# DATA DICTIONARY FOR SEVERE SEPSIS OR SEPTIC SHOCK

Version 4.1

December 16, 2016

The most recent version of this document, the *Frequently Asked Questions* document, and the *Table of Elements* data template and instructions may always be found at: <a href="https://ny.sepsis.ipro.org">https://ny.sepsis.ipro.org</a>

Questions regarding this document should be sent to: <a href="mailto:sepsis-ny@support.ipro.us">sepsis-ny@support.ipro.us</a>

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# Points to remember during data collection

To be clear: NYSDOH is ONLY aligning with select CMS SEP-1 data elements. The denominator for the NYSDOH data submission still requires reporting ALL cases of severe sepsis or septic shock INCLUDING cases identified through coding AND/OR other avenues (e.g., concurrent case identification; retrospective review; and so forth). Hospitals are NOT to be using the CMS method of selecting cases and adding DOH data elements to those cases. This would be an incorrect interpretation of the 2017 modification; the NYSDOH requires reporting ALL severe sepsis and septic shock cases regardless of how they are identified.

# • Important CMS SEP-1 alignment instructions:

- Numerous data elements in this data dictionary have been changed to align with CMS SEP-1. All notes and guidelines provided by CMS should be referenced for the correct abstraction and submission of all data for those data elements. The only exception is with respect to failed/contaminated laboratory specimen collection (e.g. blood culture, lactates, etc.). Currently the NYSDOH is not allowing any failed attempts or contaminated specimens to be reported as collected.
- Please see the Change Log for the list of the various data elements. The codes and values for the new CMS-aligned data elements have changed from the former NYSDOH codes and values. <u>For these data elements</u>, please **DO NOT USE** the previous codes and values originally set by the NYSDOH. Instead, <u>USE</u> the CMS codes and values.
- Be sure to pay attention to the few select adherence variables for which treatment prior to arrival at your facility may be reported in your data capture. Follow CMS specifications INCLUDING the requirement to have the medical record documentation in YOUR medical record to support data reporting (e.g., outpatient clinic starts treatment and sends complete medical record documentation with the patient).

#### **Examples:**

The septic patient was at a stand-alone ED (or dialysis facility or "fill in the hypothetical blank") and administered the 3 hour severe sepsis bundle. The stand-alone ED sent the chart with the patient (or it was integrated into the EHR/EMR of the admitting hospital and evidenced), and the physician at the admitting hospital documented the review of the care that was provided by the

- stand-alone ED. All the treatment data elements received prior to arrival (at the stand-alone ED) would count for reporting by the admitting hospital.
- A patient was in a GI outpatient suite, spiked a fever, became hypotensive, and sepsis was suspected. It's possible that the GI outpatient suite started an IV, drew all blood samples for labs, started fluid boluses, and gave an antibiotic prior to transferring to the ED. As long as the treatment components were clearly documented, evidenced, and merged with the admitting hospital's medical records, the treatment given prior to arrival could be reported by the admitting hospital. In this example, the GI suite's selection of antibiotic should be documented to ensure it meets CMS data element criteria.
- The hospital is responsible for reporting all diagnosed cases of severe sepsis or septic shock, regardless of billing code designation. Cases diagnosed as sepsis but that do not progress to severe sepsis or septic shock are not to be submitted.
- 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.
- 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.
- Hospitals should report a single case for patients who are internal transfers from other units within the hospital, thereby reporting the full 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 overall "admission" is considered to be used for the admission data element, and the LAST "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.
- 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.
- The term "sepsis" may be used, but it always refers to "severe sepsis or septic shock."

**Demographic Variables** 

Data Element Name: Unique Personal Identifier

Format – Length: Varchar-10

SPARCS variable:

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 <u>UPPERCASE</u> 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

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:**

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

Data Element Name: Date of Birth

Format – Length:

SPARCS variable:

CMS SEP-1 variable:

No
Mandatory:

Yes

#### **Description:**

The date of birth of the patient.

## **Codes and Values:**

- Format must be YYYYMMDD = Year Month Day (example November 3, 1959=19591103).
- Date of Birth cannot have been after Admission Datetime.

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

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.

# **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"

Data Element Name: Ethnicity
Format – Length: Enumerated-1

SPARCS variable: Yes
CMS SEP-1 variable: No
Mandatory: Yes

# **Description:**

The code that best describes the ethnicity of the patient.

# **Codes and Values:**

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

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

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.

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:**

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

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:**

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

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.

#### **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 <u>initial administrative admission to the facility</u> is what should be 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. This is regardless of whether the internal transfers are billed separately.

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.
- A = Transfer from a Rural Primary Care Hospital. The patient was admitted to this facility as a transfer from a Rural Primary Care Hospital (RPCH) where he or she was an inpatient.
- D = Transfer from One Distinct Unit of the Hospital to another Distinct Unit of the Same Hospital Resulting in a Separate Claim to the Payer. Inpatient: The patient was admitted to this facility as a transfer from hospital inpatient within this facility resulting in a separate claim to the payer.
- 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.

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:
  - 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 precede 2014-04-01 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*.
- For a patient who is discharged from one unit/department to another unit/department within the same facility, the <u>final discharge from the facility</u> 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.

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

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 <u>neither</u> 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, <u>and</u> the hospital's sepsis protocol was <u>not initiated</u> 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, <u>and</u> the hospital's sepsis protocol was <u>initiated or completed</u> prior to transfer to the receiving acute care hospital. **Note: You will need to enter the PFI of the receiving hospital.**

- 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 to 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 for 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*.

# To find a hospital PFI, please visit:

http://www.health.ny.gov/statistics/sparcs/reports/compliance/alpha facilities.htm

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. <u>If you received the patient in severe sepsis or septic shock, report the sending hospital's PFI.</u> If you are transferring the patient in severe <u>sepsis or septic shock, report the receiving hospital's PFI.</u>

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.
- When transferring a patient to or from an out of state facility, please submit the two digit state identifier (<a href="http://www.census.gov/geo/reference/ansi-statetables.html">http://www.census.gov/geo/reference/ansi-statetables.html</a>) 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

Data Element Name: Protocol Initiated Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: No Mandatory: Yes

#### **Description:**

Indicate whether the severe sepsis or septic shock protocol was initiated. Protocol initiation is defined according to your hospital's protocol. Check your protocol description for questions regarding this. NOTE: protocol initiation does NOT always mean that the entire protocol was performed.

#### **Codes and Values:**

0 = Protocol not initiated

1 = Protocol initiated

- If *Protocol Initiated* = 0, then *Protocol Initiated Place* = 0. However, all variables (including adherence variables) must still be completed unless the case includes a valid protocol exclusion reason which was in place at the time for which the protocol would have been initiated.
- If Protocol Initiated = 0, then Protocol Not Initiated Reason must be completed.
- If the severe sepsis diagnosis was made intra-op, the sepsis protocol should have still been initiated and all variables reported.
- Be sure to refer to your hospital protocol. For example, if a standing order is the initiation
  of your protocol, then documentation of a standing order would be needed to answer
  "1 = Protocol initiated."

Data Element Name: Protocol Not Initiated Reason

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: No

Mandatory: Situational

#### **Description:**

Indicate the reason why the sepsis protocol was not initiated.

#### **Codes and Values:**

- 0 = Patient was excluded from the sepsis protocol. This MUST align with a valid reported *Excluded Reason* which was in place at the time for which the protocol would have been initiated
- 1 = Transfer case and unaware of how to handle treatment at prior facility and how it relates to our protocol
- 2 = Late diagnosis of sepsis: Diagnosis made after the time for which protocol initiation was appropriate
- 3 = Clinical evidence not initially determined to meet our protocol definition of sepsis
- 4 = Responsible clinical staff unaware of our sepsis protocol
- 5 = Clear documentation of sepsis protocol initiation per our own protocol definition not found in the medical record

- If *Protocol Initiated* = 0, then one of the above reasons must be selected.
- If *Protocol Not Initiated Reason* = 0, then *Excluded Reason* must have a valid selection.

Data Element Name: Protocol NI Reason Additional Detail

Format – Length: Varchar-40

SPARCS variable:

CMS SEP-1 variable:

No
Mandatory:

No

#### **Description:**

You may add additional detail as to why your hospital protocol was not initiated. This is not required but may be completed for additional details beyond the selected reason given for *Protocol Not Initiated Reason*.

#### **Codes and Values:**

#### **Notes for Abstraction:**

• This is not required but is available as a limited text box for additional details should a hospital wish to include more information regarding why a protocol was not initiated in a patient for whom a valid exclusion did not apply.

Data Element Name: Protocol Initiated Place

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: No Mandatory: Yes

#### **Description:**

The code that best represents where the protocol was initiated.

