PEDIATRIC DATA DICTIONARY FOR SEVERE SEPSIS OR SEPTIC SHOCK

Version 2.1

March 5, 2020

The most recent version of this document, any follow-up *Frequently Asked Questions* documents, and the *Table of Elements* data template and instructions may always be found at:
https://ny.sepsis.ipro.org

Questions regarding this document should be submitted to:
https://ny.sepsis.ipro.org/support

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Points to remember during data collection

ALL cases meeting clinical criteria within 6 hours of each other indicative of severe sepsis or septic shock INCLUDING cases identified through coding AND/OR other avenues must be reported to the NYSDOH (e.g., concurrent case identification; retrospective review; and so forth).

- The hospital is responsible for reporting all diagnosed cases of severe sepsis or septic shock, regardless of billing code designation or how they are identified. Cases diagnosed as sepsis but that do not progress to severe sepsis or septic shock are not to be submitted. Cases meeting clinical criteria of severe sepsis and/or septic shock within 6 hours of each other are to be reported.
- Pediatric designation is defined as less than 18 years old as determined by patient age at admission.
- Non-discharged newborns, including newborns/infants in the NICU that had not been previously discharged from the initial birth stay, are NOT to be reported to the sepsis clinical data portal. This also includes newborns that were born at another facility and were transferred to the receiving facility without ever being discharged. Newborns that were discharged and then readmitted ARE to be reported to the sepsis data portal.

- **CMS Version 5.7 will be used for guidance for CMS aligned variables effective January 1, 2020 for the NYSDOH data collection.** (https://www.qualitynet.org/inpatient/specifications-manuals#tab2). Note that the NYSDOH has aligned with the CMS data dictionary release(s) which typically results in two dictionaries in a year. Therefore a second dictionary for 7/1/2020 discharges will also be released by the NYSDOH. While these data elements are described in this document, the latest version of CMS guidance documents should be referenced for detailed information for the correct abstraction and submission of all data for those data elements. Blood culture failed attempts or contaminated specimens may not be reported as "collected" for cases reported to the NYSDOH. This is not meant to affect clinician care - this only applies to the reporting of the quarterly data for the NYSDOH. Additionally, the NYSDOH does not exclude viral, parasitic, or fungal infections. Please report ALL infections.
- Patients who arrive through your Emergency Department (ED) and are admitted to your inpatient unit are not considered transfers for ***Source of Admission***. The location prior to the ED should be reported as the admission source for patients admitted through ED.
- All hospitals should report patients in inpatient settings. This includes psychiatric inpatient hospitals and units within hospitals but excludes ambulatory clinics.
- If a patient had multiple episodes of severe sepsis and/or septic shock during the same hospital admission, use the first episode for data abstraction.
- Hospitals should report a single case for patients who are internal transfers from other units within the hospital, thereby reporting the full episode of patient care as a single

record. If a patient is admitted and discharged from one unit/department (e.g. psychiatric unit) and admitted to another unit/department within the same facility (e.g. ICU), the full care for that entire period should be reported as one case. Also, in these cases of admission/discharge to different units within the same facility, the FIRST unit "admission" should be used for the admission data element, and the LAST "unit discharge" from the facility itself is to be used for the discharge data element. Even though the patient is "admitted/discharged" from individual units/departments for billing purposes, those do not apply to the actual initial admission or actual terminal discharge.

- The full care for the severe sepsis or septic shock episode, regardless of the hospital unit to which the patient may have presented during the stay, should be reported. For example, if the severe sepsis was identified and treatment begun in the psychiatric unit of your hospital, then you also should report the care provided in that unit in addition to the continued care in a different unit of the same hospital. The case should not be reported again. Transfer status will be reported as 1=Not a Transfer-Patient was neither admitted as a transfer nor discharged as a transfer to/from a different acute care hospital.
- Unless a case is excluded from the protocol using an acceptable exclusion reason in the data dictionary, hospitals must report all data for adherence variables. This enables accurate data capture of treatment provided to the patient. If the ED patient had severe sepsis or septic shock but was never admitted, the data would still need to be reported. Admissions to observation alone would also need to be reported.
- The term "sepsis" may be used in this data dictionary, but it always refers to "severe sepsis or septic shock."
- For alphanumeric fields submit up to 15 characters. There is no left padding.
- For the receiving hospital reporting on patients transferred with sepsis 'present on admission', from either another ED or as a direct inpatient hospital transfer, both the transferring and receiving hospitals are responsible for collecting and reporting the variables, including demographics, adherence, severity adjustment and co-morbidity variables. Data from both institutions will eventually be linked for outcomes and adherence measures reporting. It is understood that the hospital may not have data on all elements, but is expected to report on the data that is available for each hospital.

Links to CMS specifications are included for convenience. Hospitals are responsible for ensuring they are using the most current CMS specifications and direction in place for the discharge timeframe.

- CMS Specifications Manual for National Hospital Inpatient Quality Measures Discharges 01-01-20 (1Q20) through 06-30-20 (2Q20) Version 5.7. Excerpts from these documents are included in this document in addition to providing the links. Again, note that the NYSDOH data dictionary is using Version 5.7 and aligning with CMS regarding two dictionary releases in a year. Hospitals can expect to receive a revised data dictionary to align with the CMS 5.8 release effecting for 07-01-20 discharges.

- You may download the CMS Version 5.7 dictionary by clicking the below link: https://www.qualitynet.org/files/5d55ace2c84b4540884322e4?filename=1b-AlphaDD,0.pdf

Demographic Variables

Dataset Segment:	**Demographic Variables**
Data Element Name:	Admission Datetime
Format – Length:	Datetime-16
SPARCS variable:	Yes
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

The date and time that the patient was admitted to **inpatient** status at the hospital.

This is the administrative admission datetime which aligns with your SPARCS data set. If a patient is admitted to observation only, then the datetime of admission to observation is to be reported.

Codes and Values:

Notes for Abstraction:

- Formatting:
  1. Format must be YYYY-MM-DD hh:mm
     a. YYYY-MM-DDThh:mm is also valid
  2. YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  3. Example: 11:42 pm November 3, 1959=1959-11-03 23:42
     a. 1959-11-03T23:42 is also valid
  4. Midnight = 00:00, not 24:00
- Cannot have been after ***Discharge Datetime***.
- For a patient who is admitted to one unit/department from another unit/department within the same facility, the initial administrative inpatient admission to the facility is reported for ***Admission Datetime.*** Do not use admissions from internal transfers, since these are not actually separate hospital admissions – the entire period should be submitted as one record, regardless of whether the internal transfers are billed separately.
- For observation only cases which do not progress to an inpatient admission may use the arrival time as admission time.

Dataset Segment:	**Demographic Variables**
Data Element Name:	Arrival Datetime
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	Yes
Mandatory:	Yes

Description:

The earliest documented date and time the patient arrived at the hospital.

Definition: The earliest documented date and time the patient arrived at the hospital.

Format:

- Formatting:
  1. Format must be YYYY-MM-DD hh:mm
     a. YYYY-MM-DDThh:mm is also valid
  2. YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  3. Example: 11:42 pm November 3, 1959=1959-11-03 23:42
     a. 1959-11-03T23:42 is also valid
  4. Midnight = 00:00, not 24:00

Notes for Abstraction:

- Review the Only Acceptable Sources to determine the earliest datetime the patient arrived at the ED, nursing floor, or observation, or as a direct admit to the cath lab. The intent is to utilize any documentation which reflects processes that occurred after arrival at the ED or after arrival to the nursing floor/observation/cath lab for a direct admit.
- Documentation outside of the Only Acceptable Sources list should NOT be referenced (e.g., ambulance record, physician office record, H&P).
- The arrival datetime may differ from the admission date.
- Cannot have been after ***Discharge Datetime***.
- If the patient is in either an outpatient setting of the hospital other than observation status (e.g., dialysis, chemotherapy, cardiac cath) or a SNF unit of the hospital, and is subsequently admitted to acute inpatient, use the datetime the patient arrived at the ED or on the floor for acute inpatient care as the arrival date.

- Observation status: If the patient was admitted to observation from an outpatient setting of the hospital, use the datetime the patient arrived at the ED or on the floor for observation care as the arrival datetime.
    - If the patient was admitted to observation from the ED of the hospital, use the datetime the patient arrived at the ED as the arrival datetime.
- For "Direct Admits" to acute inpatient or observation, use the earliest datetime the patient arrived at the nursing floor or in observation (as documented in the Only Acceptable Sources) as the arrival datetime.
    - If the patient is a "Direct Admit" to the cath lab, use the earliest datetime the patient arrived at the cath lab (or cath lab staging/holding area) as the arrival date
- If the patient was transferred from your hospital's satellite/free-standing ED or from another hospital within your hospital's system (as an inpatient or ED patient), and there is one medical record for the care provided at both facilities, use the arrival datetime at the first facility.

Suggested Data Sources:

ONLY ACCEPTABLE SOURCES:

Emergency Department record
Nursing admission assessment/admitting note
Observation record
Procedure notes
Vital signs graphic record

Dataset Segment:	**Demographic Variables**
Data Element Name:	Date of Birth
Format – Length:	Date-10
SPARCS variable:	Yes
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

The date of birth of the patient.

Codes and Values:

Notes for Abstraction:

- Formatting:
  1. Format must be YYYY-MM-DD
  2. YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
  3. Example: November 3, 1959=1959-11-03
- Cannot precede ***Admission Datetime***
- Patients less than 18 years old are considered pediatric. Patients 18 and older as of arrival date will be rejected and required for submission to the adult sepsis data file.

Dataset Segment:	**Demographic Variables**
Data Element Name:	Discharge Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

The date and time the patient was discharged from the hospital, left against medical advice, or expired.

Codes and Values:

Notes for Abstraction:

- Formatting:
  4. Format must be YYYY-MM-DD hh:mm
     a. YYYY-MM-DDThh:mm is also valid
  5. YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  6. Example: 11:42 pm November 3, 1959=1959-11-03 23:42
     a. 1959-11-03T23:42 is also valid
  7. Midnight = 00:00, not 24:00
- Cannot precede 2019-01-01 00:00
- Cannot precede ***Admission Datetime***
- If the time of death and administrative discharge datetimes are not the same, use the time of death for ***Discharge Datetime.***
- Hospitals are directed to report the date/time of death if this is earlier than the administrative discharge date.
- For a patient who is discharged from one unit/department to another unit/department within the same facility, the final discharge from the facility is what should be reported for ***Discharge Datetime.*** Do not use discharges from internal transfers, since these are not actually separate hospital admissions – the entire period should be submitted as one record. This is regardless of whether the internal transfers are billed separately.
- Discharge data sources to include; discharge summary, face sheet, nursing discharge notes, progress notes, transfer notes or physician orders.

- If there are multiple times documented when the patient was discharged from acute inpatient care or left AMA, use the earliest datetime.
- If the patient was discharged from acute inpatient care, left AMA, or transferred out to another facility, use the datetime the patient actually left, not the datetime the order was written

Dataset Segment:	**Demographic Variables**
Data Element Name:	Discharge Status
Format – Length:	Enumerated-2
SPARCS variable:	Yes
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

The code that best represents the patient's destination after discharge from the hospital.

