Allowable Values:**

1 (Yes) Severe sepsis was present.

2 (No) Severe sepsis was not present, or unable to determine.

**Notes for Abstraction:**

- Use clinical criteria or physician/APN/PA documentation of severe sepsis to identify the presence of severe sepsis.
- To establish the presence of severe sepsis by clinical criteria, all three clinical criteria (a, b, and c) must **be met within six hours of each other.** The three clinical criteria do not need to be documented in any particular order.
  a. Documentation of an infection.
    - Physician/APN/PA or nursing documentation referencing the presence of an infection is acceptable.
    - Physician/APN/PA, nursing, or pharmacist documentation indicating a patient is receiving an IV or IO antibiotic for an infection and that antibiotic is documented as administered within six hours of criteria b and c is acceptable.
      **Example:**
      Levaquin is documented in MAR for pneumonia and nursing documentation within six hours of criteria b and c indicates the antibiotic was given.
    - If documentation of an infection within a physician/APN/PA, nursing, or pharmacist note does not have a specific date and time or is documented using the acronym POA, use the date and time the note was started or opened.
      o If a timestamp reflecting the note opened or started time is unavailable, use the following sources in priority order.
        1. Provider Patient Care Initiated Time (e.g. Seen Time, Contact Time, etc.)
        2. Scribe Time
        3. Earliest time at the beginning of the note reflecting when the note was opened or started.

- If the note states an infection was present on arrival, use the earliest documented arrival date and time.
- If an infection is documented as present on admission, use the earliest documented date and time that the patient arrives to the floor or unit for admission.
- If physician/APN/PA documentation within six hours following the initial documentation of the infection indicates that the infection is not present, **do not use** documentation of that infection made prior to the documentation indicating the infection is not present.

  **Examples:**
  - ED physician/APN/PA documented rule out UTI and pneumonia at 05:00. At 10:00, hospitalist documented no infection present. Disregard ED physician/APN/PA documentation of rule out UTI and pneumonia.
  - ED physician/APN/PA documents suspected UTI and pneumonia at 09:00. At 12:30 infectious disease APN documents no UTI. Disregard the initial documentation of suspected UTI. Documentation of pneumonia is still valid to use for an infection.
  - ED APN documents "sepsis" at 0800. PA notes "does not meet sepsis criteria" at 0930. Disregard APN documentation of "sepsis."
  - MD notes “pneumonia” at 1200. At 1500, MD notes "no clear source of infection." Disregard the documentation of pneumonia.
- Documentation of an infection in an active problem list is acceptable if there is information in the medical record supporting the infection is current.
- If a condition documented in the medical record does not include the word “infection,” or is not in the Inclusion Guidelines for Abstraction infection list, you may consult other medical resources (such as a medical dictionary) to identify whether or not the condition is an infection or is caused by an infection.
  i. If another medical resource indicates the condition is an infection or is caused by an infection, the condition can meet criterion a.
  ii. If another medical resource indicates the condition is NOT an infection and NOT caused by an infection, do not use the condition to meet criterion a.
  iii. If another medical resource indicates the condition may or may not be an infection or may or may not be caused by an infection, additional documentation in the medical record must support that the condition is an infection (e.g., antibiotic ordered for the condition) to meet criterion a.
- An antibiotic ordered for a condition that may be inflammation or a sign or symptom of an infection can be considered documentation of an infection (e.g., ceftriaxone ordered for colitis, Zosyn 3.375 g IV q6hr for cough).

- Do not use documentation of viral, fungal, or parasitic infections.
- If physician/APN/PA documentation within six hours following the initial documentation of an infection indicates that the infection is due to a viral, fungal, or parasitic source, do not use the initial documentation of the infection.
- Select Value "2" if there is physician/APN/PA documentation that coronavirus or COVID-19 is suspected or present.

b. Two or more manifestations of systemic infection according to the Systemic Inflammatory Response Syndrome (SIRS) criteria, which are:
- Temperature >38.3 C or <36.0 C (>100.9 F or <96.8 F)
- Heart rate (pulse) >90
- Respiration >20 per minute
- White blood cell count >12,000 or <4,000 or >10% bands