#### **Codes and Values:**

1 = Protocol initiated in the Emergency Department

2 = Protocol initiated on an inpatient floor (not ICU)

3 = Protocol initiated in the ICU

0 = Protocol not initiated

- If *Protocol Initiated* = 0, then *Protocol Initiated Place* = 0. However, the adherence variables must still be completed unless the patient is excluded from the protocol and designated as such according to the data dictionary criteria.
- All other data elements (i.e. Demographic, Severity Adjustment, and Comorbidity Variables) will have valid values. If a sepsis protocol is initiated in the ED by the ICU team prior to transfer, the appropriate response is "1 = Protocol initiated in the Emergency Department" since that was the physical location of protocol initiation.
- Regardless of when the severe sepsis diagnosis is made in the acute care setting (e.g., ED, ICU, floor, procedure unit, etc.), the sepsis protocol should still be initiated and all variables reported, unless the patient was excluded from the protocol.

Data Element Name: Protocol Type
Format – Length: Enumerated-1

SPARCS variable:

CMS SEP-1 variable:

No
Mandatory:

Yes

#### **Description:**

The code that best represents which protocol was initiated. This is the protocol that was deemed appropriate by the hospital; it does not have age restrictions.

#### **Codes and Values:**

- 1 = Adult protocol
- 2 = Pediatric protocol
- 0 = Protocol not initiated

- If *Protocol Initiated* = 0, then *Protocol Initiated Place* and *Protocol Type* may = 0. However, the adherence variables must still be completed unless the patient is excluded from the protocol and designated as such according to the data dictionary criteria.
- All other data elements (i.e. Demographic, Severity Adjustment, and Comorbidity Variables) will have valid values regardless of protocol type.

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 protocol.

#### **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 six 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 at the time the protocol would have been initiated. **Example:**

If a sepsis protocol was started in the ED

- o And on the following day, the patient was made comfort care
- Do not report that the patient was excluded since the patient was not excluded during the six hour treatment window.

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.

#### **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

- If Excluded from Protocol = 1, Excluded Reason must be completed.
- If Excluded Reason = 1, then a valid value must be reported for Excluded Explain, else Excluded Explain will 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 six 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 or a DNR 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.

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 was excluded from the protocol.

#### **Codes and Values:**

- 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.

Data Element Name: Excluded Explain

Format – Length: Set-11
SPARCS variable: No
CMS SEP-1 variable: No

Mandatory: Situational

#### **Description:**

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

#### **Codes and Values:**

- 1 = IV or IO fluids (acute, decompensated congestive heart failure, pulmonary edema and LVAD)
- 2 = IV or IO fluids (end stage renal disease with signs of fluid overload)
- 3 = Central Line (significant, uncorrectable coagulation abnormalities)
- 4 = Central Line (anatomic obstacles or limitations)
- 5 = Vasopressors or inotropes for refractory hypotension (significant, uncorrectable coagulation abnormalities)
- 6 = Vasopressors or inotropes for refractory hypotension (anatomic obstacles or limitations)

- Submit a number for each applicable intervention, separated by a colon.
- Example:
  - o 1:2:4 represent options 1, 2, and 4
  - Each number represents an intervention that was contraindicated.
- A total of 6 possible interventions may be submitted, representing a case whereby all exclusions were met for the case.
- If *Excluded Reason* = 1, then a valid value must be reported.
- The above six interventions are the only options that are being accepted by the Department for explaining exclusion due to clinical contraindication. If none of the above is applicable, then exclusion due to clinical contraindication may not be reported.

# **Adherence Variables**

Data Element Name: Earliest Datetime
Format – Length: Datetime-16

SPARCS variable: No CMS SEP-1 variable: No Mandatory: Yes

## **Description:**

This is the earliest date and time of arrival to the Emergency Department, inpatient unit (direct admission), or procedural/observation unit. This is the first/earliest date and time recorded in the chart. This could be, but not necessarily, the same as *Triage Datetime*.

#### **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)

- 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 arrives to one unit/department after being discharged from another
  unit/department within the same facility, the original/first arrival to the facility is what
  should be reported for *Earliest Datetime*. Do not use arrivals from internal transfers, since
  these are not actually separate hospital admissions the entire period should be regarded
  as one record, irrespective of whether the internal transfers are billed separately.
- This data element will <u>always</u> be completed, as it is the earliest datetime of arrival to the facility that is recorded in the patient's medical record.

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 <u>started</u>. 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:**

- 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.

Data Element Name: Severe Sepsis Present

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: Yes Mandatory: Yes

# **Description:**

# **Adult**

This variable has been aligned with the CMS SEP-1 data element Severe Sepsis Present. Please use the information from that data element for submission of *Severe Sepsis Present*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

## **Pediatric**

CMS SEP-1 does not require the reporting of pediatric cases therefore the approach to this data element will be similar but not the same as the approach outlined by CMS for the adult cases. The three clinical criteria components that are utilized in the adult cases are also applicable to pediatric cases. Also similar to SEP-1, all three clinical criteria must be met within 6 hours of each other. The pediatric accommodations to the clinical criteria are outlined below in the "Notes for Abstraction" section.

# **Codes and Values:**

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

#### **Notes for Abstraction:**

- Severe Sepsis Present for pediatric patients will utilize the same CMS SEP-1 notes for abstraction that do not pertain to clinical criteria (e.g. timeline parameters, suggested data sources, etc.)
- Severe Sepsis Present:

Pediatric accommodations for the three clinical criteria components for severe sepsis:

(Current internationally recognized standards for definition apply. At this time, refer to Tables 2 & 4 from the following published manuscript: Pediatr Crit Care Med. 2005 Jan; 6(1):2-8. International pediatric sepsis consensus conference: definitions for sepsis and organ dysfunction in pediatrics):

- 1. Proven or suspected infection; and,
- 2. Two or more pediatric SIRS criteria, one of which must be abnormal temperature or leukocyte count; and,
- 3. Organ dysfunction:
- For the organ dysfunction criteria, pediatric organ dysfunction is noted by the presence of **EITHER**:
  - o Cardiovascular organ dysfunction

OR

o Acute respiratory distress syndrome (ARDS)

OR

o A combination of two other types of organ dysfunction (respiratory, neurologic, hematologic, renal, hepatic)

Pediatric patients should be categorized as having septic shock if unable to differentiate between severe sepsis and septic shock.

Data Element Name: Severe Sepsis Presentation Datetime

Format – Length: Datetime-16

SPARCS variable: No CMS SEP-1 variable: Yes Mandatory: Yes

# **Description:**

# **Adult**

This variable has been aligned with the CMS SEP-1 data elements Severe Sepsis Presentation Date and Severe Sepsis Presentation Time. Please use the combination of those data elements for submission of *Severe Sepsis Presentation Datetime*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

## **Pediatric**

CMS SEP-1 does not require the reporting of pediatric cases therefore the approach to this data element will be similar but not the same as the approach outlined by CMS for the adult cases. The three clinical criteria components that are utilized in the adult cases are also applicable to pediatric cases. Also similar to SEP-1, all three clinical criteria must be met within 6 hours of each other. The pediatric accommodations to the clinical criteria are outlined below in the "Notes for Abstraction" section.

# **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)

- 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.
- Severe Sepsis Presentation Datetime for pediatric patients will utilize the same CMS SEP-1 notes for abstraction that do not pertain to clinical criteria (e.g. timeline parameters, suggested data sources, etc.)

# • Severe Sepsis Present:

Pediatric accommodations for the three clinical criteria components for severe sepsis:

(Current internationally recognized standards for definition apply. At this time, refer to Tables 2 & 4 from the following published manuscript: Pediatr Crit Care Med. 2005 Jan; 6(1):2-8. International pediatric sepsis consensus conference: definitions for sepsis and organ dysfunction in pediatrics):

- 1. Proven or suspected infection; and,
- 2. Two or more pediatric SIRS criteria, one of which must be abnormal temperature or leukocyte count; and,
- 3. Organ dysfunction:
- For the organ dysfunction criteria, pediatric organ dysfunction is noted by the presence of **EITHER**:
  - o Cardiovascular organ dysfunction

OR

o Acute respiratory distress syndrome (ARDS)

OR

o A combination of two other types of organ dysfunction (respiratory, neurologic, hematologic, renal, hepatic)

Pediatric patients should be categorized as having septic shock if unable to differentiate between severe sepsis and septic shock.

Data Element Name: Septic Shock Present

Format – Length: Enumerated-1

SPARCS variable:

CMS SEP-1 variable:

Mandatory:

Yes

# **Description:**

# **Adult**

This variable has been aligned with the CMS SEP-1 data element Septic Shock Present. Please use the information from that data element for submission of *Septic Shock Present*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

## **Pediatric**

CMS SEP-1 does not require the reporting of pediatric cases therefore the approach to this data element will be similar but not the same as the approach outlined by CMS for the adult cases. The clinical criteria components that are utilized in the adult cases are also applicable to pediatric cases. Also similar to SEP-1, all clinical criteria must be met **within 6 hours of each other**. The pediatric accommodations to the clinical criteria are outlined below in the "Notes for Abstraction" section.