Codes and Values:

01 = Discharge to Home or Self Care (Routine Discharge). Includes discharge to home; home on oxygen if DME only; any other DME only; group home, foster care, independent living and other residential care arrangements; outpatient programs, such as partial hospitalization or outpatient chemical dependency programs.
02 = Discharged/transferred to a Short-Term General Hospital for Inpatient Care
03 = Discharged/transferred to Skilled Nursing Facility (SNF) with Medicare Certification in anticipation of Skilled Care. Medicare indicates that the patient is discharged/transferred to a Medicare certified nursing facility. For hospitals with an approved swing bed arrangement, use Code 61 Swing Bed. For reporting other discharges/transfers to nursing facilities see 04 and 64.
04 = Discharged/transferred to a Facility that Provides Custodial or Supportive Care. This is used to designate patients that are discharged/transferred to a nursing facility with neither Medicare nor Medicaid certification and for discharges/transfers to Assisted Living Facilities.
05 = Discharged/transferred to a Designated Cancer Center or Children's Hospital.
06 = Discharged/transferred to Home under Care of Organized Home Health Service Organization in Anticipation of Covered Skilled Care. Report this code when the patient is discharged/transferred to home with a written plan of care (tailored to the patient's medical needs) for home care services. Not used for home health services provided by a DME supplier or from a Home IV provider for home IV services.
07 = Left against Medical Advice or Discontinued Care
09 = Admitted as an Inpatient to this Hospital-Patient admitted to the same short-term medical or specialty hospital where the hospital-based ambulatory surgery service was performed (excluding chronic disease hospitals).
20 = Expired
21 = Discharged/transferred to Court/Law Enforcement.
50 = Hospice – Home
51 = Hospice – Medical Facility (Certified) Providing Hospice Level of Care
61 = Discharged/transferred to Hospital-Based Medicare Approved Swing Bed

62 = Discharged/transferred to an Inpatient Rehabilitation Facility (IRF) including Rehabilitation Distinct Part Unit of a Hospital
63 = Discharged/transferred to a Medicare Certified Long Term Care Hospital (LTCH)
64 = Discharged/transferred to a Nursing Facility Certified under Medicaid but not certified under Medicare
65 = Discharged/transferred to a Psychiatric Hospital or Psychiatric Distinct Part Unit of a Hospital
66 = Discharged/transferred to a Critical Access Hospital (CAH)
69 = Discharged/transferred to a Designated Disaster Alternative Care Site
70 = Discharged/transferred to another Type of Health Care Institution not defined Elsewhere in this Code List
81 = Discharged to Home or Self Care with a Planned Acute Care Hospital Inpatient Readmission
82 = Discharged/transferred to a Short-Term General Hospital for Inpatient Care with a Planned Acute Care Hospital Inpatient Readmission
83 = Discharged/transferred to Skilled Nursing Facility (SNF) with Medicare Certification with a Planned Acute Care Hospital Inpatient Readmission
84 = Discharged/transferred to a Facility that Provides Custodial or Supportive Care with a Planned Acute Care Hospital Inpatient Readmission
85 = Discharged/transferred to a Designated Cancer Center or Children's Hospital with a Planned Acute Care Hospital Inpatient Readmission
86 = Discharged/transferred to Home under Care of Organized Home Health Service Organization with a Planned Acute Care Hospital Inpatient Readmission
87 = Discharged/transferred to Court/Law Enforcement with a Planned Acute Care Hospital Inpatient Readmission
88 = Discharged/transferred to a Federal Health Care Facility with a Planned Acute Care Hospital Inpatient Readmission
89 = Discharged/transferred to Hospital-Based Medicare Approved Swing Bed with a Planned Acute Care Hospital Inpatient Readmission
90 = Discharged/transferred to an Inpatient Rehabilitation Facility (IRF) including Rehabilitation Distinct Part Units of a Hospital with a Planned Acute Care Hospital Inpatient Readmission
91 = Discharged/transferred to a Medicare Certified Long Term Care Hospital (LTCH) with a Planned Acute Care Hospital Inpatient Readmission
92 = Discharged/transferred to a Nursing Facility Certified under Medicaid but not Certified under Medicare with a Planned Acute Care Hospital Inpatient Readmission
93 = Discharged/transferred to a Psychiatric Hospital or Psychiatric Distinct Part Unit of a Hospital with a Planned Acute Care Hospital Inpatient Readmission
94 = Discharged/transferred to a Critical Access Hospital (CAH) with a Planned Acute Care Hospital Inpatient Readmission
95 = Discharged/transferred to another Type of Health Care Institution not Defined Elsewhere in this Code List with a Planned Acute Care Hospital Inpatient Readmission

Dataset Segment:	**Demographic Variables**
Data Element Name:	Ethnicity
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

The code that best describes the ethnicity of the patient based on documentation.

Codes and Values:

1 = Spanish/Hispanic Origin
2 = Not of Spanish/Hispanic Origin
9 = Unknown

Dataset Segment:	**Demographic Variables**
Data Element Name:	Excluded Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Situational

Description:

The date and time that the person met the ***Excluded Reason***.

Codes and Values:

Notes for Abstraction:

- Formatting:
  1. Format must be YYYY-MM-DD hh:mm
     a. YYYY-MM-DDThh:mm is also valid
  2. YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  3. Example: 11:42 pm November 3, 1959=1959-11-03 23:42
     a. 1959-11-03T23:42 is also valid
  4. Midnight = 00:00, not 24:00
- ***Excluded Datetime*** cannot have been after ***Discharge Datetime***.
- If ***Excluded from Protocol*** = 1, then must be completed.
- If ***Excluded from Protocol*** = 0, then must be blank.

Dataset Segment:	**Demographic Variables**
Data Element Name:	Excluded Explain
Format – Length:	Set-5
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Situational

Description:

If the patient was excluded from the protocol/treatment due to a clinical contraindication to one or more of the bundle interventions, submit all interventions that were contraindicated.

Codes and Values:

1 = IV or IO fluids (acute, decompensated congestive heart failure, evidence of or concern for cardiogenic shock, pulmonary edema and LVAD)
2 = IV or IO fluids (end stage renal disease with signs of fluid overload)
3= Physician documentation within 24 hours of presentation that acute condition or sign is not due to severe sepsis or septic shock.

Notes for Abstraction:

- Submit a number for each applicable intervention, separated by a colon.
- Example:
  - 1:2:3 represent options 1, 2, and 3
  - Each number represents an intervention that was contraindicated.
- If ***Excluded Reason*** = 1, then a valid value must be reported, else must be blank.
- The above three intervention clinical contraindications are the only options that are currently being accepted by the Department for explaining exclusion. If none of the above is applicable, then exclusion due to clinical contraindication may not be reported.
- For example, if a Physician/APN/PA medical note documents a physical exam at the time of the assessment that shows acute CHF with clinical signs of fluid overload and this Physician/APN/PA documents on the same medical note that they "will not fluid overload further" or "fluid resuscitation is contraindicated", this documentation qualifies for Value "1".

Dataset Segment:	**Demographic Variables**
Data Element Name:	Excluded from Protocol
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

Indicate if the patient was excluded from the sepsis protocol during or before the treatment window (which is within 6 hours prior through 1 hour following severe sepsis presentation).

Codes and Values:

0 = Patient was not excluded from the protocol
1 = Patient was excluded from the protocol

Notes for Abstraction:

- All data elements outside of adherence (i.e. Demographic, Severity Adjustment, and Comorbidity Variables) will have valid values.
- The three interventions for ***Excluded Explain*** are the only options that are being accepted by the Department for explaining exclusion due to clinical contraindication. If none are applicable, then exclusion from the protocol may not be reported.
- Exclusion criteria must be in place before or during the treatment window.
  Example:
  If a sepsis protocol was started in the ED
  - And on the following day, the patient met an exclusion reason
    - Do not report that the patient was excluded since the patient was not excluded during the treatment window.

Dataset Segment:	**Demographic Variables**
Data Element Name:	Excluded Reason
Format – Length:	Set-7
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Situational

Description:

The code(s) that represents the reason the patient was excluded from the protocol. If interventions were clinically contraindicated, check the specific intervention(s) that were clinically contraindicated in the ***Excluded Explain*** variable. You may select more than one reason for excluding the patient from the protocol. The exclusion must be in place at the time in which the protocol would be initiated (i.e., before or during the treatment window).

Codes and Values:

1 = Interventions were clinically contraindicated
2 = Patient had advanced directives in place that precluded one or more elements of the protocol
3 = Patient, or surrogate decision maker, declined interventions
4 = Patient was enrolled in an IRB approved trial that was inconsistent with the protocol interventions

Notes for Abstraction:

- If ***Excluded from Protocol*** = 1, ***Excluded Reason*** must be completed.
- If ***Excluded from Protocol*** = 0, ***Excluded Reason*** must be blank.
- If ***Excluded Reason*** = 1, then a valid value must be reported for ***Excluded Explain***, else ***Excluded Explain*** will be blank.
- If Excluded from Protocol = 0, Excluded Reason must be blank.
- If reporting multiple exclude reason codes, use one field and separate using a colon, e.g. "1:3". Remember that when ***Excluded Reason*** = 1 (even if it is one of multiple reasons selected), then data element ***Excluded Explain*** must be completed.
- If the patient met the clinical contraindication criteria and there was clear documentation in the record at the time of treatment for severe sepsis/septic shock that they were excluded from your institution's protocol as a result of this contraindication, that contraindication would be submitted.
    - The three interventions for ***Excluded Explain*** are the only options that are being accepted by the Department for explaining exclusion due to clinical contraindication. If none are applicable, then exclusion due to clinical contraindication may not be reported.

- If the patient had advanced directives in place prior to (or at) the development of severe sepsis or septic shock that precluded one or more elements of the protocol, then the protocol is not reported/patient is excluded.
- All other data elements (i.e. Demographic, Severity Adjustment, and Comorbidity Variables) will have valid values.
- If a patient met acceptable ***Excluded Reason***, then documentation of that reason by a physician, advanced practice nurse, or physician assistant will need to be present in the medical record(s).

Dataset Segment:	**Demographic Variables**
Data Element Name:	Facility Identifier
Format – Length:	Varchar -6
SPARCS variable:	Yes
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

This number is the facility's four to six digit Permanent Facility Identifier (PFI) assigned by the Department of Health.

Department regulations state that services must be reported under the physical location where they are provided. Common ownership of different facilities does not change this requirement.

Codes and Values:

Notes for Abstraction:

- Must be a valid number as maintained by the NYSDOH Division of Health Facility Planning.
- Must contain numbers 0-9.

Dataset Segment:	**Demographic Variables**
Data Element Name:	Gender
Format – Length:	Enumerated-1
SPARCS variable:	Yes
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

The gender of the patient.

Codes and Values:

M = Male
F = Female
U = Unknown

Dataset Segment:	**Demographic Variables**
Data Element Name:	Insurance Number
Format – Length:	Varchar-19
SPARCS variable:	Yes
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

The insurance policy identification number for the patient.

Codes and Values:

Notes for Abstraction:

- Allow blanks only if Element Payer is not Medicare ("C"), Medicaid ("D"), Insurance Company ("F"), or Blue Cross ("G").
- Must be numeric (0-9) and/or alphabetic (a-z, A-Z).
- Special characters are invalid entries.

Facilities are directed to enter the following values:

Payer	**Type of Number**
Blue Cross	Enter the information depending on specific Blue Cross Plan needs and contract requirement.
CHAMPUS	Enter the information depending on CHAMPUS regulations.
Medicaid	Enter Medicaid Client Identification Number (CIN) of the insured or case head Medicaid number shown on the Medicaid Identification Card.
Medicare	Enter the patient's Medicare HIC number as shown on the Health Insurance Card, Certificate of Award, Utilization Notice, Temporary Eligibility Notice, and Hospital Transfer Form or as reported by the Social Security Office.

For all other payer types, commercial Insurers, etc., enter the insured's unique number assigned by the payer.

Dataset Segment:	**Demographic Variables**
Data Element Name:	Medical Record Number
Format – Length:	Varchar-17
SPARCS variable:	Yes
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

The number used by the hospital's Medical Records Department to identify the patient's permanent medical record file. This number is not the same as the Patient Control Number.

Codes and Values:

Notes for Abstraction:

- Must not equal zero or blanks.
- Must be numeric (0-9) and/or alphabetic (a-z, A-Z).
- Special characters are invalid entries.

Dataset Segment:	**Demographic Variables**
Data Element Name:	Patient Control Number
Format – Length:	Varchar-20
SPARCS variable:	Yes
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

A patient's unique number assigned by the provider to facilitate retrieval of individual financial and clinical records and posting of payment.

Codes and Values:

Notes for Abstraction:

- Must not equal zero or blanks.
- Must be numeric (0-9) and/or alphabetic (a-z, A-Z).
- Special characters are invalid entries.