c. Organ dysfunction, evidenced by any one of the following:
- Systolic blood pressure (SBP) <90 mmHg or mean arterial pressure <65 mmHg.
  - **Do not use** hypotensive BPs documented from an orthostatic BP evaluation.
  - **Do not use** hypotensive BPs documented during a dialysis procedure.
- Systolic blood pressure decrease of more than 40 mmHg.
  - Physician/APN/PA documentation must indicate a >40 mmHg decrease in SBP has occurred and is related to infection, severe sepsis or septic shock and not to other causes.
- Acute respiratory failure as evidenced by a new need for invasive or non-invasive mechanical ventilation.
  - Documentation the patient is on mechanical ventilation.
  - Invasive mechanical ventilation requires an endotracheal or tracheostomy tube. Non-invasive mechanical ventilation may be referred to as BiPAP or CPAP.
  - New need for mechanical ventilation indicates that either the patient had a new need for mechanical ventilation or the patient had an increased need from intermittent to continuous mechanical ventilation.
  - Use the time when mechanical ventilation was started or the time when the mechanical ventilation changed from intermittent to continuous.
- Creatinine >2.0
  - If there is physician/APN/PA documentation before or within 24 hours following presentation of severe sepsis states that the patient has end stage renal disease (ESRD) and is on hemodialysis or peritoneal dialysis, **do not use** any reported creatinine levels as signs of organ dysfunction. The same physician/APN/PA documentation does not need to include both ESRD (on hemodialysis or peritoneal dialysis) and reference the creatinine levels.
  - If there is physician/APN/PA documentation before or within 24 hours following presentation of severe sepsis of

chronic renal disease (e.g., CKD I, II, or III, or "chronic renal insufficiency") and the baseline creatinine is documented, use creatinine values elevated >0.5 above baseline as organ dysfunction (e.g., baseline 2.30, creatinine now 2.81).

- Urine output <0.5 mL/kg/hour for two consecutive hours
  - Only use urine output as a sign of organ dysfunction if documentation clearly indicates that urine output is being monitored hourly.
- Total Bilirubin >2 mg/dL (34.2 mmol/L)
- Platelet count <100,000
- INR >1.5 or aPTT >60 sec
  - If the medical record documentation before an elevated INR or aPTT value shows the patient received an anticoagulant medication in Appendix C Table 5.3, **do not use** the elevated INR or aPTT level as organ dysfunction. Physician/APN/PA documentation is not required. Use the elevated INR or aPTT level if the patient only received the following:
    Heparin flushes
- Lactate >2 mmol/L (18.0 mg/dL)

- For the following, physician/APN/PA documentation before or within 24 hours after *Severe Sepsis Presentation Time* **is required**.
  - If the SIRS criteria or a sign of organ dysfunction is due to the following, **do not use it**. Do not make inferences. The abnormal value or reference to the abnormal value must be in the same documentation (i.e., same sentence or paragraph).
    - Normal for that patient
    - Is due to a chronic condition
    - Is due to a medication

      **Examples:**

      H&P: Assessment Section
      Renal Assessment
      History of CKD
      Creatinine 3.0
      HD daily
      - Do not use value since the creatinine and the chronic condition are in the same documentation and section of the H&P.

      "Hypotensive after pain meds"
      - Do not use the hypotensive readings since the medication is in the same sentence.
  - If SIRS criteria or a sign of organ dysfunction is due to an acute condition that has a non-infectious source/process, **do not use it** (refer to *Severe Sepsis Present* criterion "a" to determine if the source of the acute condition is an infection).

    **Examples:**
    - "Lactate 4.3 r/t seizure" "Seizure post brain injury" (seizure is the acute condition and brain injury is the non-infectious source).
    - "AKI, not due to infection, creatinine 3.8." (AKI is the acute condition and "not due to infection" is the non-infectious source).

        - APN Note: “Elevated Cr secondary to dehydration post DKA.”
          Physician Note: “DKA likely due to patient non-compliance with meds.”
          (dehydration is the acute condition and DKA is the non-infectious source because it is due to medication non-compliance).
    - If SIRS criteria or a sign of organ dysfunction should not be used based on the above guidance, **do not use** any instances of less severe values.
      **Examples:**
        - “Platelet count 75 r/t chemo” (platelet counts ≥ 75 would not be used).
        - “Cr 2.8, CKD” (creatinine values ≤ 2.8 would not be used).
    - If SIRS criteria or a sign of organ dysfunction is due to the following, **use** the criterion value**.**
        - Acute condition
          **Examples:**
            - Progress Note: “Lactate 4.3 r/t seizure.”
            - H&P: “AKI, dehydration, creatinine 3.8.”
        - Acute on chronic condition
          **Examples:**
            - H&P: “Acute on chronic renal failure, creatinine 2.8.”
            - Progress Note: “Hypotension due to acute exacerbation of chronic heart failure.”
        - Infection
          **Example:**
          Physician note: “Cholecystitis with Hyperbilirubinemia.”
          Antibiotic order indication: “Cholecystitis” (the antibiotic indication confirms cholecystitis is an infection).
- Physician/APN/PA documentation of a term that is defined by a SIRS criteria or sign of organ dysfunction is acceptable in place of an abnormal value when the term is documented as normal for the patient, due to a chronic condition, due to a medication, or due to an acute condition that has a non-infectious source/process.
  **Examples** include but are not limited to:
    - Tachypnea (Respiration >20 per minutes)
    - Tachycardia, RVR (Heart rate >90)
    - Leukopenia (White blood cell count <4,000)
    - Leukocytosis (White blood cell count >12,000)
    - Thrombocytopenia (Platelet count <100,000)
    - Hypotension (Systolic blood pressure <90 mmHg)
- Use the criterion value if there is conflicting documentation within the same physician/APN/PA documentation indicating SIRS criteria or sign of organ dysfunction is:
    - normal for the patient, due to a chronic condition or medication, or due to an acute condition with a non-infectious source
      AND
      due to or possibly due to an infection, severe sepsis, or septic shock
      **Examples:**
        - “Creatinine 4.3, CKD, potentially increasing due to worsening UTI.”
          Use the creatinine value.