# **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:**

- Septic Shock Present for pediatric patients will utilize the same CMS SEP-1 notes for abstraction that do not pertain to clinical criteria (e.g. timeline parameters, suggested data sources, etc.)
- Septic Shock Present:

Pediatric accommodation to clinical criteria for septic shock:

Current internationally recognized standards for definition apply. At this time, refer to Tables 2 & 4 from the following published manuscript: Pediatr Crit Care Med. 2005 Jan; 6(1):2-8. International pediatric sepsis consensus conference: definitions for sepsis and organ dysfunction in pediatrics:

- 1. Sepsis; and,
- 2. Cardiovascular organ dysfunction (despite at least 20ml/kg fluid administration)
- The crystalloid fluid administration will be based on the pediatric patient's weight (in kg) and the 20ml/kg ratio.
- Pediatric patients should be categorized as having septic shock if unable to differentiate between severe sepsis and septic shock.

Data Element Name: Septic Shock Presentation Datetime

Format – Length: Datetime-16

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

# **Description:**

# **Adult**

This variable has been aligned with the CMS SEP-1 data elements Septic Shock Presentation Date and Septic Shock Presentation Time. Please use the combination of those data elements for submission of *Septic Shock Presentation Datetime*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

# **Pediatric**

CMS SEP-1 does not require the reporting of pediatric cases therefore the approach to this data element will be similar but not the same as the approach outlined by CMS for the adult cases. The clinical criteria components that are utilized in the adult cases are also applicable to pediatric cases. Also similar to SEP-1, all clinical criteria must be met **within 6 hours of each other**. The pediatric accommodations to the clinical criteria are outlined below in the "Notes for Abstraction" section.

#### **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)

- 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.

- Septic Shock Presentation Datetime for pediatric patients will utilize the same CMS SEP-1 notes for abstraction that do not pertain to clinical criteria (e.g. timeline parameters, suggested data sources, etc.)
- Septic Shock Present:

Pediatric accommodation to clinical criteria for septic shock:

Current internationally recognized standards for definition apply. At this time, refer to Tables 2 & 4 from the following published manuscript: Pediatr Crit Care Med. 2005 Jan; 6(1):2-8. International pediatric sepsis consensus conference: definitions for sepsis and organ dysfunction in pediatrics:

- 1. Sepsis; and,
- 2. Cardiovascular organ dysfunction (despite at least 20ml/kg fluid administration)
- The crystalloid fluid administration will be based on the pediatric patient's weight (in kg) and the 20ml/kg ratio.
- Pediatric patients should be categorized as having septic shock if unable to differentiate between severe sepsis and septic shock.

Data Element Name: Left ED Datetime Format – Length: Datetime-16

SPARCS variable: No CMS SEP-1 variable: No

Mandatory: Situational

# **Description:**

The date and time that the patient left the Emergency Department.

# **Codes and Values:**

- 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 before *Triage Datetime*.
- Must be completed if *Triage Datetime* is completed.

Data Element Name:

Format – Length:

Destination after ED
Enumerated-1

SPARCS variable:

CMS SEP-1 variable:

No

Mandatory: Situational

# **Description:**

This is where the patient went upon leaving the Emergency Department.

# **Codes and Values:**

- 1 = Non-ICU in same hospital
- 2 = ICU in same hospital
- 3 = Transfer to another hospital
- 4 = Discharged from hospital
- 5 = Patient died in Emergency Department
- 6 = Patient left against medical advice

# **Notes for Abstraction:**

• Must be completed if *Left ED Datetime* is completed.

Data Element Name: Initial Lactate Level Collection

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

## **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data element Initial Lactate Level Collection. Please use the information from that data element for submission of *Initial Lactate Level Collection*. The 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.

**IMPORTANT NOTE:** Please note the different *Codes and Values* for this variable. These are set by the CMS SEP-1 data element. Please **DO NOT USE** the previous codes and values originally set by the NYSDOH. Instead, **USE** the CMS codes and values.

# **Codes and Values:**

- 1 = (Yes) An initial lactate level was drawn in the time window between 6 hours prior to and 3 hours following the presentation of severe sepsis.
- 2 = (No) An initial lactate level was not drawn in the time window between 6 hours prior to and 3 hours following the presentation of severe sepsis, or unable to determine.

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

Data Element Name: Initial Lactate Level Collection Datetime

Format – Length: Datetime-16

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

# **Description:**

This is a CMS SEP-1 aligned variable.

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

## **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)

- 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:
  - o Initial Lactate Level Collection Datetime
  - o Initial Lactate Level
  - o Initial Lactate Level Unit

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:**

- 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:
  - o 7.81 is rounded to 7.8
  - o 7.85 is rounded to 7.9
  - o 7.97 is rounded to 8
  - o **NOT CORRECT**: 7.85 is truncated to 7.8 (this should be rounded to 7.9)
- This first lactate level associated with the sepsis episode is to be reported, regardless of whether or not the value is  $\geq 4$ .
- If *Initial Lactate Level Collection* = 1, then the following MUST be completed:
  - o Initial Lactate Level Collection Datetime
  - Initial Lactate Level
  - o Initial Lactate Level Unit

Data Element Name: Initial Lactate Level Unit

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: No

Mandatory: Situational

# **Description:**

Select the unit by which the initial lactate level was reported by the lab.

# **Codes and Values:**

1 = mg/dL

2 = mmol/L

- Only the above units of measure can be used for reporting lactate level.
- Do not use mEq/L for reporting lactate level.
- If *Initial Lactate Level Collection* = 1, then the following MUST be completed:
  - o Initial Lactate Level Collection Datetime
  - o Initial Lactate Level
  - o Initial Lactate Level Unit

Data Element Name: Repeat Lactate Level Collection

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

# **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data element Repeat Lactate Level Collection. Please use the information from that data element for submission of *Repeat Lactate Level Collection*. The 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.

**IMPORTANT NOTE:** Please note the different *Codes and Values* for this variable. These are set by the CMS SEP-1 data element. Please **DO NOT USE** the previous codes and values originally set by the NYSDOH. Instead, **USE** the CMS codes and values.

#### **Codes and Values:**

- 1 = (Yes) A repeat lactate level was drawn in the time window beginning at severe sepsis presentation date and time and ending 6 hours thereafter.
- 2 = (No) A repeat lactate level was not drawn in the time window beginning at severe sepsis presentation date and time and ending 6 hours thereafter, or unable to determine.

- If Repeat Lactate Level Collection = 1, answer Repeat Lactate Level Collection Datetime.
- If Repeat Lactate Level Collection = 2, then Repeat Lactate Level Collection Datetime is blank.

Data Element Name: Repeat Lactate Level Collection Datetime

Format – Length: Datetime-16

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

# **Description:**

This is a CMS SEP-1 aligned variable.

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

# **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)

- 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 Repeat Lactate Level Collection = 1, then must be completed.

Data Element Name: Blood Culture Collection

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

## **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data element Blood Culture Collection. Please use the information from that data element for submission of *Blood Culture Collection*. The 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.

#### **Pediatric**

CMS SEP-1 does not require the reporting of pediatric cases therefore the approach to this data element will be similar to the approach outlined by CMS for the adult cases however, the time window of the blood culture collection for pediatric cases will differ. The pediatric accommodations to the clinical criteria are outlined below in the "Notes for Abstraction" section. The same exception for failed/contaminated laboratory specimens will apply to pediatric cases; failed attempts or contaminated specimens cannot be reported as collected.

**IMPORTANT NOTE:** Please note the different *Codes and Values* for this variable. These are set by the CMS SEP-1 data element. Please **DO NOT USE** the previous codes and values originally set by the NYSDOH. Instead, **USE** the CMS codes and values.

#### **Codes and Values:**

- 1 = (Yes) A blood culture was collected in the time window 48 hours prior to and 3 hours following the presentation of severe sepsis.
- 2 = (No) A blood culture was not collected in the time window 48 hours prior to and 3 hours following the presentation of severe sepsis or unable to determine.

- If *Blood Culture Collection* = 1, answer additional blood culture data elements listed below.
- If *Blood Culture Collection* = 2, then all of the blood culture data elements below are blank:
  - o Blood Culture Collection Acceptable Delay

- o Blood Culture Collection Datetime
- o Blood Culture Result
- o Blood Culture Pathogen
- If *Exclusion from Protocol* = 1, may be blank, else must be completed.

# <u>Pediatric accommodation to <u>Blood Culture Collection</u>:</u>

- 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 and
     1 hour following the presentation of severe sepsis.
  - 2 = (No) A blood culture was not collected in the time window 48 hours prior to and
     1 hour following the presentation of severe sepsis or unable to determine.

Data Element Name: Blood Culture Collection Acceptable Delay

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

# **Description:**

This is a CMS SEP-1 aligned variable.

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 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.

#### **Pediatric**

CMS SEP-1 does not require the reporting of pediatric cases, but the approach to this data element will be similar to the approach outlined by CMS for the adult cases. This data element would be reported for pediatric cases just as it would be for adult cases. The same exception for failed/contaminated laboratory specimens will apply to pediatric cases; failed attempts or contaminated specimens cannot be reported as collected.

#### **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 must be completed.

Data Element Name: Blood Culture Collection Datetime

Format – Length: Datetime-16

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

## **Description:**

This is a CMS SEP-1 aligned variable.