Dataset Segment:	**Demographic Variables**
Data Element Name:	Payer
Format – Length:	Enumerated -1
SPARCS variable:	Yes
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

The code that indicates the primary payer for this hospitalization.

Codes and Values:

A = Self-Pay
B = Workers' Compensation
C = Medicare
D = Medicaid
E = Other Federal Program
F = Insurance Company
G = Blue Cross
H = CHAMPUS
I = Other Non-Federal Program
J=Disability
K=Title V
L=Unknown

Dataset Segment:	**Demographic Variables**
Data Element Name:	Pregnancy Status
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

The patient's documented pregnancy/postpartum status during the sepsis episode.

Codes and Values:

1 = Patient was pregnant at severe sepsis/septic shock presentation.
2 = Patient was 0-42 days postpartum at severe sepsis/septic shock presentation.
3 = Patient was 0-42 days post spontaneous abortion or induced abortion at severe sepsis/septic shock presentation.
4 = Patient was not pregnant, postpartum or post spontaneous abortion/induced abortion at severe sepsis/septic shock presentation.
5 = Unable to determine

Notes for Abstraction:

- Select "1" if there is documentation that patient is pregnant or there is a positive pregnancy test at severe sepsis/septic shock presentation in the medical record.
- Select "2" if there is documentation in the medical record that the patient presents with severe sepsis/septic shock after delivery on same day as delivery up to 42 days post-delivery. Include deliveries of live births and stillbirths (gestational age ≥ 20 weeks).
- Select "3" if there is documentation in the medical record that the patient presents with severe sepsis/septic shock after spontaneous abortion (gestational age < 20 weeks) or induced abortion. Include ectopic pregnancies and spontaneous fetal loss of uncertain gestational age in this selection.
- Select "4" if there is no documentation in the medical record that the patient is pregnant, 0-42 days post spontaneous abortion, induced abortion or delivery at severe sepsis/septic shock presentation. Select "4" for males.
- Select "5" if patient is postpartum, post-spontaneous abortion or post-induced abortion but number of days post procedure or post-delivery is not documented.

Dataset Segment:	**Demographic Variables**
Data Element Name:	Race
Format – Length:	Set-47
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

The code that best describes the race of the patient based on documentation.

Codes and Values:

01 = White
02 = African American (Black)
03 = Native American (American Indian/Eskimo/Aleut)
41 = Asian Indian
42 = Chinese
43 = Filipino
44 = Japanese
45 = Korean
46 = Vietnamese
49 = Other Asian
51 = Native Hawaiian
52 = Samoan
53 = Guamanian or Chamorro
59 = Other Pacific Islander
88 = Other Race
MR = Multi-racial

Notes for Abstraction:

- If reporting multiple race codes, use one field and separate using a colon, e.g. “01:41”

Dataset Segment:	**Demographic Variables**
Data Element Name:	Sepsis Identification Place
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

The code that best represents where the severe sepsis or septic shock was first identified.

Codes and Values:

1 = Severe sepsis or Septic Shock was identified in the Emergency Department
2 = Severe sepsis or Septic Shock was identified on an inpatient floor (not ICU)
3 = Severe sepsis or Septic Shock was identified in the ICU/PICU
4 = Severe sepsis or Septic Shock was identified in the observation unit
5 = Severe sepsis or Septic Shock was identified in an outpatient setting prior to hospital arrival, e.g., clinic or dialysis facility

Notes for Abstraction:

- Must be completed.
- If the patient has severe sepsis and septic shock, then the place of identification will align with severe sepsis.
- Regardless of where the sepsis diagnosis is made in the acute care setting (e.g., ED, ICU/PICU, floor, procedure unit, etc.), all variables are to be reported, unless the patient was excluded from the protocol.

Dataset Segment:	**Demographic Variables**
Data Element Name:	Source of Admission
Format – Length:	Enumerated-1
SPARCS variable:	Yes
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

The code that best describes the patient's origin before coming to the hospital.

Codes and Values:

1 = Non-Health Facility Point of Origin-The patient was admitted to this facility from home or from an assisted living facility.
2 = Clinic-The patient was referred to this facility as a transfer from a freestanding or non-freestanding clinic.
4 = Transfer from a Hospital (Different Facility)-The patient was admitted to this facility as a hospital transfer from an acute care facility where he or she was an inpatient or outpatient.
5 = Transfer from a Skilled Nursing Facility (SNF) or Intermediate Care Facility (ICF)-The patient was admitted to this facility as a transfer from a SNF or ICF where he or she was a resident.
6 = Transfer from Another Health Care Facility-The patient was admitted to this facility as a transfer from another type of health care facility not defined elsewhere in this code list.
8 = Court/Law Enforcement- The patient was admitted to this facility upon the direction of a court of law, or upon the request of a law enforcement agency representative.
9 = Information Not Available-The means by which the patient was admitted to this hospital was not known.
E = Transfer from Ambulatory Surgery Center-The patient was admitted to this facility as a transfer from an ambulatory surgery center.
F = Transfer from Hospice and is Under a Hospice Plan of Care or Enrolled in a Hospice Program- The patient was admitted to this facility as a transfer from a hospice.

Notes for Abstraction:

- If a patient is moved from one area of the hospital to another i.e., from the Emergency Department to the ICU the patient is not considered a transfer. Only if the patient is moved between different hospitals, with discharge and admission at each location, and separate billing from each location, is the case considered a transfer.
- Assisted Living is reported as Non-Health Facility Point of Origin.

Dataset Segment:	**Demographic Variables**
Data Element Name:	Transfer Facility Identifier
Format – Length:	Varchar -6
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Situational

Description:

This number is the transfer sending or transfer receiving facility's four to six-digit Permanent Facility Identifier (PFI) assigned by the Department of Health. If you received the patient with severe sepsis or septic shock, report the sending hospital's PFI. If you are transferring the patient with severe sepsis or septic shock, report the receiving hospital's PFI.

Department regulations state that services must be reported under the physical location where they are provided. Common ownership of different facilities does not change this requirement.

Codes and Values:

Notes for Abstraction:

- Must be a valid number as maintained by the NYSDOH Division of Health Facility Planning.
- Must contain numbers 0-9.
- Must be completed if ***Transfer Status*** is reported as a value of 3, 4, or 5.
- Must be blank if ***Transfer Status*** is reported as a value of 1 or 2.
- Can be blank if ***Transfer Status*** is reported as a value of 2.
- When transferring a patient to or from an out of state facility, please submit the two digit state identifier (http://www.census.gov/geo/reference/ansi_statetables.html) to represent the transfer facility state. This is ONLY to be used when patients are transferred in/out of state therefore the code for New York will not be accepted for data submission. For example, a patient transferred to a Connecticut hospital is submitted with the Transfer Facility Identifier of 09.

To find a hospital PFI, please visit:
http://www.health.ny.gov/statistics/sparcs/reports/compliance/alpha_facilities.htm

Dataset Segment:	**Demographic Variables**
Data Element Name:	Transfer Status
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

The code that best represents the patient's acute care transfer status.

Codes and Values:

1 = Not a Transfer – Patient was **neither** admitted as a transfer nor discharged as a transfer to/from a different acute care hospital.
2 = Transfer without Severe Sepsis or Septic Shock (SS) – Patient was admitted as a transfer or discharged as a transfer to/from a different acute care hospital but **did not have** Severe Sepsis or Septic Shock (SS) as primary diagnosis or reason for transfer.
3 = Admission Transfer with SS – Patient was **admitted** (admitted = sent to ED or directly admitted as inpatient to floor or ICU) as a transfer from a different acute care hospital with SS. ***Note: You will need to enter the PFI of the sending hospital.***
4 = Discharged Transfer with SS No Protocol – Patient was **transferred** from this hospital to a different acute care hospital with SS, and the hospital's sepsis protocol was not initiated prior to transfer to the receiving acute care hospital. ***Note: You will need to enter the PFI of the receiving hospital.***
5 = Discharged Transfer with SS Initiated Protocol – Patient was **transferred** from this hospital to a different acute care hospital with SS, and the hospital's sepsis protocol was initiated or completed prior to transfer to the receiving acute care hospital. ***Note: You will need to enter the PFI of the receiving hospital.***

Notes for Abstraction:

- Internal consistency requirement: source of admission and/or discharge status must align with a transfer status designation.
- Hospitals are expected to report all cases of severe sepsis or septic shock regardless of transfer status.
- Both the transferring and receiving hospitals are responsible for collecting and reporting all of the data elements, including demographics, adherence, severity adjustment, and comorbidity variables.

- Data from both institutions may be linked (by NYSDOH/IPRO) for outcomes and adherence measures reporting. It is understood that the hospital may not have data on all elements, but it is expected that the hospital report on the data that's available for each hospital.
- Be sure that you are submitting the full care for the severe sepsis or septic shock episode, regardless of the hospital unit to which the patient may have presented during the stay. For example, if the severe sepsis was identified and treatment initiated in the psychiatric unit of your hospital, then you also want to report the care provided in that unit in addition to the continued care in a different unit of the same hospital. The entire period should be submitted as one record regardless of whether the treatments in the separate units are billed separately.
- Out of state transfers are to be reported, and instructions for doing so are found under ***Transfer Facility Identifier.***
- If a patient is moved from one area of the hospital to another e.g., from the Emergency Department to the ICU the patient is not considered a transfer. Only if the patient is moved between different hospitals, with discharge and admission at each location, and separate billing from each location, is the case considered a transfer.

To find a hospital PFI, please visit:
http://www.health.ny.gov/statistics/sparcs/reports/compliance/alpha_facilities.htm

Dataset Segment:	**Demographic Variables**
Data Element Name:	Triage Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Situational

Description:

The date and time that the triage assessment of the patient was started. This is to be reported even if the patient developed sepsis on the floor. This will only be blank if a patient was a direct admission and did not come through the ED at any point.

Codes and Values:

Notes for Abstraction:

- Formatting:
  1. Format must be YYYY-MM-DD hh:mm
     a. YYYY-MM-DDThh:mm is also valid
  2. YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  3. Example: 11:42 pm November 3, 1959=1959-11-03 23:42
     a. 1959-11-03T23:42 is also valid
  4. Midnight = 00:00, not 24:00
- Cannot have been after ***Discharge Datetime***.
- NOTE: This is asking for the **start** of the triage assessment, not the datetime of its completion.
- If a patient was a direct admission, this data element will not be reported. If the patient developed sepsis on the floor but at some previous point arrived through the ED, ***Triage Datetime*** is to be reported.
- The ***Triage Datetime*** is referring to the start or initiation of the triage assessment process in the ED.

Dataset Segment:	**Demographic Variables**
Data Element Name:	Unique Personal Identifier
Format – Length:	Varchar-10
SPARCS variable:	Yes
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

A composite field comprised of portions of the patient last name, first name, and social security number.

Included below are the individual components of this data element.

- **"First 2" and "Last 2" characters of the Patient's Last Name**. The birth name of the patient is preferable if it is available on the facility's information system.
- **"First 2" characters of the Patient's First Name.**
- **"Last 4" digits of the Patient's Social Security Number.**

Joe Tan with Social Security Number 123-456-7890 would be reported as TAANJO7890

NOTE: This data element is not to be confused with ***Patient Control Number***, which provides linkage of all record types containing patient-related data for a specific discharge.

First and Last Name Components: Must be UPPERCASE alphabetic characters. If the last name is less than 4 characters, the first two and last two characters are used even if some characters are repeated.

Included below are examples of how to report some unusual scenarios. A three character last name, a two character last name, a name with junior, a one character first name, a last name with an apostrophe, and a hyphenated last name.

- Joe Tan would be reported as TAANJO
- Bill Su Jr. would be reported as SUSUBI
- E John Smith would be reported as SMTHEE
- Bob O'Brien would be reported as OBENBO
- Sue Jones-Davis would be reported as JOISSU

Social Security Number Component: Must be numeric. If no Social Security Number is available, this sub-field must be zeroes e.g. TAANJO0000

Adherence Variables

Dataset Segment:	**Adherence Variables**
Data Element Name:	Antibiotic Administration
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Situational

Description:

The code that represents the documented administration of a broad spectrum antibiotic in the time window 24 hours prior to through1 hour after the presentation of severe sepsis.