- “Thrombocytopenia possibly due to NSAID use, however complicated by sepsis.” Use the platelet value.

- Abstract based on the latest piece of documentation within 24 hours after *Severe Sepsis Presentation Time* if there is conflicting information within **two or more separate** pieces of physician/APN/PA documentation indicating SIRS criteria or sign of organ dysfunction is:
  - normal for the patient due to a chronic condition or medication, or due to an acute condition with a non-infectious source
    And
  - due to or possibly due to an infection, severe sepsis, or septic shock
    **Examples:**
    - H&P 0900: “Tachypnea, on 2L NC, chronic emphysema.”
      Consult 1500: “URI x 2 days with worsening tachypnea.”
      - Use the elevated respiratory rate.
    - Note 1800: “Patient has been taking Lasix BID for 1 week, presenting with hypotension and dehydration.”
      Note 2230: “Dehydration and hypotension currently, Lasix discontinued, starting fluid resuscitation for possible sepsis.”
      - Use the hypotensive readings.
- Abstract based on the documentation closest to the *Severe Sepsis Presentation Time* if there is conflicting information before the *Severe Sepsis Presentation Time* within two or more separate pieces of physician/APN/PA documentation indicating SIRS criteria or a sign of organ dysfunction is:
  - normal for the patient, due to a chronic condition or medication, or due to an acute condition with a non-infectious source
    AND
  - due to or possibly due to an infection, severe sepsis, or septic shock
- **Do not use** SIRS criteria or a sign of organ dysfunction obtained in the operating room (OR), in interventional radiology, during active delivery, during cardiopulmonary arrest (code), or during procedural/conscious sedation.
- **Do not use** SIRS criteria or a sign of organ dysfunction due to artificial interventions.
  **Example:**
  Mechanical ventilator rate set at 24 and respiratory rate is 24, do not use the respiratory rate for SIRS criteria.
- If an artificial intervention is unable to control a patient’s physiological function, use the SIRS criteria or a sign of organ dysfunction.
  **Example:**
  Mechanical ventilator rate set at 24 and respiratory rate at 28, use the respiratory rate for SIRS criteria.
- **Do not use** the title or heading of an order set, protocol, checklist, alert, screening tool, etc. to meet infection, SIRS, organ dysfunction, sepsis, severe sepsis, or septic shock criteria.
- Use documentation of an infection, SIRS, organ dysfunction, sepsis, severe sepsis, or septic shock ***within an*** order set, protocol, checklist, alert, screening tool, etc., if the following is true:
  The documentation or value and recorded date and time is present and it is the earliest date and time recorded for the criterion.