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 CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

#### **Pediatric**

CMS SEP-1 does not require the reporting of pediatric cases, but the approach to this data element will be similar to the approach outlined by CMS for the adult cases however, the time window of the blood culture collection for pediatric cases will differ. The pediatric accommodations to the clinical criteria are outlined below in the "Notes for Abstraction" section. The same exception for failed/contaminated laboratory specimens will apply to pediatric cases; failed attempts or contaminated specimens cannot be reported as 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)

- 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.

# <u>Pediatric accommodation to Blood Culture Collection Datetime:</u>

- The time window will be modified according to the 1 hour pediatric bundle.
- The time window for abstracting the datetime will be 48 hours prior to and 1 hour following the presentation of severe sepsis.

Data Element Name: Blood Culture Result

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: No

Mandatory: Situational

# **Description:**

Indicate if the result of the first blood culture was positive or negative. This culture could be from up to 48 hours prior to 3 hours following the presentation of severe sepsis. A positive blood culture is defined as a recognized pathogen from one or more blood cultures.

# **Codes and Values:**

0 = Negative blood culture

1 = Positive blood culture

# **Notes for Abstraction:**

• If **Blood Culture Collection** = 1, then must be completed.

Data Element Name: Blood Culture Pathogen

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: No

Mandatory: Situational

# **Description:**

Select the most abundant pathogen in the blood culture.

# **Codes and Values:**

0 = No pathogen reported

1 = Gram positive bacteria

2 = Gram negative bacteria

3 = Anaerobic bacteria

4 = Yeast

5 = Mold

6 = Mixed pathogens

7 = Viral

# **Notes for Abstraction:**

• If **Blood Culture Collection** = 1, then must be completed.

Data Element Name: Antibiotic Administration

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

# **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data element Broad Spectrum or Other Antibiotic Administration. Please use the information from that data element for submission of *Antibiotic Administration*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

#### **Pediatric**

CMS SEP-1 does not require the reporting of pediatric cases therefore the approach to this data element will be similar to the approach outlined by CMS for the adult cases however, the time window of the antibiotic administration for pediatric cases will differ. The pediatric accommodations to the clinical criteria are outlined below in the "Notes for Abstraction" section.

**IMPORTANT NOTE:** Please note the different *Codes and Values* for this variable. These are set by the CMS SEP-1 data element. Please **DO NOT USE** the previous codes and values originally set by the NYSDOH. Instead, **USE** the CMS codes and values.

# **Codes and Values:**

- 1 = (Yes) A broad spectrum or other antibiotic was administered intravenously in the time window 24 hours prior to or 3 hours following the presentation of severe sepsis.
- 2 = (No) No antibiotic was administered intravenously in the time window 24 hours prior to or 3 hours following the presentation of severe sepsis, or unable to determine.

#### **Notes for Abstraction:**

- If Antibiotic Administration = 1, then Antibiotic Administration Selection must be completed.
- If Exclusion from Protocol = 1, then may be blank, else must be completed.

## Pediatric accommodation to Antibiotic Administration:

• The Codes and Values for the time window will be modified according to the 1 hour pediatric bundle.

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

Data Element Name: Antibiotic Administration Selection

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

# **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data element Broad Spectrum or Other Antibiotic Administration Selection. Please use the information from that data element for submission of *Antibiotic Administration Selection*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

#### **Pediatric**

CMS SEP-1 does not require the reporting of pediatric cases therefore the approach to this data element will be similar to the approach outlined by CMS for the adult cases however, the time window of the antibiotic administration for pediatric cases will differ. The pediatric accommodations are outlined below in the "Notes for Abstraction" section.

**IMPORTANT NOTE:** Please note the different *Codes and Values* for this variable. These are set by the CMS SEP-1 data element. Please **DO NOT USE** the previous codes and values originally set by the NYSDOH. Instead, **USE** the CMS codes and values.

#### **Codes and Values:**

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

#### **Notes for Abstraction:**

- If *Antibiotic Administration* = 1, then this must be completed.
- If Antibiotic Administration = 2, then this must be blank or contain a value of 2.
- NOTE CMS SEP-1 addresses the process for antibiotic selection in cases of patients with C. difficile. Please refer to the CMS documentation.

# Pediatric accommodation to Antibiotic Administration Selection:

• The time window will be modified according to the 1 hour pediatric bundle.

- The time window for abstracting the datetime will be within 1 hour following the presentation of severe sepsis.
- The same tables for antibiotic monotherapy and combination therapy from CMS SEP-1 should be used as a reference when reporting this data element.
- In certain facilities, a combination of antibiotics may be the default order set based on infection source in a pediatric patient, and one antibiotic in that combination may be considered appropriate for monotherapy according to the adult SEP-1 table.
- If the approved monotherapy antibiotic in that combination was started within 1 hour following the presentation of severe sepsis, then "1 = (Yes) ..." may be reported. If not, then the notes and guidelines from the CMS SEP-1 should be referenced in reporting *Antibiotic Administration Selection*.

Data Element Name: Antibiotic Administration Datetime

Format – Length: Datetime-16

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

# **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data elements Broad Spectrum or Other Antibiotic Administration Date and Broad Spectrum or Other Antibiotic Administration Time. Please use the combination of those data elements for submission of *Antibiotic Administration Datetime*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

#### <u>Pediatric</u>

CMS SEP-1 does not require the reporting of pediatric cases therefore the approach to this data element will be similar to the approach outlined by CMS for the adult cases however, the time window of the antibiotic administration datetime for pediatric cases will differ. The pediatric accommodations are outlined below in the "Notes for Abstraction" section.

#### **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.

Pediatric accommodation to Antibiotic Administration Datetime:

- The time window will be modified according to the 1 hour pediatric bundle.
- The time window for abstracting the datetime will be 24 hours prior to and 1 hour following the presentation of severe sepsis.

Data Element Name: Adult Crystalloid Fluid Administration

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

# **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data element Crystalloid Fluid Administration. Please use the information from that data element for submission of *Adult Crystalloid Fluid Administration*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

**IMPORTANT NOTE:** Please note the different *Codes and Values* for this variable. These are set by the CMS SEP-1 data element. Please **DO NOT USE** the previous codes and values originally set by the NYSDOH. Instead, **USE** the CMS codes and values.

#### **Codes and Values:**

- 1 = (Yes) 30 mL/kg of crystalloid fluids were ordered and initiated prior to, at the time of, or after the presentation of Initial Hypotension, Initial Lactate Level Result >=4 mmol/L, or Documentation of Septic Shock, and 30 mL/kg of crystalloid fluids were infused.
- 2 = (No) Less than 30 mL/kg of crystalloid fluids were ordered and initiated prior to, at the time of, or after the presentation of Initial Hypotension, Initial Lactate Level Result >=4 mmol/L, or Documentation of Septic Shock, or unable to determine volume ordered, or less than 30 mL/kg of crystalloid fluids were infused.
- 3 = (No) Crystalloid fluids were not initiated prior to, at the time of, or after the presentation of Initial Hypotension, Initial Lactate Level Result >=4 mmol/L, or Documentation of Septic Shock, or unable to determine whether or not they were administered.
- 4 = (No) There is documentation the patient has an implanted Ventricular Assist Device (VAD).

- Must be completed unless Exclusion from Protocol = 1 or Protocol Type = 2.
- If *Adult Crystalloid Fluid Administration* = 1, then the following fluid assessment data elements must also be completed:
  - o Bedside Cardiovascular Ultrasound
  - Capillary Refill Examination
  - Cardiopulmonary Evaluation
  - Passive Leg Raise

- o Peripheral Pulse Evaluation
- Skin Examination
- Vital Signs Review
- o Central venous pressure measurement
- o Central venous oxygen measurement
- o Fluid challenge performed

Data Element Name: Pediatric Crystalloid Fluid Administration

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: No

Mandatory: Situational

# **Description:**

If *Protocol Type* = 2 (Pediatric), indicate if at least 20ml/kg isotonic saline or colloid was given.

# **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

- Must be completed unless *Exclusion from Protocol* = 1 or *Protocol Type* = 1.
- If *Pediatric Crystalloid Fluid Administration* = 1, then the following fluid assessment data elements must also be completed:
- If *Adult Crystalloid Fluid Administration* = 1, then the following fluid assessment data elements must also be completed:
  - Bedside Cardiovascular Ultrasound
  - Capillary Refill Examination
  - Cardiopulmonary Evaluation
  - o Passive Lea Raise
  - Peripheral Pulse Evaluation
  - Skin Examination
  - Vital Signs Review
  - Central venous pressure measurement
  - Central venous oxygen measurement
  - Fluid challenge performed
- It's understood that not all of the fluid assessment data elements will be applicable for pediatric patients. It is expected that at least one will apply. Therefore, facilities should accordingly submit a Yes/No response for each data element as appropriate, and complete the corresponding data element datetime if a "Yes" response is chosen.