Codes and Values:

1 = (Yes) A broad spectrum or other antibiotic was administered intravenously in the time window 24 hours prior to through 1 hour following the presentation of severe sepsis.
2 = (No) No antibiotic was administered intravenously in the time window 24 hours prior to through 1 hour following the presentation of severe sepsis, or unable to determine.

Notes for Abstraction:

- If ***Excluded from Protocol*** = 1, may be blank, else must be completed.
- Only IV antibiotic administered in the 24 hours prior to through 1 hour after severe sepsis presentation is acceptable.
    - **EXCEPTION:** If there is documentation indicating IV access could not be established, antibiotics administered via intramuscular (IM) or intraosseous (IO) started in the 24 hours prior to through 1 hour after the severe sepsis presentation is acceptable to select Value "1."
- If no antibiotic was started within the 24 hours preceding to 1 hour following the S*evere Sepsis Presentation Date and Time*, choose Value "2."
- Antibiotic administration information should only be abstracted from documentation that demonstrates actual administration of the antibiotic (i.e., antibiotic name, route, date and time).
- Do not abstract antibiotics from narrative charting unless there is no other documentation that reflects that the same antibiotic was given during the specified timeframe.

- 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 indicated. The route on the MAR for an antibiotic cannot be used as the route for a dose of that same antibiotic on another form.

- 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. The methods may vary. Whatever method is used, it must be clear that the dose was administered.
- Do not abstract test doses of antibiotics.
- Do not abstract antibiotics from sources that do not represent actual administration.
- If the antibiotic name, route, date or time is missing, disregard that dose.
- Pre-hospital records (e.g., ambulance records, nursing home records) that are considered part of the medical record should be used for abstracting antibiotics.

Dataset Segment:	**Adherence Variables**
Data Element Name:	Antibiotic Administration Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Situational

Description:
The earliest datetime that an antibiotic was started in the window of 24 hours preceding to 1 hour after the presentation of severe sepsis.

Codes and Values:

Notes for Abstraction:

- Formatting:
  1. Format must be YYYY-MM-DD hh:mm
     a. YYYY-MM-DDThh:mm is also valid
  2. YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  3. Example: 11:42 pm November 3, 1959=1959-11-03 23:42
     a. 1959-11-03T23:42 is also valid
  4. Midnight = 00:00, not 24:00
- If ***Antibiotic Administration*** = 1, then must be completed.
- If ***Antibiotic Administration*** is blank or contains a value of 2, then must be blank.
- Cannot have been after ***Discharge Datetime***.
- If one or more antibiotic was started within 24 hours prior to severe sepsis presentation, and none of those same antibiotics were started more than 24 hours prior to severe sepsis presentation; and/or if antibiotic(s) was administered both 24 hours prior to and within 1 hour after severe sepsis presentation, THEN abstract the earliest date and time that the antibiotic was started.
  - This may be the same date as the date of presentation or may be a date any time before presentation.
  - Do not review for antibiotic doses started more than 72 hours prior to severe sepsis presentation.
  - If one or more antibiotic was started within the 1 hour after severe sepsis presentation, and the patient did not receive an antibiotic in the 24 hours before severe sepsis presentation, abstract the dose started closest to 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.
- If the antibiotic name, route, date or time is missing, disregard that dose.
- Specific documentation by one person that another person administered the antibiotic is acceptable for determining the date and time of administration.
- Pre-hospital records (e.g., ambulance records, nursing home records) that are considered part of the medical record should be used for abstracting antibiotics.

Dataset Segment:	**Adherence Variables**
Data Element Name:	Blood Culture Collection
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	Yes
Mandatory:	Situational

Description:

Definition: Documentation of the collection of a blood culture.

Code and Values:

- The Codes and Values for the time window will be modified according to the 1 hour pediatric bundle.
    - 1 = (Yes) A blood culture was collected in the time window 48 hours prior to 1 hour following the presentation of severe sepsis.
    - 2 = (No) A blood culture was not collected in the time window 48 hours prior to 1 hour following the presentation of severe sepsis or unable to determine.

Notes for Abstraction:

- If ***Blood Culture Collection*** = 1, then ***Blood Culture Collection Datetime*** must be completed.
- If ***Blood Culture Collection*** = 2 or is blank, then ***Blood Culture Collection Datetime*** must be blank.
- If ***Excluded from Protocol*** = 1, may be blank, else must be completed.
- Failed attempts or contaminated specimens may not be reported as "collected" for cases reported to the NYSDOH. This is not meant to affect clinician care - this only applies to the reporting of the quarterly data for the NYSDOH. Additionally, the NYSDOH does not exclude viral, parasitic, or fungal infections. Please report ALL infections.
- If a patient **does not** receive an IV or IO antibiotic within the 24 hours before the presentation of severe sepsis, the appropriate time window is:
    - 24 hours prior to *Severe Sepsis Present Date and Time* through 1 hours following *Severe Sepsis Present Date and Time*.
- If a patient **does** receive an IV or IO antibiotic within the 24 hours before the presentation of severe sepsis, the appropriate time window is:
- 24 hours prior to the administration of the antibiotic through1 hours following *Severe Sepsis Present 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.

- Do not use physician orders to determine a blood culture was collected, as they do not demonstrate collection of the blood culture.

- If there is supportive documentation that a blood culture was collected in the appropriate time window and is the earliest mention of a blood culture, this date and time can be used, e.g. “BC sent to lab”, “blood culture received time.” Select Value “1”.

Suggested Data Sources:

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

Dataset Segment:	**Adherence Variables**
Data Element Name:	Blood Culture Collection Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
CMS SEP-1 variable:	Yes
Mandatory:	Situational

Description:
This variable has been aligned with the CMS SEP-1 data elements Blood Culture Collection Date and Blood Culture Collection Time. Please use the combination of those data elements for submission of ***Blood Culture Collection Datetime***. The most recent CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

The time window for abstracting the datetime will be 48 hours prior to 1 hour following the presentation of severe sepsis. The only exceptions are with respect to failed/contaminated laboratory specimen collection. Currently the NYSDOH is not allowing any failed attempts or contaminated specimens to be reported as collected. Additionally, the NYSDOH does not exclude viral, parasitic, or fungal infections. Please report ALL infections.

Definition: The datetime on which a blood culture was collected.

Codes and Values:

Notes for Abstraction:

- Formatting:
  1. Format must be YYYY-MM-DD hh:mm
     a. YYYY-MM-DDThh:mm is also valid
  2. YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  3. Example: 11:42 pm November 3, 1959=1959-11-03 23:42
     a. 1959-11-03T23:42 is also valid
  4. Midnight = 00:00, not 24:00
- If ***Blood Culture Collection*** = 1, then must be completed.
- If ***Blood Culture Collection*** is blank or contains a value of 2, then must be blank.
- Cannot have been after ***Discharge Datetime***.
- Please refer to blood culture collection data element for appropriate time window 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 blood culture.

- If there is supportive documentation that a blood culture was collected in the time window 48 hours prior to or 1 hours following the presentation of severe sepsis and it is the earliest mention of a blood culture, this date and time can be used, e.g., “BC sent to lab,” “blood culture received time.”
- Do not use physician orders to determine that a blood culture was collected, as they do not demonstrate collection of the blood culture.
- If the patient was started on antibiotics within 24 hours before presentation of severe sepsis, begin abstracting 24 hours prior to the time the first antibiotic dose was given.
- If the patient was not on antibiotics at the time of presentation of severe sepsis, begin abstracting 24 hours prior to the time of presentation of severe sepsis.
- If multiple blood cultures were drawn, abstract the earliest blood culture drawn or attempted in the time window 48 hours prior to or 1 hours following the presentation of severe sepsis.
- Stop abstracting 1 hour after the presentation of severe sepsis.

Dataset Segment:	**Adherence Variables**
Data Element Name:	Blood Culture Collection Acceptable Delay
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	Yes
Mandatory:	Situational

Description:

This variable has been aligned with the CMS SEP-1 data element Blood Culture Collection Acceptable Delay. Please use the information from that data element for submission of ***Blood Culture Collection Acceptable Delay***. The most recent CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable. **The only exceptions are with respect to failed/contaminated laboratory specimen collection. Currently the NYSDOH is not allowing any failed attempts or contaminated specimens to be reported as collected.**

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

Codes and 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.

Notes for Abstraction:

- If ***Blood Culture Collection*** = 1, then ***Blood Culture Collection Acceptable Delay*** must be completed.
- If there was no delay in the collection of a blood culture, than an "acceptable delay" did not occur. Choose Value "2" (No-there is no documentation supporting an acceptable delay in the collection of a blood culture) would be the appropriate selection if a delay never occurred for a blood culture collection.
- 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*. If there is an acceptable delay, choose Value "1."
    - 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, which 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.

- If there is no documentation supporting an acceptable delay in the collection of a blood culture, choose Value "2."

Suggested Data Sources:

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

Exclusion Guidelines for Abstraction:

Oral (PO) Antibiotics

Dataset Segment:	**Adherence Variables**
Data Element Name:	Crystalloid Fluid Administration
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Situational

Description:

Indicate if at least 20ml/kg isotonic saline or colloid was given. Fluids must be administered within 6 hours preceding to 1 hour following severe sepsis or septic shock presentation.

Codes and Values:

0 = At least 20ml/kg isotonic saline or colloid were not given
1 = At least 20ml/kg isotonic saline or colloid were given
2 = Volume of fluids given is unknown

Notes for Abstraction:

- If ***Excluded from Protocol*** = 1, may be blank, else must be completed.
- Acceptable fluids are crystalloid or balanced crystalloid solutions.
    - Crystalloid fluids or balanced crystalloid fluids that are given to dilute medications are acceptable to count towards the target ordered volume.
    - 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.

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

Examples of 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

Dataset Segment:	**Adherence Variables**
Data Element Name:	Crystalloid Fluid Administration Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Situational

Description:

Definition: The earliest datetime on which crystalloid fluids were initiated for presentation of severe sepsis or septic shock through clinical criteria or physician/APN/PA *Documentation of Severe Sepsis or Septic Shock*.

Pediatric submission requires the start date and time for the number of bag(s) that would deliver sufficient fluid volume based on the pediatric patient's weight (in kg) and the 20ml/kg ratio.

Codes and Values:

Notes for Abstraction:

- Formatting:
  1. Format must be YYYY-MM-DD hh:mm
     a. YYYY-MM-DDThh:mm is also valid
  2. YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  3. Example: 11:42 pm November 3, 1959=1959-11-03 23:42
     a. 1959-11-03T23:42 is also valid
  4. Midnight = 00:00, not 24:00
- If ***Crystalloid Fluid Administration*** = 1, then ***Crystalloid Fluid Administration Datetime*** must be completed. .
- If ***Crystalloid Fluid Administration*** = 0 or 2, then ***Crystalloid Fluid Administration Datetime*** must be blank.
- Cannot have been after ***Discharge Datetime***.
- 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 multiple orders are written that total the target ordered volume, use the start date of the crystalloid fluid infusion that completes the target ordered volume.

- 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 use physician orders (i.e. date that fluids were ordered) or the date that IV access was started. Abstract the date and time that the crystalloid fluid infusion began.
- If there is physician/APN/PA documentation identifying the patient has obesity (defined as a Body Mass Index (BMI) at or above the 95th percentile for age and sex), the clinician may choose to use Ideal Body Weight (IBW) to determine the target ordered crystalloid fluid volume. If the clinician prefers to use IBW, it must be documented clearly, and the clinician must indicate that IBW will be the weight used to determine the target ordered volume.

Dataset Segment:	**Adherence Variables**
Data Element Name:	Elevated Lactate Reason
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Situational

Description:

This allows the identification of an elevated lactate (lactate >2 mmol/L) for a condition that is not an infection or is due to a medication.

Codes and Values:

1 = (Yes) There is physician/APN/PA documentation prior to or within 24 hours after the initial lactate level result that indicates the initial lactate value is due to a condition that is not an infection or is due to a medication.