- If there is physician/APN/PA or nursing documentation that SIRS criteria or sign of organ dysfunction is invalid, erroneous or questionable within 24 hours after the *Severe Sepsis Presentation Time,* **do not use** that value when determining the presence of severe sepsis.
- Use the time vital signs were taken or obtained. If time taken or obtained is not available, use recorded or documented time. Do not abstract vital signs from narrative charting unless no other documentation reflects the time when the same vital sign was obtained.
- To determine the laboratory test value time for severe sepsis criteria, use the following sources in priority order.
    - Primary source:
        1. Laboratory test value result time from lab
    - Supporting sources in priority order if primary source not available:
        1. Time within a narrative note that is directly associated with the laboratory test value
        2. Time the laboratory test value is documented in a non-narrative location (e.g., sepsis flowsheet)
        3. Laboratory test sample draw or collected time
        4. Physician/APN/PA or nursing narrative note open time
- To determine the presence of severe sepsis, you may use documentation in pre-hospital records (e.g., ambulance records, nursing home records) that are considered part of the medical record.
- If there is more than one presentation of severe sepsis in the record, abstract only the first presentation.
- If severe sepsis is met by physician/APN/PA documentation only, and is documented as due to a viral, fungal, or parasitic infection, do not use the documentation of severe sepsis.
- Select Value “1” if there is physician/APN/PA documentation of septic shock before or instead of clinical criteria or physician/APN/PA documentation of severe sepsis.
- Disregard any documentation of SIRS criteria, organ dysfunction, an infection, severe sepsis, or septic shock in a discharge note, discharge summary, or documented after the time of discharge.
- Select Value “2” if at the same time or within six hours after meeting clinical criteria or physician/APN/PA documentation of severe sepsis there is additional physician/APN/PA documentation indicating:
    - Patient is not septic
    - Patient does not have sepsis or severe sepsis
    - Patient does not have septic shock, and severe sepsis was met by physician/APN/PA documentation that septic shock was present.
    - Severe sepsis or septic shock is due to a viral, fungal, or parasitic infection.
- For documentation of an infection, severe sepsis, or septic shock accompanied by a qualifier, use the table below. Use documentation containing a positive qualifier to meet criteria. Do not use documentation containing a negative qualifier to meet criteria. Do not use documentation containing both a positive and negative qualifier to meet criteria.

| Positive Qualifiers | Negative Qualifiers |
|---|---|
| Possible | Impending |
| Rule out (r/o) | Unlikely |
| Suspected | Doubt |
| Likely | Risk for |
| Probable | Ruled out |
| Differential Diagnosis | Evolving |
| Suspicious for | Questionable |
| Concern for | |

**Suggested Data Sources:**

- Any physician/APN/PA documentation
- Entire ED record
- Hourly output record
- Intake/Output record
- Laboratory results
- Nurses notes
- Vital signs record or flow sheet

**Guidelines for Abstraction: severe sepsis**

Inclusions

- Documentation that is acceptable for severe sepsis.
- PHYSICIAN/APN/PA DOCUMENTATION ONLY
- Severe sepsis

Exclusions

- Documentation that is not acceptable for severe sepsis.
- Bacteremia
- Septicemia

**Guidelines for Abstraction: Infections**

Inclusions

Documentation that is acceptable for an infection.

- The following is a list of conditions commonly associated with severe sepsis that are considered infections.
- (This is not an all-inclusive list.)
- Abscess
- Acute abdomen
- Acute abdominal infection
- Blood stream catheter infection
- Bone/joint infection
- C. difficile (C-diff)
- Chronic obstructive pulmonary disease (COPD) acute exacerbation
- Endocarditis
- Gangrene
- Implantable device infection
- Infection

- Infectious
- Meningitis
- Necrosis
- Necrotic/ischemic/infarcted bowel
- Pelvic Inflammatory Disease
- Perforated bowel
- Pneumonia, empyema
- Purulence/pus
- Sepsis
- Septic
- Skin/soft tissue infection
- Suspect infection, source unknown
- Urosepsis, urinary tract infection
- Wound infection

Exclusions
Documentation that is not acceptable for an infection.

- Colonization, positive screens, or positive cultures (e.g., MRSA, VRE, or for other bacteria) without physician/APN/PA documentation referencing an infection.
- Fungal infections
- History of infection, recent infection, or recurrent infection that is not documented as a current or active infection.
- Orders for tests or screens without documentation of a suspected infection.
- Parasitic infections
- Results of tests without documentation of a suspected infection (e.g., infiltrates on chest x-ray, positive cultures).
- Signs or symptoms of an infection without supportive documentation.
- Viral infections

**Data Element Name:** *Severe Sepsis Presentation Date*

**Collected For CMS:** SEP-1

**Definition:** The earliest date on which the final criterion was met to establish the presence of severe sepsis.

**Suggested Data Collection Question:** What was the date on which the last criterion was met to establish the presence of severe sepsis?

**Format:**

**Length:** 10 – MM-DD-YYYY (includes dashes) or UTD
**Type:** Date
**Occurs:** 1

**Allowable Values:**

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (20xx)
UTD = Unable to Determine