Data Element Name: Crystalloid Fluid Administration Datetime

Format – Length: Datetime-16

SPARCS variable: No

CMS SEP-1 variable: Situational Mandatory: Situational

# **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data elements Crystalloid Fluid Administration Date and Crystalloid Fluid Administration Time. Please use the combination of those data elements for submission of *Crystalloid Fluid Administration Datetime*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

Although pediatric patients are not addressed in SEP-1, this data element aligns to *Pediatric Crystalloid Fluid Administration* for pediatric patients and requires the <u>start date and time</u> for the number of bag(s) that would deliver sufficient fluid volume based on the pediatric patient's weight (in kg) and the 20mg/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)

- 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 either Adult or Pediatric Crystalloid Fluid Administration = 1, then Crystalloid Fluid Administration Datetime must be completed along with the following fluid assessment data elements:
- If *Adult Crystalloid Fluid Administration* = 1, then the following fluid assessment data elements must also be completed:
  - Bedside Cardiovascular Ultrasound
  - Capillary Refill Examination

- Cardiopulmonary Evaluation
- o Passive Leg Raise
- Peripheral Pulse Evaluation
- Skin Examination
- Vital Signs Review
- Central venous pressure measurement
- o Central venous oxygen measurement
- o Fluid challenge performed
- It's understood that not all of the fluid assessment data elements will be applicable for pediatric patients. It is expected that at least one will apply. Therefore, facilities should accordingly submit a Yes/No response for each data element as appropriate, and complete the corresponding data element datetime if a "Yes" response is chosen.

Data Element Name: Initial Hypotension Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

## **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data element Initial Hypotension. Please use the information from that data element for submission of *Initial Hypotension*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

**IMPORTANT NOTE:** Please note the different *Codes and Values* for this variable. These are set by the CMS SEP-1 data element. Please **DO NOT USE** the previous codes and values originally set by the NYSDOH. Instead, **USE** the CMS codes and values.

### **Codes and Values:**

- 1 = (Yes) Hypotension was present 6 hours prior to or within 6 hours following Severe Sepsis presentation.
- 2 = (No) Hypotension was not present 6 hours prior to or within 6 hours following Severe Sepsis presentation or unable to determine from medical record documentation.

## **Notes for Abstraction:**

• Must be completed unless **Exclusion from Protocol** = 1.

Data Element Name: Persistent Hypotension

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

## **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data element Persistent Hypotension. Please use the information from that data element for submission of *Persistent Hypotension*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

**IMPORTANT NOTE:** Please note the different *Codes and Values* for this variable. These are set by the CMS SEP-1 data element. Please **DO NOT USE** the previous codes and values originally set by the NYSDOH. Instead, **USE** the CMS codes and values.

# **Codes and Values:**

1 = (Yes)	Crystalloid fluids were administered at a volume of 30 mL/kg and
	persistent hypotension or new onset of hypotension was present within
	one hour of conclusion of fluid administration.
2 = (No)	Persistent hypotension or new onset of hypotension was not present
	within one hour of the conclusion of crystalloid fluid administration at a
	volume of 30 mL/kg.
3 = (No) or UTD	The patient was not assessed for persistent hypotension or new onset of
	hypotension within the one hour after the conclusion of crystalloid fluid
	administration at a volume of 30 mL/kg, or Unable to Determine.
4 = (Not applicable)	Crystalloid fluids were administered but at a volume less than 30 mL/kg.

## **Notes for Abstraction:**

• Must be completed unless **Exclusion from Protocol** = 1.

Data Element Name: Vasopressor Administration

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

## **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data element Vasopressor Administration. Please use the information from that data element for submission of *Vasopressor Administration*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

**IMPORTANT NOTE:** Please note the different *Codes and Values* for this variable. These are set by the CMS SEP-1 data element. Please **DO NOT USE** the previous codes and values originally set by the NYSDOH. Instead, **USE** the CMS codes and values.

## **Codes and Values:**

- 1 = (Yes) The patient was given an intravenous or intraosseous vasopressor in the time window beginning at septic shock presentation and ending 6 hours after the presentation of septic shock.
- 2 = (No) The patient was not given an intravenous or intraosseous vasopressor in the time window beginning at septic shock presentation and ending 6 hours after the time of presentation of septic shock.

## **Notes for Abstraction:**

Must be completed unless Exclusion from Protocol = 1.

Data Element Name: Vasopressor Administration Datetime

Format – Length: Datetime-16

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

### **Description:**

This is a CMS SEP-1 aligned variable.

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

### **Notes for Abstraction:**

- Formatting:
  - o Format must be YYYY-MM-DD hh:mm
    - a. YYYY-MM-DDThh:mm is also valid
  - O 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)

- o Example: 11:42 pm November 3, 1959=1959-11-03 23:42
  - a. 1959-11-03T23:42 is also valid
- o Midnight = 00:00, not 24:00

## **Notes for Abstraction:**

• If *Vasopressor Administration* = 1, then must be completed.

Data Element Name: Bedside Cardiovascular Ultrasound

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

### **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data element Bedside Cardiovascular Ultrasound Performed. Please use the information from that data element for submission of *Bedside Cardiovascular Ultrasound*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

**IMPORTANT NOTE:** Please note the different *Codes and Values* for this variable. These are set by the CMS SEP-1 data element.

## **Codes and Values:**

- 1 = (Yes) Bedside cardiovascular ultrasound was performed in the time window beginning at the crystalloid fluid administration date and time and ending six hours after the presentation of septic shock date and time.
- 2 = (No) Bedside cardiovascular ultrasound was not performed in the time window beginning at the crystalloid fluid administration date and time and ending six hours after the presentation of septic shock date and time, or unable to determine.

- If either Adult or Pediatric Crystalloid Fluid Administration = 1, then must be completed.
- It's understood that not all of the fluid assessment data elements will be applicable for pediatric patients. It is expected that at least one will apply. Therefore, facilities should accordingly submit a Yes/No response for each data element as appropriate, and complete the corresponding data element datetime if a "Yes" response is chosen.

Data Element Name: Bedside Cardiovascular Ultrasound Datetime

Format – Length: Datetime-16

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

## **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data elements Bedside Cardiovascular Ultrasound Performed Date and Bedside Cardiovascular Ultrasound Performed Time. Please use the combination of those data elements for submission of *Bedside Cardiovascular Ultrasound Datetime*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

#### **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)

- 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 *Bedside Cardiovascular Ultrasound* performed = 1, then must be completed.

Data Element Name: Capillary Refill Examination

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

## **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data element Capillary Refill Examination Performed. Please use the information from that data element for submission of *Capillary Refill Examination*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

**IMPORTANT NOTE:** Please note the different *Codes and Values* for this variable. These are set by the CMS SEP-1 data element.

#### **Codes and Values:**

- 1 = (Yes) Capillary refill examination was documented by a physician/APN/PA.
- 2 = (No) Capillary refill examination was not documented by a physician/APN/PA, or unable to determine.

- If either *Adult or Pediatric Crystalloid Fluid Administration* = 1, then must be completed.
- It's understood that not all of the fluid assessment data elements will be applicable for pediatric patients. It is expected that at least one will apply. Therefore, facilities should accordingly submit a Yes/No response for each data element as appropriate, and complete the corresponding data element datetime if a "Yes" response is chosen.

Data Element Name: Capillary Refill Examination Datetime

Format – Length: Datetime-16

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

### **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data elements Capillary Refill Examination Performed Date and Capillary Refill Examination Performed Time. Please use the combination of those data elements for submission of *Capillary Refill Examination Datetime*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

### **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)

- 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 Capillary Refill Examination = 1, then must be completed.

Data Element Name: Cardiopulmonary Evaluation

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

### **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data element Cardiopulmonary Evaluation Performed. Please use the information from that data element for submission of *Cardiopulmonary Evaluation*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

**IMPORTANT NOTE:** Please note the different *Codes and Values* for this variable. These are set by the CMS SEP-1 data element.

#### **Codes and Values:**

- 1 = (Yes) Cardiopulmonary evaluation was documented by a physician/APN/PA.
- 2 = (No) Cardiopulmonary evaluation was not documented by a physician/APN/PA, or unable to determine.

- If either Adult or Pediatric Crystalloid Fluid Administration = 1, then must be completed.
- It's understood that not all of the fluid assessment data elements will be applicable for pediatric patients. It is expected that at least one will apply. Therefore, facilities should accordingly submit a Yes/No response for each data element as appropriate, and complete the corresponding data element datetime if a "Yes" response is chosen.

Data Element Name: Cardiopulmonary Evaluation Datetime

Format – Length: Datetime-16

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

### **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data elements Cardiopulmonary Evaluation Performed Date and Cardiopulmonary Evaluation Performed Time. Please use the combination of those data elements for submission of *Cardiopulmonary Evaluation Datetime*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

### **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)

- 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 *Cardiopulmonary Evaluation* = 1, then must be completed.

Data Element Name: Passive Leg Raise Examination

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

### **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data element Passive Leg Raise Examination Performed. Please use the information from that data element for submission of *Passive Leg Raise Examination*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

**IMPORTANT NOTE:** Please note the different *Codes and Values* for this variable. These are set by the CMS SEP-1 data element.

#### **Codes and Values:**

- 1 = (Yes) Passive leg raise examination was documented in the time window beginning at the crystalloid fluid administration date and time and ending six hours after the presentation of septic shock date and time.
- 2 = (No) Passive leg raise examination was not documented in the time window beginning at the crystalloid fluid administration date and time and ending six hours after the presentation of septic shock date and time, or unable to determine.