2 = (No) There is no physician/APN/PA documentation prior to or within 24 hours after the initial lactate level result that indicates the initial lactate value is due to a condition that is not an infection, or is due to a medication, or unable to determine.

Notes for Abstraction:

- If ***Initial Lactate Level*** >2, must answer.

Dataset Segment:	**Adherence Variables**
Data Element Name:	Initial Lactate Level
Format – Length:	Decimal-4
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Situational

Description:

This is the actual lactate level that was reported by the lab for the initial lactate associated with the sepsis episode.

Codes and Values:

- Enter the actual initial lactate level using the mmol/L value. Convert from mg/dL if needed.
    - Values might range from 0 to 9; numbers higher than nine may indicate the value has not been converted to mmol/L. Be sure to convert to mmol/L as subsequent data elements are required for values >2 mmol/L.

Notes for Abstraction:

- If ***Initial Lactate Level Collection*** = 1, must answer.
- Must be numeric to one decimal place (example 19.8).
- If the lactate level was reported by the lab with more than one decimal place, use the rules of rounding to convert the number to one decimal place.
- Do not just truncate the number in order to convert it to one decimal place.
- Examples of rounding lactate level results:
    - 7.81 is rounded to 7.8
    - 7.85 is rounded to 7.9
    - 7.97 is rounded to 8

      NOT CORRECT: 7.85 is truncated to 7.8 (this should be rounded to 7.9)
- If multiple lactate levels are drawn within the specified time frame, use the lactate drawn PRIOR to the Severe Sepsis Presentation Time with the HIGHEST level.
- If multiple lactate levels are drawn ONLY in the 1 hour after the Severe Sepsis Presentation Time, use the lactate drawn with the HIGHEST level within this time frame
- If there is physician/APN/PA or nursing documentation that a lactate value is invalid, erroneous or questionable, disregard that value.

Dataset Segment:	**Adherence Variables**
Data Element Name:	Initial Lactate Level Collection
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Situational

Description:

Definition: Documentation of collection of an initial lactate level between 6 hours prior to and 1 hour following the presentation of severe sepsis.

Codes and Values:

1 = (Yes) An initial lactate level was drawn in the time window between 6 hours prior to 1 hour following the presentation of severe sepsis.
2 = (No) An initial lactate level was not drawn in the time window between 6 hours prior to 1 hour following the presentation of severe sepsis, or unable to determine.

Notes for Abstraction:

- If ***Initial Lactate Level Collection*** = 1, answer additional lactate questions.
- If ***Initial Lactate Level Collection*** = 2 or is blank, then all of the below are blank:
  - ***Initial Lactate Level Collection Datetime***
  - ***Initial Lactate Level***
- If ***Excluded from Protocol*** = 1, may be blank, else must be completed.
- 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.
- For the NYSDOH data collection, the lactate result must actually be present in the medical record.
- The NYSDOH data collection does not permit the submission of failed or contaminated specimens.

Dataset Segment:	**Adherence Variables**
Data Element Name:	Initial Lactate Level Collection Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
CMS SEP-1 variable:	Yes
Mandatory:	Situational

Description:

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

Codes and Values:

Notes for Abstraction:

- Formatting:
  1. Format must be YYYY-MM-DD hh:mm
     a. YYYY-MM-DDThh:mm is also valid
  2. YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  3. Example: 11:42 pm November 3, 1959=1959-11-03 23:42
     a. 1959-11-03T23:42 is also valid
  4. Midnight = 00:00, not 24:00
- If ***Initial Lactate Level Collection*** = 1, then the following MUST be completed:
  - ***Initial Lactate Level Collection Datetime***
  - ***Initial Lactate Level***
  - ***Initial Lactate Level Source***
- If ***Initial Lactate Level Collection*** is blank or contains a value of 2, then the following MUST be blank:
  - ***Initial Lactate Level Collection Datetime***
  - ***Initial Lactate Level***
- Cannot have been after ***Discharge Datetime***.
- If multiple lactate levels are drawn within the specified time frame, use the lactate drawn PRIOR to the Severe Sepsis Presentation Time with the HIGHEST level.
- If multiple lactate levels are drawn ONLY in the 1 hour after the Severe Sepsis Presentation Time, use the lactate drawn with the HIGHEST level within this time frame.

- 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 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).

Dataset Segment:	**Adherence Variables**
Data Element Name:	Initial Lactate Level Source
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Situational

Description:
This is the initial lactate collection source.

Definition: Specify the source of the initial lactate collection occurring between 6 hours prior to and 1 hour following the presentation of severe sepsis.

Codes and Values:

1 = Arterial source collection of the reported initial lactate level collection.
2 = Venous source collection of the reported initial lactate level collection.

Notes for Abstraction:

- If ***Initial Lactate Level Collection*** = 1, answer additional lactate questions.
- If ***Initial Lactate Level Collection*** = 2 or is blank, then all of the below are blank:
  - ***Initial Lactate Level Collection Datetime***
  - ***Initial Lactate Level***
  - ***Initial Lactate Level Source***
- If ***Excluded from Protocol*** = 1, may be blank, else must be completed.

Dataset Segment:	**Adherence Variables**
Data Element Name:	Septic Shock Present
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

Clinical criteria must be met **within 6 hours of each other.**

Definition: Documentation of the presence of septic shock.

Codes and Values:

1 = (Yes) There is documentation of Septic Shock.
2 = (No) There is no documentation of Septic Shock, or unable to determine.

Notes for Abstraction:

- Presence of Septic Shock may be identified based upon clinical criteria or physician/APN/PA documentation of Septic Shock.

In order to establish the presence of Septic Shock by clinical criteria, sepsis criteria plus one of the following two criteria must be met;

Sepsis (suspected or proven infection and ***two*** SIRS criteria met from the following four: tachycardia, tachypnea, hypo/hyperthermia, high/low WBC or bandemia >10%, of which at least ONE must be hypo/hyperthermia *or* high/low WBC/bandemia > 10%)

AND

A) ***One of the following signs of cardiovascular organ dysfunction***

- Hypotension as defined by the age-specific vital signs reported on Table 1. Contrary to adult septic shock, pediatric septic shock does not require **two** documented hypotensive blood pressure readings to satisfy the criteria for pediatric cardiovascular organ dysfunction; one low BP is sufficient.
- Need for vasoactive drug to maintain BP in normal range

Table 1: Age-specific Systolic Blood Pressure Values for Hypotension	
Age Groups	**Thresholds**
0 d to < 1 mo	SBP < 60
1 < 3 mo	SBP < 70
3 mo to < 1 yr	SBP < 70
1 to < 2 yr	SBP < 70 + (2 x age in years)
2 to < 10 yr	SBP < 70 + (2 x age in years)
10 to < 18 yr	SBP < 90
SBP, Systolic Blood Pressure *Data from* Kleinman ME, Chameides L, Schexnayder SM, et al: Part 14: Pediatric advanced life support: 2010 American Heart Association Guidelines for cardiopulmonary resuscitation and emergency cardiovascular care. Circulation 2010; 122:876–909	

B) ***OR any TWO of the following signs of cardiovascular organ dysfunction***

- Unexplained metabolic acidosis: base deficit > 5.0 meq/L regardless of fluid administration
- Elevated serum lactate > 2 mmol/L regardless of fluid administration
- Decreased urine output <0.5cc/kg/hr **after administration of 20cc/kg crystalloid fluid**
- Prolonged capillary refill > 3 sec. or flash capillary refill **after administration of 20cc/kg fluid**
- Diminished pulses or mottled cool extremities **after administration of 20cc/kg fluid**
- Bounding peripheral pulses and wide pulse pressure **after administration of 20 cc/kg fluid**

The crystalloid fluid administration will be based on the pediatric patient's weight (in kg) and the 20ml/kg.

Dataset Segment:	**Adherence Variables**
Data Element Name:	Septic Shock Presentation Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Situational

Description:

Clinical criteria must be met **within 6 hours of each other** at which point the earliest time of the final criterion is reported as the presentation datetime.

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

Codes and Values:

Notes for Abstraction:

- Formatting:
  1. Format must be YYYY-MM-DD hh:mm
     a. YYYY-MM-DDThh:mm is also valid
  2. YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  3. Example: 11:42 pm November 3, 1959=1959-11-03 23:42
     a. 1959-11-03T23:42 is also valid
  4. Midnight = 00:00, not 24:00
- Cannot have been after ***Discharge Datetime***.
- Cannot be before ***Arrival Datetime***.
- If ***Septic Shock Present*** =2, then must be blank.
- If ***Severe Sepsis Presentation Datetime*** is completed than ***Septic Shock Presentation Datetime*** cannot be before ***Severe Sepsis Presentation Datetime***.
- The date/time that should be used is the time that the last criterion was met determining that septic shock was present.
- In patients with multiple episodes of septic shock during the same admission, use the date/time from the first episode.
- If septic shock was determined by provider note, use the earliest date and time this was documented, which could be time of arrival to the ED if the note states there was septic shock on arrival. Unless a time of severe sepsis is included in the note, use the time that the note was opened or started.

Dataset Segment:	**Adherence Variables**
Data Element Name:	Severe Sepsis Present
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

All three clinical criteria must be met **within 6 hours of each other**.

Definition: Documentation of the presence of severe sepsis.

Codes and Values:

1 = (Yes) Severe Sepsis was present.
2 = (No) Severe Sepsis was not present, or Unable to Determine

Notes for Abstraction:

- Presence of Severe Sepsis may be identified based upon clinical criteria or physician/APN/PA documentation of Severe Sepsis.

In order to establish the presence of Severe Sepsis by clinical criteria;

1. **Proven or suspected infection**
2. ***Two*** SIRS criteria met from the following four: tachycardia, tachypnea, hypo/hyperthermia, high/low WBC or bandemia >10%, of which at least ONE must be hypo/hyperthermia *or* high/low WBC/bandemia > 10%)

Table 1: Pediatric systematic inflammatory response syndrome (SIRS) criteria

- Core body temperature (rectal or oral) of greater than 38.5°C or less than 36°C (tympanic, toe, axillary temperature measurements are not recommended)
- Tachycardia
- Tachypnea
- Abnormal high or low leukocyte count for age or bandemia (>10% immature neutrophils)

Systemic inflammatory response syndrome = 2 out of these 4 criteria with at least 1 being abnormality in temperature or leukocyte count.

Data from Goldstein, B., Giroir, B., & Randolph, A. (2005). International pediatric sepsis consensus conference: definitions for sepsis and organ dysfunction in pediatrics. Pediatric critical care medicine, 6(1), 2-8.

Table 2: Age-specific vital signs and laboratory values for SIRS criteria				
Age Groups	**Tachycardia (HR)**	**Bradycardia (HR)**	**Respiratory Rate (RR)**	**Leukocytosis (WBC)**
Birth to 1 wk	>180	<100	>50	>34
1 wk to 1 mo	>180	<100	>40	>19.5 or <5
1 mo to 1 y	>180	<90	>34	>17.5 or <5
2-5y	>140	NA	>22	>15.5 or <6
6-12y	>130	NA	>18	>13.5 or <4.5
13 to 18 y	>110	NA	>14	>11 or <4.5
NA, not applicable *Data from* Goldstein, B., Giroir, B., & Randolph, A. (2005). International pediatric sepsis consensus conference: definitions for sepsis and organ dysfunction in pediatrics. Pediatric critical care medicine, 6(1), 2-8.				

3. Organ dysfunction **other** than cardiovascular

For the organ dysfunction criteria, pediatric organ dysfunction is noted by the presence of:

Respiratory dysfunction*

OR

Two other types of organ dysfunction (neurologic**, hematological***, renal****, hepatic*****).

*Defined as per Goldstein et.al. PaO2/FIO2<300 in absence of cyanotic heart disease or preexisting lung disease, PaCO2>65 torr or 20 mmHg over baseline PaCO2, >50% FIO2 to maintain saturation>92%, need for non-elective invasive or noninvasive mechanical ventilation

** Altered mental status, such as lethargy, confusion, obtundation, coma

***Hematologic dysfunction is defined as a platelet count less than 80,000/mm3 (not in hematology patients) or a decline of 50% in platelet count from highest value recorded over the past 3 days (for hematology patients) or having an INR greater than 2.