**Notes for Abstraction:**

- Use the earliest date the final clinical criterion for severe sepsis was noted (see *Severe Sepsis Present* data element for clinical criteria list) or the earliest date the physician/APN/PA documented severe sepsis.
- For patients with multiple severe sepsis presentation dates, only abstract the earliest presentation date.
- If severe sepsis or septic shock is documented multiple times within the same note, use the earliest specified date.
- If severe sepsis or septic shock is documented in a physician/APN/PA note without a specific date or documented using the acronym POA, the following apply:
  - If it is the only documentation of severe sepsis or septic shock in the note, use the date the note was started or opened.
    - If a timestamp reflecting the note opened or started date is unavailable, use the following sources in priority order.
      1. Provider Patient Care Initiated date (e.g. Seen date, Contact date, etc.)
      2. Scribe date
      3. Earliest date at the beginning of the note reflecting when the note was opened or started.
- Use the earliest documented arrival date for patients who enter the Emergency Department with the following:
  - Severe sepsis clinical criteria met in pre-hospital records
  - Physician/APN/PA documentation of severe sepsis in pre-hospital records
  - Physician/APN/PA documentation that severe sepsis was present on arrival
- Use the earliest documented date patient arrives to floor or unit for patients who are direct hospital admits and one of the following is present:

    - Severe sepsis clinical criteria met in pre-hospital records
    - Physician/APN/PA documentation of severe sepsis in pre-hospital records
    - Earliest documentation is in a physician/APN/PA note that states severe sepsis was present on admission
- If physician/APN/PA documentation states severe sepsis was present on admission or indicates the patient was admitted with severe sepsis, use the earliest date of the following for the physician/APN/PA documentation of severe sepsis:
    - Physician/APN/PA note
    - Admit order
    - Disposition to inpatient
    - Arrival to floor or unit
- If clinical criteria for severe sepsis are met after physician/APN/PA documentation of septic shock, enter the date the physician/APN/PA documented septic shock.
- If clinical criteria for severe sepsis are not documented and there is not physician/APN/PA documentation of severe sepsis, but there is physician/APN/PA documentation of septic shock, enter the earliest date septic shock was documented for this data element.

**Suggested Data Sources:**
- Any physician/APN/PA documentation
- Entire ED record
- Hourly output record
- Intake/Output record
- Laboratory results
- Nurses notes
- Vital signs record or flow sheet

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Severe Sepsis Presentation Time*

**Collected For CMS:** SEP-1

**Definition:** The earliest time at which the final criterion was met to establish the presence of severe sepsis.

**Suggested Data Collection Question:** What was the time at which the last criterion was met to establish the presence of severe sepsis?

**Format:**

**Length:** 5 - HH:MM (with or without colon) or UTD
**Type:** Time
**Occurs:** 1

**Allowable Values:**

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unable to Determine

Time must be recorded in military time format.
With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|---|---|
| Midnight – 00:00 | Noon – 12:00 |
| 5:31 am – 05:31 | 5:31 pm – 17:31 |
| 11:59 am – 11:59 | 11:59 pm – 23:59 |

**Notes for Abstraction:**

- Use the earliest time the final clinical criterion for severe sepsis was noted (see *Severe Sepsis Present* data element for clinical criteria list) or the earliest time the physician/APN/PA documented severe sepsis.
- For patients with multiple severe sepsis presentation times, only abstract the earliest presentation time.
- If severe sepsis or septic shock is documented multiple times within the same note, use the earliest specified time.
- If severe sepsis or septic shock is documented in a physician/APN/PA note without a specific time or documented using the acronym POA, the following apply:
  - If it is the only documentation of severe sepsis or septic shock in the note, use the time the note was started or opened.
    - If a timestamp reflecting the note opened or started time is unavailable, use the following sources in priority order.
      1. Provider Patient Care Initiated time (e.g. Seen time, Contact time, etc.)
      2. Scribe time
      3. Earliest time at the beginning of the note reflecting when the note was opened or started.

- Use the earliest documented arrival time for patients who enter the Emergency Department with the following:
    - Severe sepsis clinical criteria met in pre-hospital records
    - Physician/APN/PA documentation of severe sepsis in pre-hospital records
    - Physician/APN/PA documentation that severe sepsis was present on arrival
- Use the earliest documented time patient arrives to floor or unit for patients who are direct hospital admits and one of the following is present:
    - Severe sepsis clinical criteria met in pre-hospital records
    - Physician/APN/PA documentation of severe sepsis in pre-hospital records
    - Earliest documentation is in a physician/APN/PA note that states severe sepsis was present on admission
- If physician/APN/PA documentation states severe sepsis was present on admission or indicates the patient was admitted with severe sepsis, use the earliest time of the following for the physician/APN/PA documentation of severe sepsis:
    - Physician/APN/PA note
    - Admit order
    - Disposition to inpatient
    - Arrival to floor or unit
- If clinical criteria for severe sepsis are met after physician/APN/PA documentation of septic shock, enter the time the physician/APN/PA documented septic shock.
- If clinical criteria for severe sepsis are not documented and there is not physician/APN/PA documentation of severe sepsis, but there is physician/APN/PA documentation of septic shock, enter the earliest time septic shock was documented.