- If either Adult or Pediatric Crystalloid Fluid Administration = 1, then must be completed.
- It's understood that not all of the fluid assessment data elements will be applicable for pediatric patients. It is expected that at least one will apply. Therefore, facilities should accordingly submit a Yes/No response for each data element as appropriate, and complete the corresponding data element datetime if a "Yes" response is chosen.

Data Element Name: Passive Leg Raise Examination Datetime

Format – Length: Datetime-16

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

### **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data elements Passive Leg Raise Examination Performed Date and Passive Leg Raise Examination Performed Time. Please use the combination of those data elements for submission of *Passive Leg Raise Examination Datetime*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

### **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)

- 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 *Passive Leg Raise Examination* = 1, then must be completed.

Data Element Name: Peripheral Pulse Evaluation

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

### **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data element Peripheral Pulse Evaluation Performed. Please use the information from that data element for submission of *Peripheral Pulse Evaluation*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

**IMPORTANT NOTE:** Please note the different *Codes and Values* for this variable. These are set by the CMS SEP-1 data element.

#### **Codes and Values:**

- 1 = (Yes) Peripheral pulse evaluation was documented by a physician/APN/PA in the time window beginning at the crystalloid fluid administration date and time and ending six hours after the presentation of septic shock date and time.
- 2 = (No) Peripheral pulse evaluation was not documented by a physician/APN/PA in the time window beginning at the crystalloid fluid administration date and time and ending six hours after the presentation of septic shock date and time, or unable to determine.

- If either Adult or Pediatric Crystalloid Fluid Administration = 1, then must be completed.
- It's understood that not all of the fluid assessment data elements will be applicable for pediatric patients. It is expected that at least one will apply. Therefore, facilities should accordingly submit a Yes/No response for each data element as appropriate, and complete the corresponding data element datetime if a "Yes" response is chosen.

Data Element Name: Peripheral Pulse Evaluation Datetime

Format – Length: Datetime-16

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

### **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data elements Peripheral Pulse Evaluation Performed Date and Peripheral Pulse Evaluation Performed Time. Please use the combination of those data elements for submission of *Peripheral Pulse Evaluation Datetime*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

## **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)

- 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 *Peripheral Pulse Evaluation* = 1, then must be completed.

Data Element Name: Skin Examination Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

## **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data element Skin Examination Performed. Please use the information from that data element for submission of *Skin Examination*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

**IMPORTANT NOTE:** Please note the different *Codes and Values* for this variable. These are set by the CMS SEP-1 data element.

#### **Codes and Values:**

- 1 = (Yes) Skin examination was documented by a physician/APN/PA.
- 2 = (No) Skin examination was not documented by a physician/APN/PA, or unable to determine.

- If either *Adult or Pediatric Crystalloid Fluid Administration* = 1, then must be completed.
- It's understood that not all of the fluid assessment data elements will be applicable for pediatric patients. It is expected that at least one will apply. Therefore, facilities should accordingly submit a Yes/No response for each data element as appropriate, and complete the corresponding data element datetime if a "Yes" response is chosen.

Data Element Name: Skin Examination Datetime

Format – Length: Datetime-16

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

## **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data elements Skin Examination Performed Date and Skin Examination Performed Time. Please use the combination of those data elements for submission of *Skin Examination Datetime*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

### **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)

- 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 *Skin Examination* = 1, then must be completed.

Data Element Name: Central Venous Oxygen Measurement

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

### **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data element Central Venous Oxygen Measurement. Please use the information from that data element for submission of *Central Venous Oxygen Measurement*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

**IMPORTANT NOTE:** Please note the different *Codes and Values* for this variable. These are set by the CMS SEP-1 data element.

#### **Codes and Values:**

- 1 = (Yes) Central venous oxygen measurement was obtained within 6 hours after the presentation of septic shock.
- 2 = (No) Central venous oxygen measurement was not obtained within 6 hours after the presentation of septic shock, or unable to determine.

- If either Adult or Pediatric Crystalloid Fluid Administration = 1, then must be completed.
- It's understood that not all of the fluid assessment data elements will be applicable for pediatric patients. It is expected that at least one will apply. Therefore, facilities should accordingly submit a Yes/No response for each data element as appropriate, and complete the corresponding data element datetime if a "Yes" response is chosen.

Data Element Name: Central Venous Oxygen Measurement

Datetime

Format – Length: Datetime-16

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

## **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data elements Central Venous Oxygen Measurement Date and Central Venous Oxygen Measurement Time. Please use the combination of those data elements for submission of *Central Venous Oxygen Measurement Datetime*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

## **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)

- 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 *Central Venous Oxygen Measurement*= 1, then must be completed.

Data Element Name: Central Venous Pressure Measurement

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

### **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data element Central Venous Pressure Measurement. Please use the information from that data element for submission of *Central Venous Pressure Measurement*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

**IMPORTANT NOTE:** Please note the different *Codes and Values* for this variable. These are set by the CMS SEP-1 data element.

#### **Codes and Values:**

- 1 = (Yes) Central venous pressure measurement was obtained within 6 hours after the presentation of septic shock.
- 2 = (No) Central venous pressure measurement was not obtained within 6 hours after the presentation of septic shock, or unable to determine.

- If either Adult or Pediatric Crystalloid Fluid Administration = 1, then must be completed.
- It's understood that not all of the fluid assessment data elements will be applicable for pediatric patients. It is expected that at least one will apply. Therefore, facilities should accordingly submit a Yes/No response for each data element as appropriate, and complete the corresponding data element datetime if a "Yes" response is chosen.

Data Element Name: Central Venous Pressure Measurement

Datetime

Format – Length: Datetime-16

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

## **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data elements Central Venous Pressure Measurement Date and Central Venous Pressure Measurement Time. Please use the combination of those data elements for submission of *Central Venous Pressure Measurement Datetime*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

## **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)

- 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 Central Venous Pressure Measurement = 1, then must be completed.

Data Element Name: Fluid Challenge Performed

Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

### **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data element Fluid Challenge Performed. Please use the information from that data element for submission of *Fluid Challenge Performed*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

**IMPORTANT NOTE:** Please note the different *Codes and Values* for this variable. These are set by the CMS SEP-1 data element.

#### **Codes and Values:**

- 1 = (Yes) Fluid challenge was performed in the time window beginning at the completion of the crystalloid fluid administration and ending six hours after the presentation of septic shock date and time.
- 2 = (No) Fluid challenge was not performed in the time window beginning at the completion of the crystalloid fluid administration and ending six hours after the presentation of septic shock date and time, or unable to determine.

- If either Adult or Pediatric Crystalloid Fluid Administration = 1, then must be completed.
- It's understood that not all of the fluid assessment data elements will be applicable for pediatric patients. It is expected that at least one will apply. Therefore, facilities should accordingly submit a Yes/No response for each data element as appropriate, and complete the corresponding data element datetime if a "Yes" response is chosen.

Data Element Name: Fluid Challenge Performed Datetime

Format – Length: Datetime-16

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

### **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data elements Fluid Challenge Performed Date and Fluid Challenge Performed Time. Please use the combination of those data elements for submission of *Fluid Challenge Performed Datetime*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

### **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)

- 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 *Fluid Challenge Performed* = 1, then must be completed.

Data Element Name: Vital Signs Review Format – Length: Enumerated-1

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

## **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data element Vital Signs Review Performed. Please use the information from that data element for submission of *Vital Signs Review*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

**IMPORTANT NOTE:** Please note the different *Codes and Values* for this variable. These are set by the CMS SEP-1 data element.

## **Codes and Values:**

- 1 = (Yes) Vital signs review was documented by a physician/APN/PA in the time window beginning at the crystalloid fluid administration date and time and ending six hours after the presentation of septic shock date and time.
- 2 = (No) Vital signs review was not documented by a physician/APN/PA in the time window beginning at the crystalloid fluid administration date and time and ending six hours after the presentation of septic shock date and time, or unable to determine.

- If either Adult or Pediatric Crystalloid Fluid Administration = 1, then must be completed.
- It's understood that not all of the fluid assessment data elements will be applicable for pediatric patients. It is expected that at least one will apply. Therefore, facilities should accordingly submit a Yes/No response for each data element as appropriate, and complete the corresponding data element datetime if a "Yes" response is chosen.

Data Element Name: Vital Signs Review Datetime

Format – Length: Datetime-16

SPARCS variable: No CMS SEP-1 variable: Yes

Mandatory: Situational

## **Description:**

This is a CMS SEP-1 aligned variable.

This variable has been aligned with the CMS SEP-1 data elements Vital Signs Review Performed Date and Vital Signs Review Performed Time. Please use the combination of those data elements for submission of *Vital Signs Review Datetime*. The CMS definition, notes, and guidelines should be referenced for all questions and issues regarding this variable.

### **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)

- 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 *Vital Signs Review* = 1, then must be completed.

**Severity Adjustment Variables** 

Data Element Name: Platelet Count (Thrombocytopenia)

Format – Length: Enumerated-1

SPARCS variable:

CMS SEP-1 variable:

No
Mandatory:

Yes

## **Description:**

Was the platelet count at the time of presentation of severe sepsis <150,000 cells/mm<sup>3</sup>?