****Renal dysfunction is defined as having a serum creatinine greater than or equal to 2x the upper limit of normal for age or 2-fold increase in baseline creatinine.

*****Hepatic dysfunction is defined as having a bilirubin level greater than or equal to 4 mg/dl (n/a for newborns) or an ALT level 2x the upper limit of normal for age (refer to the Table for hepatic lab values).

- Hospitals lab results may include age-specific reference ranges for normal values of creatinine and ALT Determining lab abnormality associated with renal or hepatic organ dysfunction may be based on each hospital's specified and documented lab value ranges.
    1) Please refer to Appendix A which contains a list of potential references Please note this is not an exhaustive list; your clinical team should be consulted for the facility's parameters for determining hepatic and renal organ dysfunction in pediatric patients.

- Clinician (physician/APN/PA) documentation of acute kidney injury (AKI) or acute liver failure (ALF) is acceptable to be used toward meeting the clinical criteria for organ dysfunction.

  References:

  1. Goldstein, B., Giroir, B., & Randolph, A. (2005). International Pediatric Sepsis Consensus Conference: Definitions for Sepsis and Organ Dysfunction in Pediatrics. Pediatric Critical Care Medicine, 6(1), 97. doi:10.1097/00130478-200501000-00033

Dataset Segment:	**Adherence Variables**
Data Element Name:	Severe Sepsis Presentation Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

Three clinical criteria as defined previously must be met **within 6 hours of each other** at which point the earliest time of the final criterion is reported as the presentation datetime.

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

Codes and Values:

Notes for Abstraction:

- Formatting:
  1. Format must be YYYY-MM-DD hh:mm
     a. YYYY-MM-DDThh:mm is also valid
  2. YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  3. Example: 11:42 pm November 3, 1959=1959-11-03 23:42
     a. 1959-11-03T23:42 is also valid
  4. Midnight = 00:00, not 24:00
- Cannot have been after ***Discharge Datetime***.
- Cannot be before ***Arrival Datetime***.
- If ***Severe Sepsis Present*** = 2, then must be blank.
- If ***Septic Shock Presentation Datetime*** is completed than ***Severe Sepsis Present Datetime*** cannot be after ***Septic Shock Presentation Datetime***.
- The date/time that should be used is the time that the last criteria was met determining that severe sepsis was present.
- In patients with multiple episodes of severe sepsis within the same admission, use the date/time from the first episode.
- If severe sepsis was determined by provider note, use the earliest date and time this was documented which could be time of arrival to the ED if the note states there was severe

sepsis on arrival. Unless a time of severe sepsis is included in the note, use the time that the note was opened or started.

- If there is no provider documentation of severe sepsis, and clinical criteria for severe sepsis are not documented, but the provider documents that septic shock is present, enter the date/time that septic shock was documented in the septic shock presentation datetime.

Dataset Segment:	**Adherence Variables**
Data Element Name:	Vasopressor Administration
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Situational

Description:

Documentation of administration of an intravenous or intraosseous vasopressor associated with this current episode of severe sepsis/septic shock case.

Codes and Values:

1 = (Yes) The patient was given an intravenous or intraosseous vasopressor
2 = (No) The patient was not given an intravenous or intraosseous vasopressor

Notes for Abstraction:

- Must be completed unless excluded from the protocol within one hour of severe sepsis or septic shock presentation datetime.
- 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.
- 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.
- If a vasopressor was infusing at the time of presentation of septic shock, 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."
- 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.

Dataset Segment:	**Adherence Variables**
Data Element Name:	Vasopressor AdministrationStart Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Situational

Description:

The date on which an intravenous or intraosseous vasopressor was administered.

Notes for Abstraction:

- Formatting:
  - Format must be YYYY-MM-DD hh:mm
    a. YYYY-MM-DDThh:mm is also valid
  - YYYY = four-digit year
    MM = two-digit month (01=January, etc.)
    DD = two-digit day of month (01 through 31)
    hh = two digits of hour (00 through 23) (am/pm NOT allowed)
    mm = two digits of minute (00 through 59)
  - Example: 11:42 pm November 3, 1959=1959-11-03 23:42
    a. 1959-11-03T23:42 is also valid
  - Midnight = 00:00, not 24:00

Notes for Abstraction:

- If ***Vasopressor Administration*** = 1, then must be completed.
- If ***Vasopressor Administration*** is blank or contains a value of 2, then must be blank.
- Cannot have been after ***Discharge Datetime***.
- 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.

Dataset Segment:	**Adherence Variables**
Data Element Name:	Vasopressor AdministrationEnd Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Situational

Description:

The date and time that the vasopressors were **discontinued**.

Definition: The date and time on which an intravenous or intraosseous vasopressor was discontinued.

Notes for Abstraction:

- Formatting:
  - Format must be YYYY-MM-DD hh:mm
    a. YYYY-MM-DDThh:mm is also valid
  - YYYY = four-digit year
    MM = two-digit month (01=January, etc.)
    DD = two-digit day of month (01 through 31)
    hh = two digits of hour (00 through 23) (am/pm NOT allowed)
    mm = two digits of minute (00 through 59)
  - Example: 11:42 pm November 3, 1959=1959-11-03 23:42
    a. 1959-11-03T23:42 is also valid
  - Midnight = 00:00, not 24:00

Notes for Abstraction:

- If ***Vasopressor Administration*** = 1, then must be completed.
- If ***Vasopressor Administration*** is blank or contains a value of 2, then must be blank.
- Cannot have been after ***Discharge Datetime***.
- Cannot be before ***Vasopressor AdministrationStart Datetime***.
- 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.
- If the patient is discharge or transferred with vasopressors, use ***Discharge Datetime***.

Dataset Segment:	**Adherence Variables**
Data Element Name:	Vasopressor Administration Transfer
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Situational

Description:

Indicate whether the patient was transferred in on vasopressors.

Codes and Values:

0 = The patient was not received as a transfer on vasopressors
1 = The patient was received as a transfer on vasopressors

Notes for Abstraction:

- Must be completed if ***Transfer Status*** = 2 or 3**.**
- If ***Vasopressor Administration Transfer*** =1**,** then ***Vasopressor Administration Start Datetime*** and ***Vasopressor Administration End Datetime*** must be completed.

Severity Adjustment Variables

Dataset Segment:	**Severity Adjustment Variables**
Data Element Name:	Altered Mental Status
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description: The clinical criteria timeframe for these data elements is within 6 hours before to 6 hours after the identification of severe sepsis and/or septic shock.

Was there any difference from the patient's baseline in any of the three spheres of orientation (sense of person/self, place and date/time) or in their level of alertness?

Codes and Values:

0 = No
1 = Yes
2 = Unknown

Notes for Abstraction:

- Must be completed.
- Altered mental status refers to the difference in mental status at the time of the sepsis episode as compared to the patient's baseline.
- This is not automatically the first mental assessment of the patient for that admission.
- The clinical criteria timeframe for these data elements is within 6 hours before to 6 hours after the identification of severe sepsis and/or septic shock.

Dataset Segment:	**Severity Adjustment Variables**
Data Element Name:	Bandemia
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

Was the band count more than 5% of the total white blood cell count at the time of ***Severe Sepsis Presentation Datetime***?

Codes and Values:

0 = No
1 = Yes
2 = Unknown

Notes for Abstraction:

- Must be completed.
- Additional information for the bandemia critical limit value being set at 5%:
    - The bandemia element is one component of the Mortality in Emergency Department Sepsis (MEDS) score and has been used in various studies for the creation of risk adjusted mortality associated with sepsis.
        - Shapiro NI, et al. Mortality in Emergency Department Sepsis (MEDS) score: a prospectively derived and validated clinical prediction rule. Critical Care Medicine 2003; 31(3): 670-675.
- Severity variable vs. SIRS criterion:
    - Band count – 5% is the severity variable collected for this data element.
    - Band count – 10% is a SIRS criterion.
- If the laboratory does not provide a report of percentage of bands, select "2". If bands are not elevated, select 0. If bands are elevated select "1".
- The clinical criteria timeframe for these data elements is within 6 hours before to 6 hours after the identification of severe sepsis and/or septic shock.

Dataset Segment:	**Severity Adjustment Variables**
Data Element Name:	Lower Respiratory Infection
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

Was there infiltrate on the patient's chest radiograph, computed tomography scan, or the presence of clinical findings suggestive of lower respiratory infection?

Codes and Values:

0 = No
1 = Yes
2 = Unknown

Notes for Abstraction:

- Must be completed.
- The clinical criteria timeframe for these data elements is within 6 hours before to 6 hours after the identification of severe sepsis and/or septic shock.

Dataset Segment:	**Severity Adjustment Variables**
Data Element Name:	Platelet Count (Thrombocytopenia)
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

Was the platelet count at the time of ***Severe Sepsis Present*** <150,000 cells/mm^3?

Codes and Values:

0 = No
1 = Yes
2 = Unknown

Notes for Abstraction:

- Must be completed.
- The collection of low platelets associated with sepsis is captured to determine patient severity.
- Severity variable vs. organ dysfunction:
    - Platelets <150,000 is the severity variable collected for this data element.
    - Platelets <100,000 is a sign of organ dysfunction.
- The clinical criteria timeframe for these data elements is within 6 hours before to 6 hours after the identification of severe sepsis and/or septic shock.

Comorbidity Variables

Dataset Segment:	**Comorbidity Variables**
Data Element Name:	AIDS/HIV Disease
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

Indicate if patient has AIDS or HIV infection. This is demonstrated by a history of the condition reported in the chart by any source, lab or radiologic results which would be considered diagnostic of the condition or notation in the chart indicating the patient has been/was diagnosed with the condition.

Codes and Values:

0 = Not present on admission
1 = Present on admission
2 = Not known upon admission, but discovered prior to presentation of severe sepsis
3 = Not known upon admission but discovered after the presentation of severe sepsis

Notes for Abstraction:

- Must be completed.

Dataset Segment:	**Comorbidity Variables**
Data Element Name:	Chronic Liver Disease
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

Indicate if patient has chronic liver disease as defined as the presence of cirrhosis or other liver disease accompanied by elevated bilirubin > 2mg/dL and serum albumin < 3.5g/dL, documentation of prior or present esophageal or gastric varices, portal hypertension, previous hepatic encephalopathy or ascites with notation of liver disease. This is demonstrated by a history of the condition reported in the chart by any source, lab or radiologic results which would be considered diagnostic of the condition or notation in the chart indicating the patient has been/was diagnosed with the condition.

Codes and Values:

0 = Not present on admission
1 = Present on admission
2 = Not known upon admission but discovered prior to presentation of severe sepsis
3 = Not known upon admission but discovered after the presentation of severe sepsis

Notes for Abstraction:

- Must be completed.
- For patients with Hepatitis B or C without liver failure, clinical judgment should be used in determining the acute versus chronic stage of the liver disease.

Dataset Segment:	**Comorbidity Variables**
Data Element Name:	Chronic Renal Failure
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

Indicate if patient has renal failure sufficient to require peritoneal dialysis or hemodialysis. This is demonstrated by a history of the condition reported in the chart by any source, lab or radiologic results which would be considered diagnostic of the condition or notation in the chart indicating the patient has been/was diagnosed with the condition.

Codes and Values:

0 = Not present on admission
1 = Present on admission
2 = Not known upon admission but discovered prior to presentation of severe sepsis
3 = Not known upon admission but discovered after the presentation of severe sepsis

Notes for Abstraction:

- Must be completed.

Dataset Segment:	**Comorbidity Variables**
Data Element Name:	Chronic Respiratory Failure
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

Patient has chronic respiratory failure that requires use of mechanical ventilation. This is demonstrated by a history of the condition reported in the chart by any source, lab or radiologic results which would be considered diagnostic of the condition or notation in the chart indicating the patient has been/was diagnosed with the condition.