**Suggested Data Sources:**
- Any physician/APN/PA documentation
- Entire ED record
- Hourly output record
- Intake/Output record
- Laboratory results
- Nurses notes
- Vital signs record or flow sheet

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Sex*

**Collected For CMS:** All Records

**Definition:** The patient's documented sex on arrival at the hospital.

**Suggested Data Collection Question:** What was the patient's sex on arrival?

**Format:**

**Length:** 1
**Type:** Character
**Occurs:** 1

**Allowable Values:**

M = Male
F = Female
U = Unknown

**Notes for Abstraction:**

- Collect the documented patient's sex at admission or the first documentation after arrival.
- Consider the sex to be unable to be determined and select "Unknown" if:
  - The patient refuses to provide their sex.
  - Documentation is contradictory.
  - Documentation indicates the patient is a Transsexual.
  - Documentation indicates the patient is a Hermaphrodite.
  - Documentation indicates the patient is Non-binary.

**Suggested Data Sources:**

- Consultation notes
- Emergency Department record
- Face sheet
- History and physical
- Nursing admission notes
- Progress notes
- UB-04

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Transfer From Another Hospital or ASC*

**Collected For CMS Only:** SEP-1

**Definition:** Documentation that the patient was received as a transfer from an inpatient, outpatient, or emergency/observation department of an outside hospital or from an ambulatory surgery center (ASC).

**Suggested Data Collection Question:** Was the patient received as a transfer from an inpatient, outpatient or emergency/observation department of an outside hospital or from an ambulatory surgery center?

**Format:**

**Length:** 1
**Type:** Alphanumeric
**Occurs:** 1

**Allowable Values:**

| | |
|---|---|
| Y (Yes) | Patient was received as a transfer from an inpatient, outpatient, or emergency/observation department of an outside hospital or from an ambulatory surgery center. |
| N (No) | Patient was not received as a transfer from an inpatient, outpatient, or emergency/observation department of an outside hospital or from an ambulatory surgery center, or unable to determine from medical record documentation. |

**Notes for Abstraction:**

- If a patient is transferred in from any emergency department (ED) or observation unit OUTSIDE of your hospital, select “Yes.” This applies even if the emergency department or observation unit is part of your hospital’s system (e.g., your hospital’s free-standing or satellite emergency department), has a shared medical record or provider number, or is in close proximity.
- If the patient is transferred to your hospital from an outside hospital where he was an inpatient or outpatient, select “Yes.” This applies even if the two hospitals are close in proximity, part of the same hospital system, have the same provider number, and/or there is one medical record.
- Select “**Yes**” in the following types of transfers:
  - Long term acute care (LTAC): Any LTAC hospital or unit (outside or inside your hospital)
  - Acute rehabilitation: Rehab unit in outside hospital, free-standing rehab hospital/facility/pavilion outside your hospital, OR rehab hospital inside your hospital
  - Psychiatric: Psych unit in outside hospital, free-standing psych hospital/facility/pavilion outside your hospital, OR psych hospital inside your hospital
  - Cath lab, same day surgery, or other outpatient department of an outside hospital

    - Disaster Medical Assistance Team (DMAT): Provides emergency medical assistance following catastrophic disaster or other major emergency
- Select "**No**" in the following types of transfers:
    - Urgent care center
    - Psych or rehab unit inside your hospital
    - Dialysis center (unless documented as an outpatient department of an outside hospital)
    - Same Day Surgery or other outpatient department inside your hospital
    - Clinic (outside or inside your hospital)
    - Hospice facility (outside or inside your hospital)
    - Assisted living facilities and nursing homes
    - Skilled nursing facility (SNF) care: Any facility or unit (outside or inside your hospital) providing SNF level of care to patient
- If there is conflicting documentation in the record, and you are unable to determine whether or not the patient was received as a transfer from an inpatient, outpatient, or emergency/observation department of an outside hospital or from an ambulatory surgery center, select "No" UNLESS there is supporting documentation for one setting over the other.

  **Examples:**
    - One source reports patient was transferred from an outside hospital's ED, another source reports patient was transferred in from an urgent care center. No additional documentation. Select "No."
    - One source states patient came from physician office, another source reports patient was transferred from an outside hospital's ED, and transfer records from the outside hospital's ED are included in the record. Select "Yes."
- If, in cases other than conflicting documentation, you are unable to determine whether or not the patient was received as a transfer from an inpatient, outpatient, or emergency/observation department of an outside hospital or from an ambulatory surgery center, select "No." (e.g., "Transferred from Park Meadows" documented – documentation is not clear whether Park Meadows is a hospital or not.)