# **Codes and Values:**

0 = No

1 = Yes

2 = Unknown

- Must be completed.
- The collection of low platelets associated with sepsis is captured to determine patient severity.

Data Element Name:

Format – Length:

Enumerated-1

SPARCS variable:

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 presentation of severe sepsis?

## **Codes and Values:**

0 = No

1 = Yes

2 = Unknown

- 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.

Data Element Name: Lower Respiratory Infection

Format – Length: Enumerated-1

SPARCS variable:

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.

Data Element Name: Altered Mental Status

Format – Length: Enumerated-1

SPARCS variable:

CMS SEP-1 variable:

No
Mandatory:

Yes

## **Description:**

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

- 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.

**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

- Must be completed.
- ONLY indicate "1 = Yes" if **ALL** of the following conditions are met:
  - o The infection is a hospital acquired infection (HAI)
  - o The HAI was acquired from your facility
  - o 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:
  - o The patient presented to the ED from a nursing home
  - And the patient presented with severe sepsis (or septic shock) secondary to pneumonia (diagnoses)
  - o And the infection (pneumonia) was "hospital acquired" from the nursing home
  - o This is **not** reported as "1 = Yes" this should be reported as "0 = No"
  - o 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).

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

- Must be completed.
- If there are multiple suspected or diagnosed sites of infection, the most likely source of infection should be chosen.
- Option "7 = Unknown" should be chosen for cases where the site of infection cannot be determined.

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

- 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:
  - o BIPAP (except when used only for sleep apnea)
  - o The patient arrived and remained on mechanical ventilation
  - The patient was intubated, specifically associated with initiation of mechanical ventilation
  - o The patient was intubated for surgery and was unable to be extubated post-surgery

Data Element Name: Mechanical Ventilation 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:**

- 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.
- 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:
  - o BIPAP is acceptable, except in use for sleep apnea.
- If the patient arrives on mechanical ventilation, use *Earliest Datetime*.
- 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.

Data Element Name: ICU

Format – Length: Enumerated-1

SPARCS variable:

CMS SEP-1 variable:

No
Mandatory:

Yes

## **Description:**

Indicate if the patient was admitted to the Intensive Care Unit (ICU).

## **Codes and Values:**

0 = Patient not admitted to ICU

1 = Patient admitted to ICU

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

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.
- Indicate if the patient was admitted at any time to the ICU during the hospital admission, and specify that date and time.
- 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.

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.
- ICU Discharge Datetime may not precede ICU Admission Datetime.

Data Element Name: Chronic Respiratory Failure

Format – Length: Enumerated-1

SPARCS variable:

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:**

Data Element Name: AIDS/HIV Disease Format – Length: Enumerated-1

SPARCS variable:

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:**

Data Element Name: Metastatic Cancer Format – Length: Enumerated-1

SPARCS variable:

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:**

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:**

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.

Data Element Name: Congestive Heart Failure

Format – Length: Enumerated-1

SPARCS variable:

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:**

Data Element Name: Chronic Renal Failure

Format – Length: Enumerated-1

SPARCS variable:

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:**

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.

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 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:**

Data Element Name: Organ Transplant Format – Length: Enumerated-1

SPARCS variable:

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:**

# **Sepsis Data Submission Data Types and Constraints**

#### **Data Typing:**

date YYYYMMDD

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 <a href="https://ny.sepsis.ipro.org">https://ny.sepsis.ipro.org</a>.

#### 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.

# **Change Log**

### Version 4.1

#### **Critical clarification:**

• To be clear: NYSDOH is ONLY aligning with select CMS SEP-1 data elements. The denominator for the NYSDOH data submission still requires reporting ALL cases of severe sepsis or septic shock INCLUDING cases identified through coding AND/OR other avenues (e.g., concurrent case identification; retrospective review; and so forth). Hospitals are NOT to be using the CMS method of selecting cases and adding DOH data elements to those cases. This would be an incorrect interpretation of the 2017 modification; the NYSDOH requires reporting ALL severe sepsis and septic shock cases regardless of how they are identified.

The following fluid assessment data elements were not included in Version 4.0 in error. The same expectations apply to these as were applied for the fluid assessment data elements outlined in the 4.0 version. These variables are CMS SEP-1 data elements, and therefore data collection will follow CMS SEP-1 specifications. They are required for data collection beginning with discharges on or after January 1, 2017.

- Central venous oxygen measurement
- Central venous oxygen measurement datetime
- Central venous pressure measurement
- Central venous pressure measurement datetime
- Fluid challenge performed
- Fluid challenge performed datetime

Version 4.1 is effective for discharges on or after January 1, 2017.

# Version 4.0

#### Important CMS SEP-1 alignment instructions:

- Numerous data elements in this data dictionary have been changed to align with CMS SEP-1. All notes and guidelines provided by CMS should be referenced for the correct abstraction and submission of all data for those data elements. The only exception is with respect to failed/contaminated laboratory specimen collection (e.g. blood culture, lactates, etc.). Currently the NYSDOH is not allowing any failed attempts or contaminated specimens to be reported as collected.
- Please see below for the list of the various data elements. The codes and values for the new CMS-aligned data elements have changed from the former NYSDOH codes and values.
   For these data elements, please DO NOT USE the previous codes and values originally set

by the NYSDOH. Instead, **USE** the CMS codes and values.

 Be sure to pay attention to the few select adherence variables for which treatment prior to arrival at your facility may be reported in your data capture. Follow CMS specifications INCLUDING the requirement to have the medical record documentation in YOUR medical record to support data reporting (e.g., outpatient clinic starts treatment and sends complete medical record documentation with the patient).

#### **Examples**:

- The septic patient was at a stand-alone ED (or dialysis facility or "fill in the hypothetical blank") and administered the 3 hour severe sepsis bundle. The stand-alone ED sent the chart with the patient (or it was integrated into the EHR/EMR of the admitting hospital and evidenced), and the physician at the admitting hospital documented the review of the care that was provided by the stand-alone ED. All the treatment data elements received prior to arrival (at the stand-alone ED) would count for reporting by the admitting hospital.
- A patient was in a GI outpatient suite, spiked a fever, became hypotensive, and sepsis was suspected. It's possible that the GI outpatient suite started an IV, drew all blood samples for labs, started fluid boluses, and gave an antibiotic prior to transferring to the ED. As long as the treatment components were clearly documented, evidenced, and merged with the admitting hospital's medical records, the treatment given prior to arrival could be reported by the admitting hospital. In this example, the GI suite's selection of antibiotic should be documented to ensure it meets CMS data element criteria.

The following data elements were <u>removed</u> from version 3.0 of the NYSDOH Data Dictionary:

- Protocol Datetime
- Fluids Assessment
- CVP Measured
- CVP Measured Datetime
- ScVO<sub>2</sub> Measured
- ScVO<sub>2</sub> Measured Datetime
- Septic Shock Diagnosis

The following data elements were already in the NYSDOH Data Dictionary but were changed to align with CMS SEP-1, displayed below using the "New Data Element Name (Old Data Element Name)" format:

- Initial Lactate Level Collection (Lactate Reported)
- Initial Lactate Level Collection Datetime (Lactate Reported Datetime)
- Repeat Lactate Level Collection (Lactate Re-ordered)
- Repeat Lactate Level Collection Datetime (Lactate Re-ordered Datetime)
- **Blood Culture Collection** (Blood Cultures Obtained)
- **Blood Culture Collection Datetime** (Blood Cultures Obtained Datetime)
- **Antibiotic Administration** (Antibiotics Given)

- **Antibiotic Administration Datetime** (Antibiotics Start Datetime)
- Adult Crystalloid Fluid Administration (Adult Fluids)
- **Pediatric Crystalloid Fluid Administration** (Pediatric Fluids)
- Crystalloid Fluid Administration Datetime (Fluids Completed Datetime)
- Persistent Hypotension (Hypotension)
- Vasopressor Administration (Vasopressors Given)
- Vasopressor Administration Datetime (Vasopressors Given Datetime)

The following new data elements (NYSDOH, not associated with CMS SEP-1) were added:

- Protocol Not Initiated Reason
- Protocol NI Reason Additional Detail

The following CMS SEP-1 data elements were <u>newly added</u> to the NYSDOH Data Dictionary, not having been in any previous versions. Having been added, these will maintain alignment with CMS SEP-1.