Codes and Values:

0 = Not present on admission
1 = Present on admission
2 = Not known upon admission but discovered prior to presentation of severe sepsis
3 = Not known upon admission but discovered after the presentation of severe sepsis

Notes for Abstraction:

- Must be completed.

Dataset Segment:	**Comorbidity Variables**
Data Element Name:	Congestive Heart Failure
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

An indication of congestive heart failure with evidence of treatment; include compensated and uncompensated congestive heart failure. This is demonstrated by a history of the condition reported in the chart by any source, lab or radiologic results which would be considered diagnostic of the condition or notation in the chart indicating the patient has been/was diagnosed with the condition.

Codes and Values:

0 = Not present on admission
1 = Present on admission
2 = Not known upon admission but discovered prior to presentation of severe sepsis
3 = Not known upon admission but discovered after the presentation of severe sepsis

Notes for Abstraction:

- Must be completed.

Dataset Segment:	**Comorbidity Variables**
Data Element Name:	Diabetes
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

Indicate if patient was diagnosed and/or treated for diabetes or notation of a HbA1c of 6.5% or higher. Include patients on any pharmacologic therapy; exclude diet controlled, history of pregnancy related diabetes, and acute hyperglycemia without known history of diabetes. This is demonstrated by a history of the condition reported in the chart by any source, lab or results which would be considered diagnostic of the condition or notation in the chart indicating the patient has been/was diagnosed with the condition.

Codes and Values:

0 = Not present on admission
1 = Present on admission
2 = Not known upon admission but discovered prior to presentation of severe sepsis
3 = Not known upon admission but discovered after the presentation of severe sepsis

Notes for Abstraction:

- Must be completed.

Dataset Segment:	**Comorbidity Variables**
Data Element Name:	ICU
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

Indicate if the patient was admitted to the Intensive Care Unit (ICU; MICU; SICU; PICU; CCU).

Codes and Values:

0 = Patient not admitted to ICU
1 = Patient admitted to ICU

Notes for Abstraction:

- Must be completed.
- If ***ICU*** = 1, ***ICU Admission Datetime*** and ***ICU Discharge Datetime*** must be completed.
- Indicate if the patient was admitted at any time to the ICU during the hospital admission.

Dataset Segment:	**Comorbidity Variables**
Data Element Name:	ICU Admission Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Situational

Description:

The date and time the patient was first admitted to the Intensive Care Unit (ICU).

Codes and Values:

Notes for Abstraction:

- Formatting:
  1. Format must be YYYY-MM-DD hh:mm
     a. YYYY-MM-DDThh:mm is also valid
  2. YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  3. Example: 11:42 pm November 3, 1959=1959-11-03 23:42
     a. 1959-11-03T23:42 is also valid
  4. Midnight = 00:00, not 24:00
- If ***ICU*** = 1, then must be completed.
- If ***ICU*** = 0, then must be blank.
- Cannot have been after ***Discharge Datetime***.
- Indicate if the patient was admitted at any time to the ICU during the hospital admission and specify that date and time.
- If there is a difference between actual admission and order time, the order time to ICU should be reported. The intent of using the “order time” for ICU admission datetime & the “actual ICU discharge time” is to capture the full time for which the ICU was responsible for the patient care.
- If there are multiple ICU admissions within the same hospital admission (due the patient being transferred in & out multiple times), use the first ICU admission date and time.
- "Indicate if the patient was admitted to the Intensive Care Unit (ICU)" means if the patient was admitted at any time during the stay. Specify the date and time in the 'ICU Admission Datetime' data element.

Dataset Segment:	**Comorbidity Variables**
Data Element Name:	ICU Discharge Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Situational

Description:

The date and time that the patient was first discharged from the Intensive Care Unit (ICU) or expired.

Codes and Values:

Notes for Abstraction:

- Formatting:
  1. Format must be YYYY-MM-DD hh:mm
     a. YYYY-MM-DDThh:mm is also valid
  2. YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  3. Example: 11:42 pm November 3, 1959=1959-11-03 23:42
     a. 1959-11-03T23:42 is also valid
  4. Midnight = 00:00, not 24:00
- If ***ICU*** = 1, then must be completed.
- If ***ICU*** = 0, then must be blank.
- ***ICU Discharge Datetime*** may not precede ***ICU Admission Datetime***.
- If there is a difference between discharge order and actual discharge time, report actual discharge date and time. The intent of using the "order time" for ICU admission datetime & the "actual ICU discharge time" is to capture the full time for which the ICU was responsible for the patient care.

Dataset Segment:	**Comorbidity Variables**
Data Element Name:	Immune Modifying Medications
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

Indicate if patient is taking disease modifying medications/therapies (drugs and biologics) for collagen diseases, corticosteroids, chemotherapeutic agents through any modality (oral, IV, IM, etc.) known to specifically adversely impact the function of the immune system as primary therapeutic goal or unintended side effect, including steroids (excluding inhaled or topical steroids), radiotherapy, chemotherapy. This is demonstrated by a history of the condition reported in the chart by any source, lab or radiologic results which would be considered diagnostic of the condition or notation in the chart indicating the patient has been/was diagnosed with the condition.

Codes and Values:

0 = Not present on admission
1 = Present on admission
2 = Not present on admission but started prior to presentation of severe sepsis
3 = Not present on admission but started after the presentation of severe sepsis

Notes for Abstraction:

- Must be completed.
- As steroid usage (dosage/type) can vary depending on the patient's acute or chronic conditions, clinical judgment should be used in answering this variable.

Dataset Segment:	**Comorbidity Variables**
Data Element Name:	Infection Etiology (Hospital Acquired Infection)
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

Indicate if the severe sepsis or septic shock was the result of a hospital acquired infection that was obtained sometime during that current admission.

Codes and Values:

0 = No
1 = Yes
2 = Unknown

Notes for Abstraction:

- Must be completed.
- ONLY indicate "1 = Yes" if **ALL** of the following conditions are met:
  - The infection is a hospital acquired infection (HAI)
  - The HAI was acquired from your facility
  - The HAI was acquired from your facility during this current admission
- If only 1 or 2 of the above conditions are met, then either "0 = No" or "2 = Unknown" must be chosen (depending on the particular circumstance).
- All severe sepsis & septic shock cases presenting as such to the ED should be reported as "0 = No" unless the patient arrived at the ED for a different reason, acquired a HAI in the ED, and resultantly developed severe sepsis or septic shock.
- Example:
  - The patient presented to the ED from a nursing home
  - And the patient presented with severe sepsis (or septic shock) secondary to pneumonia (diagnoses)
  - And the infection (pneumonia) was "hospital acquired" from the nursing home
  - This is **not** reported as "1 = Yes" – this should be reported as "0 = No"
  - If the patient arrives at the hospital with severe sepsis/septic shock, then the infection causing that condition was not hospital acquired (as defined for these reporting purposes).

- If the patient arrives at a hospital with severe sepsis or septic shock, then the condition was not hospital acquired (e.g. arrives from a nursing home).

Dataset Segment:	**Comorbidity Variables**
Data Element Name:	Lymphoma/Leukemia/Multiple Myeloma
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

Indicate if patient has malignant neoplasm of lymphatic and hematopoietic tissue including those neoplasms which may be in clinical remission. This is demonstrated by a history of the condition reported in the chart by any source, lab or radiologic results which would be considered diagnostic of the condition or notation in the chart indicating the patient has been/was diagnosed with the condition.

Codes and Values:

0 = Not present on admission
1 = Present on admission
2 = Not known upon admission but discovered prior to presentation of severe sepsis
3 = Not known upon admission, but discovered after the presentation of severe sepsis

Notes for Abstraction:

- Must be completed.

Dataset Segment:	**Comorbidity Variables**
Data Element Name:	Mechanical Ventilation
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

Indicate whether the patient had mechanical ventilation support during the hospital stay. Do not report patients with only CPAP for sleep apnea as having mechanical ventilation.

Codes and Values:

0 = No mechanical ventilation
1 = Mechanical ventilation

Notes for Abstraction:

- Must be completed.
- If ***Mechanical Ventilation*** = 1, then ***Mechanical Ventilation Datetime*** must be completed.
- Any type of mechanical/assisted ventilation (invasive or non-invasive) is acceptable.
- If a patient was **only** intubated for surgery and was able to be extubated, then mechanical ventilation would not apply.
- Examples of acceptable use:
    - BIPAP (except when used only for sleep apnea)
    - The patient arrived and remained on mechanical ventilation
    - The patient was intubated, specifically associated with initiation of mechanical ventilation
    - The patient was intubated for surgery and was unable to be extubated post-surgery
- Mechanical ventilation includes all types of assisted ventilation except CPAP or BiPAP for sleep apnea.

Dataset Segment:	**Comorbidity Variables**
Data Element Name:	Mechanical Ventilation Start Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Situational

Description:

The date and time that the patient was first started on mechanical ventilation.

Codes and Values:

Notes for Abstraction:

- Formatting:
  1. Format must be YYYY-MM-DD hh:mm
     a. YYYY-MM-DDThh:mm is also valid
  2. YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  3. Example: 11:42 pm November 3, 1959=1959-11-03 23:42
     a. 1959-11-03T23:42 is also valid
  4. Midnight = 00:00, not 24:00
- If ***Mechanical Ventilation*** = 1, then must be completed.
- If ***Mechanical Ventilation*** is blank or contains a value of 0, then must be blank.
- Cannot have been after ***Discharge Datetime***.
- The datetime of the clinician's order for mechanical ventilation is not acceptable.
- Any type of mechanical/assisted ventilation (invasive or non-invasive) is acceptable, except:
  - BIPAP is acceptable, except in use for sleep apnea.
- If the patient arrives on mechanical ventilation, use ***Arrival Datetime***.
- If the patient arrives in the ED and is already receiving and continues to receive ventilation support, the arrival date and time would be used for Mechanical Ventilation Datetime unless you have clear documentation of the initiation of the mechanical ventilation at the prior facility. If you have clear documentation of the prior facility mechanical ventilation start time you would report that start time.

- Intubation datetime may be used if specifically associated with the initiation of mechanical ventilation for the patient.
- If a patient was intubated for surgery and was unable to be extubated post-surgery, then use the surgery intubation datetime. If a patient was **only** intubated for surgery and was able to be extubated, then mechanical ventilation would not apply.
- The intubation datetime can be used for Mechanical Ventilation Datetime if it is specifically associated with the initiation of mechanical ventilation for the patient. Any type of mechanical ventilation (invasive or noninvasive) is acceptable, except CPAP or BIPAP that is used specifically for sleep apnea. An order date/time for mechanical ventilation is not acceptable.

Dataset Segment:	**Comorbidity Variables**
Data Element Name:	Mechanical Ventilation End Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Situational

Description:

The date and time that the patient **was removed from** mechanical ventilation.

Codes and Values:

Notes for Abstraction:

- Formatting:
  5. Format must be YYYY-MM-DD hh:mm
     a. YYYY-MM-DDThh:mm is also valid
  6. YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  7. Example: 11:42 pm November 3, 1959=1959-11-03 23:42
     a. 1959-11-03T23:42 is also valid
  8. Midnight = 00:00, not 24:00
- If ***Mechanical Ventilation*** = 1, then must be completed.
- If ***Mechanical Ventilation*** is blank or contains a value of 0, then must be blank.
- Cannot have been after ***Discharge Datetime***.
- The datetime of the clinician's order for mechanical ventilation extubation is not acceptable.
- Documented extubation time can be used for end of mechanical ventilation if not otherwise documented. This may be defined as successful extubation or completion time of the withdrawl of NIV support.
- If the patient is discharge or transferred with mechanical ventilation, use ***Discharge Datetime***.
- If a patient was **only** intubated for surgery and was able to be extubated, then mechanical ventilation would not apply.

Dataset Segment:	**Comorbidity Variables**
Data Element Name:	Mechanical Ventilation_Transfer
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Situational

Description:

Indicate whether the patient was transferred in on mechanical ventilation. Do not report patients with only CPAP or BIPAP for sleep apnea as having mechanical ventilation.