**Suggested Data Sources:**
- Ambulance record
- Any DMAT documentation
- Emergency Department record
- Face sheet
- History and physical
- Nursing admission assessment
- Progress notes
- Transfer sheet

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Vasopressor Administration*

**Collected For CMS:** SEP-1

**Definition:** Documentation of administration of an intravenous or intraosseous vasopressor in the time window beginning at septic shock presentation and ending six hours after the presentation of septic shock, demonstrated by persistent hypotension after crystalloid fluid administration.

**Suggested Data Collection Question:** Was an intravenous or intraosseous vasopressor administered in the time window beginning at septic shock presentation and ending six hours after the presentation of septic shock, demonstrated by persistent hypotension after crystalloid fluid administration?

**Format:**

**Length:** 1
**Type:** Alphanumeric
**Occurs:** 1

**Allowable Values:**

| | |
|---|---|
| 1 (Yes) | The patient was given an intravenous or intraosseous vasopressor in the time window beginning at septic shock presentation and ending six hours after the presentation of septic shock. |
| 2 (No) | The patient was not given an intravenous or intraosseous vasopressor in the time window beginning at septic shock presentation and ending six hours after the time of presentation of septic shock, or Unable to Determine. |

**Notes for Abstraction:**

- The list of acceptable vasopressors is contained in Appendix C, Table 5.2. These are the only medications that can be abstracted.
- Only abstract a vasopressor given via the IV or intraosseous (IO) route.
- Vasopressor administration information should only be abstracted from documentation that demonstrates actual administration of the vasopressor.
  - Do not abstract doses from a physician order unless they are clearly designated as given on the physician order form.
  - Acceptable examples of administration include: “vasopressor running” and “vasopressor given.”
- If a vasopressor was infusing at the time of presentation of septic shock, demonstrated by persistent hypotension after crystalloid fluid administration, choose Value “1.” For example, septic shock patient was triaged in the ED at 08:00. The patient was receiving Levophed via an IV at the time of triage – choose Value “1.”
- If a vasopressor was not started or running within the acceptable time frame, select Value “2.”

- A dose can be abstracted that is given by one person and documented as being given by another person if that dose is not documented by the person that actually administered it.
- Authentication on one side/page of a multi-side or multi-page form applies to all pages of the form. The sides/pages of the form must be identifiable as being from the same form.
- The method of designation of administration on hand-written or pre-printed forms, such as MARs or eMARs, must be clearly designated as given. The methods may vary. Whatever method is used, it must be clear that the dose was administered.
- Use of documentation in pre-hospital records (e.g., ambulance records, nursing home records) that are considered part of the medical record is acceptable.
- Do not abstract test doses of vasopressors.
- Do not abstract vasopressors from narrative charting unless there is no other documentation that reflects that the same vasopressor was given during the specified time frame.

**Suggested Data Sources:**
- Entire Emergency Department record
- IV flow sheets
- Medication Administration record (MAR)
- Nursing notes
- Physician/APN/PA notes
- Transport records

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Vasopressor Administration Date*

**Collected For CMS:** SEP-1

**Definition:** The date on which an intravenous or intraosseous vasopressor was administered within six hours following the presentation of septic shock, demonstrated by persistent hypotension after crystalloid fluid administration.

**Suggested Data Collection Question:** What was the date on which an intravenous or intraosseous vasopressor was administered within six hours following the presentation of septic shock, demonstrated by persistent hypotension after crystalloid fluid administration?

**Format:**

**Length:** 10 – MM-DD-YYYY (includes dashes) or UTD
**Type:** Date
**Occurs:** 1

**Allowable Values:**

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (20xx)
UTD = Unable to Determine

**Notes for Abstraction:**

- The list of acceptable vasopressors is contained in Appendix C, Table 5.2. These are the only medications that can be abstracted.
- Only abstract a vasopressor given via the IV or intraosseous (IO) route.
- Vasopressor administration information should only be abstracted from documentation that demonstrates actual administration of the vasopressor.
  - Do not abstract doses from a physician order unless they are clearly designated as given on the physician order form.
  - Acceptable examples of administration include: “vasopressor running” and “vasopressor given.”
- If a vasopressor was infusing at the time of presentation of septic shock, demonstrated by persistent hypotension after crystalloid fluid administration, or the vasopressor was infusing at the time of septic shock and multiple doses were subsequently given, abstract the date the vasopressor that was infusing at the time of presentation of septic shock was initiated.