Codes and Values:

0 = The patient was not received as a transfer on mechanical ventilation
1 = The patient was received as a transfer on mechanical ventilation

Notes for Abstraction:

- Must be completed if ***Transfer Status*** = 2 or 3.
- If ***Mechanical Ventilation_Transfer*** =1**,** then ***Mechanical Ventilation Datetime_Start*** and ***Mechanical Ventilation Datetime_End*** must be completed.
- Any type of mechanical/assisted ventilation (invasive or non-invasive) is acceptable.
- Examples of acceptable use:
    - BIPAP (except when used only for sleep apnea)
    - The patient arrived and remained on mechanical ventilation
    - The patient was intubated, specifically associated with initiation of mechanical ventilation
    - The patient was intubated for surgery and was unable to be extubated post-surgery
- Mechanical ventilation includes all types of assisted ventilation except CPAP or BIPAP for sleep apnea.

Dataset Segment:	**Comorbidity Variables**
Data Element Name:	Metastatic Cancer
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

Indicate if patient has any solid, malignant neoplasm with evidence of metastasis beyond the primary involved organ, including involvement of lymph nodes (exclude lymphoma/leukemia/multiple myeloma). This is demonstrated by a history of the condition reported in the chart by any source, lab or radiologic results which would be considered diagnostic of the condition or notation in the chart indicating the patient has been/was diagnosed with the condition.

Codes and Values:

0 = Not present on admission
1 = Present on admission
2 = Not known upon admission but discovered prior to presentation of severe sepsis
3 = Not known upon admission, but discovered after the presentation of severe sepsis

Notes for Abstraction:

- Must be completed.
- Malignant brain tumor may also be counted as a comorbidity under Metastatic Cancer.

Dataset Segment:	**Comorbidity Variables**
Data Element Name:	Organ Transplant
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

Indicate if patient had an organ transplant including heart, lung, kidney, liver, pancreas, stem cell/bone marrow. Exclude corneal or skin transplant/grafting. This is demonstrated by a history of the condition reported in the chart by any source, lab or radiologic results which would be considered diagnostic of the condition or notation in the chart indicating the patient has been/was diagnosed with the condition.

Codes and Values:

0 = Not present on admission
1 = Present on admission
2 = Not present on admission but received transplant prior to presentation of severe sepsis
3 = Not present on admission but received transplant after the presentation of severe sepsis

Notes for Abstraction:

- Must be completed.

Dataset Segment:	**Comorbidity Variables**
Data Element Name:	Site of Infection
Format – Length:	Enumerated-1
SPARCS variable:	No
CMS SEP-1 variable:	No
Mandatory:	Yes

Description:

Indicate the suspected or diagnosed site of infection.

Codes and Values:

1 = Urinary
2 = Respiratory
3 = Gastrointestinal
4 = Skin
5 = Central Nervous System
6 = Other
7 = Unknown

Notes for Abstraction:

- Must be completed.
- If there are multiple suspected or diagnosed sites of infection, the most likely source of infection should be chosen.
- If the site of infection cannot be determined then choose 7=Unknown.
- If severe sepsis or shock was part of the patient's final diagnosis (beyond the bacterial vs. viral/fungal infection) then this case would need to be reported to the NYSDOH. All cases of severe sepsis or septic shock are to be reported regardless of the source of infection.

Sepsis Data Submission Data Types and Constraints

Data Typing:

date	YYYY-MM-DD
datetime	YYYY-MM-DD hh:mm OR YYYY-MM-DDThh:mm
enumerated	defined list of possible values, single choice
set	defined list of possible values, composite choice with each choice separated by a colon.
varchar	variable ascii character
int	integer
decimal	fixed point (precision, scale)

Data Constraints:

- comma signals specified available values (A,Z allows only A or Z)
- dash signals range of values (A-Z allows any letter from A through Z)
- minlength is the minimum ASCII character length of the element IF the element is submitted. Where blanks are allowed, minlength is moot.
- maxlength denotes the total allowed space per element, but is not fixed width. Do not left-pad or zero-fill.

The most up to date *Table of Elements* defining data submission data element names, data element min and max lengths and, data element constraints for each data element may be downloaded at https://ny.sepsis.ipro.org.

Blanks:

There may be cases for which data elements can include a blank field. Cases with blank fields depend upon situational responses to related data elements. Please read the data dictionary for each data element carefully.

Appendix A: Potential Sources for Lab Values for Organ Dysfunction

Please note that your clinical team should be consulted for final determination of acceptable values for organ dysfunction.

- Harriet Lane Handbook. TABLE 27.1: REFERENCE VALUES. (2018). In Kahl, L. K., & Hughes, H. K. (Eds.). Available at: https://www.unboundmedicine.com/harrietlane/view/Harriet_Lane_Handbook/309269/all/TABLE_27_1:_Reference_Values

Hepatic labs	
Age	Normal Range
Alanine Aminotransferase (ALT)	
Infant aged <12 mo	13 – 45 U/L
1 – 3 yr	5 – 45 U/L
4 – 6 yr	10 – 25 U/L
7 – 9 yr	10 – 35 U/L
10 – 11 yr	
Female	10 – 30 U/L
Male	10 – 35 U/L
12 – 13 yr	
Female	10 – 30 U/L
Male	10 – 55 U/L
14 – 15 yr	
Female	5 – 30 U/L
Male	10 – 45 U/L
>16 yr	
Female	5 – 35 U/L
Male	10 – 40 U/L
Bilirubin (Total)	
Cord:	
Term and Preterm	<2 mg/dL
0 – 1 days	
Term and Preterm	<8 mg/dL
1 – 2 days	
Preterm	<12 mg/dL
Term	<11.5 mg/dL
3 – 5 days	
Preterm	<16 mg/dL
Term	<12 mg/dL
>5 days – 1 yr	
Preterm	<2 mg/dL
Term	<1.2 mg/dL
1 – <18 yr	<1.5 mg/dL

Ref: Harriet Lane Handbook (Table 27.1)

Renal lab	
Age	Normal Range
Creatinine (serum)	
Cord	0.6 – 1.2 mg/dL
Newborn	0.3 – 1.0 mg/dL
Infant	0.2 – 0.4 mg/dL
Child	0.3 – 0.7 mg/dL
Adolescent	0.5 – 1.0 mg/dL

Ref: Harriet Lane Handbook (Table 27.1)

- Creatinine-based "Bedside Schwartz" Equation (2009). Available at: https://www.kidney.org/content/creatinine-based-%E2%80%9Cbedside-schwartz%E2%80%9D-equation-2009

Creatinine-based "Bedside Schwartz" Equation (2009)
eGFR = 0.413 x (height/Scr) if height is expressed in centimeters OR 41.3 x (height/Scr) if height is expressed in meters
References: Schwartz GJ and Work DF. Measurement and estimation of GFR in children and adolescents. J Am Soc Nephrol. 2009; Nov; 4(11): 1832-643. Schwartz GJ, Munoz A, Schneider MF, et al. New equations to estimate GFR in children with CKD. J Am Soc Nephrol. 2009; 20: 629-637. Staples A, LeBlond R, Watkins S, Wong C, Brandt J. Validation of the revised Schwartz estimating equation in a predominantly non-CKD population. Pediatr Nephrol. 2010 Nov;25(11):2321-6

- Pediatric Acute Liver Failure (PALF) Criteria

Pediatric Acute Liver Failure (PALF) Criteria
A consensus definition of PALF is the acute onset of liver disease with hepatic-based coagulopathy (prothrombin time [PT] ≥ 20 seconds) not corrected by parenteral vitamin K with or without hepatic encephalopathy (HE) **or** hepatic-based coagulopathy (PT=15-19.9 seconds; INR=1.5-1.9) with hepatic encephalopathy (HE)
Reference: Jain, V., & Dhawan, A. (2016). Prognostic modeling in pediatric acute liver failure. *Liver Transplantation*, *22*(10), 1418-1430. Squires Jr, R. H., Shneider, B. L., Bucuvalas, J., Alonso, E., Sokol, R. J., Narkewicz, M. R., ... & Horslen, S. (2006). Acute liver failure in children: the first 348 patients in the pediatric acute liver failure study group. *The Journal of pediatrics*, *148*(5), 652-658.

Change Log

Version 2.1

This is effective for discharges on or after January 1, 2020 through June 30, 2020. The NYSDOH is aligning with CMS in releasing two dictionaries for 2020 therefore hospitals will receive a revised dictionary for July 1, 2020 discharges.

The following data element was changed to correct a typographical error:

- ***Septic Shock Present:***
  - For Table 1: Age-specific Systolic Blood Pressure Values for Hypotension, the thresholds for ages 1 year to <10 years was corrected from SBP<70 + age/2 to SBP<70 + (2 x age in years).

Version 2.0

This is effective for discharges on or after January 1, 2020 through June 30, 2020. The NYSDOH is aligning with CMS in releasing two dictionaries for 2020 therefore hospitals will receive a revised dictionary for July 1, 2020 discharges.

The following data element was added:

- ***Initial Lactate Level Source:***
  - This is the hospital reported source for initial lactate level collection: arterial or venous.

Appendix A: Potential sources for lab values for organ dysfunction was added.

The following data element was modified:

- ***Points to remember:***
  - "Non-discharged newborn" exclusion statement was added:
    - Non-discharged newborns, including newborns/infants in the NICU that had not been previously discharged from the initial birth stay, are NOT to be reported to the sepsis clinical data portal. This also includes newborns that were born at another facility and were transferred to the receiving facility without ever being discharged. Newborns that were discharged and then readmitted ARE to be reported to the sepsis data portal.
- ***Discharge Datetime:***
  - Added: "Hospitals are directed to report the date/time of death if this is earlier than the administrative discharge date."
- ***Ethnicity:***
  - Description statement has been modified.

- ***Excluded Explain:***
  - For Value "1" acute decompensated congested heart failure. In order to clarify the meaning of "acute" decompensated congestive heart failure, one example was added:
- ***Excluded Protocol:***
  - Added: "(which is within 6 hours prior through 1 hour following severe sepsis presentation)" after the phrase treatment window.
- ***Pregnancy Status*** variable added to this edition.
- ***Race:***
  - Description statement has been modified.
- ***Crystalloid Fluid Administration:***
  - Added: Acceptable fluids are crystalloid or balanced crystalloid solutions and examples to the Notes for Abstraction.
- ***Crystalloid Fluid Administration Datetime:***
  - Added: If ***Crystalloid Fluid Administration*** = 0 or 2, then ***Crystalloid Fluid Administration Datetime*** must be blank
- ***Initial Lactate Level, Initial Lactate Collection, Initial Lactate Collection Datetime:***
  - Revised timeframe for lactate evaluation to initial lactate level abstraction between 6 hours prior to and 1 hours following the presentation of severe sepsis.
    - Revised to: If multiple lactate levels are drawn within the specified time frame, use the lactate drawn PRIOR to the Severe Sepsis Presentation Time with the HIGHEST level.
    - Revised to: If multiple lactate levels are drawn ONLY in the 1 hour after the Severe Sepsis Presentation Time, use the lactate drawn with the HIGHEST level within this time frame.
- ***Septic Shock Present:***
  - References and tables were added.
  - Cardiovascular dysfunction was clarified to note that two BPs are not required to meet the criteria; one low BP is sufficient.
- ***Septic Shock Present Datetime:***
  - Added "Unless a time of severe sepsis is included in the note, use the time that the note was opened or started" to the Notes for Abstraction.
- ***Severe Sepsis Present:***
  - References and tables were added.
- ***Vasopressor Administration:***
  - Added: Documentation of administration of an intravenous or intraosseous vasopressor "associated with this current episode of severe sepsis/septic shock case" in the Description for clarification.
- ***Altered Mental Status:***

    - Rearranged content to specify the timeframe for abstraction in the description statement.
- ***ICU Admission Datetime*** and ***ICU Discharge Datetime:***
    - Additional notes for abstraction were included.
- ***Mechanical Ventilation-Start Datetime:***
    - Clarifying sentence added to notes and abstraction.

Version 1.1

This is effective for discharges on or after January 1, 2019.

The following data element was modified:

- Mechanical Ventilation_End Datetime
    - Clarifying sentence added to notes and abstraction.