  **Example:**

  Septic shock patient was triaged in the ED at 08:00. At the time of triage, the patient was receiving Levophed via an IV started prior to arrival, abstract the date the Levophed was started prior to arrival.
- If the patient received multiple doses of a vasopressor and there was no vasopressor infusing at the time of presentation of septic shock, abstract the dose given closest to the time of presentation of septic shock.

- A dose can be abstracted that is given by one person and documented as being given by another person if that dose is not documented by the person that actually administered it.
- Only abstract from an undated MAR if it has a patient sticker on it and it is titled first day or initial MAR. If an undated MAR is designated as the initial or first day MAR and it does not have a patient sticker on it, use UTD for the date.
- Authentication on one side/page of a multi-side or multi-page form applies to all pages of the form. The sides/pages of the form must be identifiable as being from the same form.
- The method of designation of administration on hand-written such as MARs or eMARs, must be clearly designated as given. The methods may vary. Whatever method is used, it must be clear that the dose was administered.
- Use of documentation in pre-hospital records (e.g., ambulance records, nursing home records) that are considered part of the medical record is acceptable.
- Do not abstract test doses of vasopressors.
- Do not abstract vasopressors from sources that do not represent actual administration.
- Do not abstract vasopressors from narrative charting unless there is no other documentation that reflects that the same vasopressor was given during the specified time frame.

**Suggested Data Sources:**
- Entire Emergency Department record
- IV flow sheets
- Medication Administration record (MAR)
- Nursing notes
- Physician/APN/PA notes
- Transport records

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None

**Data Element Name:** *Vasopressor Administration Time*

**Collected For CMS:** SEP-1

**Definition:** The time at which an intravenous or intraosseous vasopressor was administered within six hours following the presentation of septic shock, demonstrated by persistent hypotension after crystalloid fluid administration.

**Suggested Data Collection Question:** What was the time at which an intravenous or intraosseous vasopressor was administered within six hours following the presentation of septic shock, demonstrated by persistent hypotension after crystalloid fluid administration?

**Format:**

**Length:** 5 - HH:MM (with or without colon) or UTD
**Type:** Time
**Occurs:** 1

**Allowable Values:**

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unable to Determine

Time must be recorded in military time format.
With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|---|---|
| Midnight – 00:00 | Noon – 12:00 |
| 5:31 am – 05:31 | 5:31 pm – 17:31 |
| 11:59 am – 11:59 | 11:59 pm – 23:59 |

**Notes for Abstraction:**

- The list of acceptable vasopressors is contained in Appendix C, Table 5.2. These are the only medications that can be abstracted.
- Only abstract a vasopressor given via the IV or intraosseous (IO) route.
- Vasopressor administration information should only be abstracted from documentation that demonstrates actual administration of the vasopressor.
  - Do not abstract doses from a physician order unless they are clearly designated as given on the physician order form.
  - Acceptable examples of administration include: “vasopressor running” and “vasopressor given.”
- If a vasopressor was infusing at the time of presentation of septic shock, demonstrated by persistent hypotension after crystalloid fluid administration, or the vasopressor was infusing at the time of septic shock and multiple doses were subsequently given, abstract the time the vasopressor that was infusing at the time of presentation of septic shock was initiated.

**Example:**
Septic shock patient was triaged in the ED at 08:00. At the time of triage, the patient was receiving Levophed via an IV started prior to arrival at 07:45, abstract the time the Levophed was started prior to arrival, 07:45.

- If the patient received multiple doses of a vasopressor and there was no vasopressor infusing at the time of presentation of septic shock, abstract the dose given closest to the time of presentation of septic shock.
- A dose can be abstracted that is given by one person and documented as being given by another person if that dose is not documented by the person that actually administered it.
- Only abstract from an undated MAR if it has a patient sticker on it and it is titled first day or initial MAR. If an undated MAR is designated as the initial or first day MAR and it does not have a patient sticker on it, use UTD for the time.
- Authentication on one side/page of a multi-side or multi-page form applies to all pages of the form. The sides/pages of the form must be identifiable as being from the same form.
- The method of designation of administration on hand-written such as MARs or eMARs, must be clearly designated as given. The methods may vary. Whatever method is used, it must be clear that the dose was administered.
- Use of documentation in pre-hospital records (e.g., ambulance records, nursing home records) that are considered part of the medical record is acceptable.
- Do not abstract test doses of vasopressors.
- Do not abstract vasopressors from narrative charting unless there is no other documentation that reflects that the same vasopressor was given during the specified time frame.

**Suggested Data Sources:**

- Entire Emergency Department record
- IV flow sheets
- Medication Administration record (MAR)
- Nursing notes
- Physician/APN/PA notes
- Transport records

**Inclusion Guidelines for Abstraction:**
None

**Exclusion Guidelines for Abstraction:**
None