- Severe Sepsis Present
- Severe Sepsis Presentation Datetime
- Septic Shock Present
- Septic Shock Presentation Datetime
- Blood Culture Collection Acceptable Delay
- Antibiotic Administration Selection
- Initial Hypotension
- Bedside Cardiovascular Ultrasound
- Bedside Cardiovascular Ultrasound Datetime
- Capillary Refill Examination
- Capillary Refill Examination Datetime
- Cardiopulmonary Evaluation
- Cardiopulmonary Evaluation Datetime
- Passive Lea Raise Examination
- Passive Leg Raise Examination Datetime
- Peripheral Pulse Evaluation
- Peripheral Pulse Evaluation Datetime
- Skin Examination
- Skin Examination Datetime
- Vital Signs Review
- Vital Signs Review Datetime

The following data elements were changed as described below:

- Ethnicity and Payer codes and options were changed to align with SPARCS.
- *Triage Datetime* was changed to situational status to account for the few instances in which a patient was a direct admission and never entered the ED. This data element

- captures the triage start date and time. If the patient developed sepsis on the floor but at some previous point arrived through the ED, *Triage Datetime* is to be reported.
- Admission Datetime was changed to match the administrative admission of the patient to inpatient status at the hospital. This is now a SPARCS alignment variable.
- *Earliest Datetime* description was modified to capture the earliest arrival date and time to the facility, whether to the ED or directly to an inpatient unit (direct admission). This data element is mandatory for all cases, as it is not linked to the ED but seeks the earliest arrival datetime for all patients.
- Initial Lactate Level and Initial Lactate Level Unit are data elements with modification only
  to the name (originally named Lactate Level and Lactate Level Unit). The expectations for
  reporting of lactate level and level unit remain the same.
- Adult Fluids and Pediatric Fluids were changed to Adult Crystalloid Fluid Administration
  and Pediatric Crystalloid Fluid Administration, respectively. For adults, this data element
  was aligned with CMS SEP-1 and is to be reported according to their guidelines. For peds,
  the fluid volume requirements remain unchanged, but additional fluid assessment data
  elements are now necessary for reporting.
- Fluids Completed Datetime was changed to Crystalloid Fluid Administration Datetime.
   The original data element (Fluids Completed Datetime) required the documentation of the completion of fluids (the end date and time) for what would have been the sufficient amount of crystalloid fluids (30ml/kg for adult and 20ml/kg for peds).
  - The new data element (*Crystalloid Fluid Administration Datetime*) was aligned with CMS SEP-1 and requires the **start date and time** for the number of bags that would deliver sufficient fluid volume using the same fluid volume to weight ratio (30ml/kg for adults).
  - Although pediatric patients are not addressed in SEP-1, for pediatric patients this
    data element will now require 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 20mg/kg ratio.
  - For both adult and pediatric patients, if the hospital reported that sufficient crystalloid fluids were given, the 7 fluid assessment data elements (and datetimes) must also be completed.
  - O It's understood that not all of the fluid assessment data elements will be applicable for pediatric patients. It is expected that at least one will apply. Therefore, facilities should accordingly submit a Yes/No response for each data element as appropriate, and complete the corresponding data element datetime if a "Yes" response is chosen.
  - Those 7 fluid assessment data elements are as follows:
    - Bedside Cardiovascular Ultrasound
    - Capillary Refill Examination
    - Cardiopulmonary Evaluation
    - Passive Leg Raise Examination
    - Peripheral Pulse Evaluation

- Skin Examination
- Vital Signs Review
- Hypotension originally referred to 2 physiologic conditions (hypotension and elevated lactate level) that were or were not responsive to fluid administration. This data element was changed to Persistent Hypotension (as mentioned in a prior list), and this now only refers to persistent hypotension or new hypotension present after fluid administration. This data element now aligns with CMS SEP-1. Also, the Initial Hypotension data element was added to align with CMS SEP-1 and provides additional insight into the patient's status with respect to low blood pressure and treatment.
- The new data element *Protocol Not Initiated Reason* must be completed if a hospital reported that a protocol was not initiated. Regardless of protocol initiated status, the appropriate adherence variables must be submitted by the hospitals for all adherence treatment data elements unless the patient was excluded from the protocol and documented as such. An additional data element *Protocol NI Reason Additional Detail* was added to allow hospitals to add additional details if desired in explanation for cases for which a protocol was not initiated in a patient for whom exclusion was not selected.
- The Codes and Values for the comorbidity data elements (Chronic Respiratory Failure, Congestive Heart Failure, Chronic Renal Failure, Chronic Liver Disease, Diabetes) were rephrased to say "...discovered..." instead of "...developed...," since conditions that develop during a hospital admission would be considered acute and not chronic.

The "Edit Applications" section was renamed as "Notes for Abstraction" and provides additional notes and examples (for some) to aid data abstraction and submission.

The relevant FAQ's from the Sepsis Data Collection Portal and topics from the Helpdesk were integrated throughout this revision of the Data Dictionary. The introduction page "Points to remember for data collection" was also updated to reflect these changes.

Version 4.0 is effective for discharges on or after January 1, 2017.

# Version 3.0

Data elements *Earliest Time, Triage Datetime, Left ED Datetime,* and *Destination after ED* were updated in definition. These data elements are to be reported regardless of whether or not a protocol was initiated. These variables are all mandatory data elements; all cases reported must include responses to these data elements. This is effective for discharges on or after January 1, 2016.

Sepsis Data Submission Data Types and Constraints section was updated to incorporate the changes described above. The end table specifying potentially blank data elements for data submission was removed. This data specification is available within each data element.

## Version 2.0

Data element *Excluded Reason* updated in codes and values. The Department has clarified that 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. Code 5 = Patient is a newborn or infant in the NICU that had not been previously discharged from initial birth stay has been removed from the dictionary and is effective for discharges on or after October 1, 2015. Hospitals should NOT report these cases to the sepsis data portal, which were previously considered excluded cases. Cases reported prior to this effective date will be removed from the database and hospital reports. Newborns that are discharged and then readmitted ARE to be reported to the sepsis data portal.

Data elements *Infection Etiology* and *Platelet Count* include subheading changes to Hospital Acquired Infection and Thrombocytopenia, respectively, to represent more accurate data descriptions. The data elements have NOT been changed therefore there is no change to data capture.

### Version 1.44

Data element *Hypotension* updated in description. More detail has been provided to specify that the data code and value should be answered using the six hour window of the patient having severe sepsis or septic shock. This change does not require a modification to your data template and is effective for discharges on or after July 1, 2015.

## Version 1.43

Data element *Excluded Explain* updated in codes and values to remove: 7 = Mechanical Ventilation. This change does not require a modification to your data template and is effective for discharges on or after April 1, 2015.

## Version 1.42

Data element *Hypotension* updated in codes and values to: 2 = No hypotension. This change does not require a modification to your data template and is effective for discharges on or after January 1, 2015.

### Version 1.41

Data element *Excluded Reason* updated in codes and values to permit the submission of more

than one reason for excluding the patient from the protocol. This change is effective for discharges on or after January 1, 2015. Remember that when *Excluded Reason* = 1 (even if it is one of multiple reasons selected), then data element *Excluded Explain* must be completed. Data element *Transfer Facility Identifier* corrected to reflect that this is not a SPARCS variable. Additionally, the edit application was modified to provide direction for out of state transfer patients. When transferring a patient to or from an out of state facility, please submit the two digit state identifier (<a href="http://www.census.gov/geo/reference/ansi-statetables.html">http://www.census.gov/geo/reference/ansi-statetables.html</a>) to represent the transfer facility state.

Data element *Vascular or Intraosseous Access Datetime* removed from the Data Dictionary as per documentation provided in Version 1.3 and 1.4.

### Version 1.4

Demographic data element *Transfer Status* has been updated in codes and values to streamline data collection. This change is effective for discharges on or after October 1, 2014.

Demographic data element *Transfer Facility Identifier* has been added to capture the sending or receiving Permanent Facility Identifier for all severe sepsis or septic shock transfer cases. This change is effective for discharges on or after October 1, 2014.

An introductory section has been added to the Dictionary to highlight key points to remember

An introductory section has been added to the Dictionary to highlight key points to remember during data collection.

## Version 1.3

Element *Vascular or Intraosseous Access Datetime* will be removed from the Data Dictionary for all data collected as of October 1, 2014 onward. For the reporting period discharge dates July 1, 2014 through September 30, 2014 the data element will be optional and therefore, may be blank. Please note the current data structure will require a space allocation for the element in order to pass data validation for 7/1-9/30/2014 discharges but will no longer be reported as of October 1, 2014 discharges.

Element *Fluids Assessment* modified to include codes "6" and "7". "6"=Fluid response not evaluated. "7"=Fluid resuscitation not provided. This change is effective for discharges on or after July 1, 2014.

Element *Septic Shock Diagnosis* modified to exclude code "0" Patient was not diagnosed with either severe sepsis or septic shock. The element description was modified from "Indicate if the patient has been <u>diagnosed</u> with severe sepsis and/or septic shock". The new description states "Indicate if the patient had severe sepsis and/or septic shock." This change is effective for discharges on or after July 1, 2014.

Demographic data element *Transfer Status* has been added to require hospitals to designate if a patient has been received or discharged as a transfer patient. In recognition that this data element requires data collection of new information, this change is effective for discharges on or after October 1, 2014.

The link provided on page 2 of the Dictionary was updated to reflect the consolidated website <a href="https://ny.sepsis.ipro.org">https://ny.sepsis.ipro.org</a>. Please note the original website will seamlessly redirect you to this site.

The direct link is provided as a courtesy and requires no action on your part.

# Version 1.21

Element *Excluded Explain* amended to capture additional exclusions. Code 1 was "IV or IO fluids (acute, decompensated congestive heart failure)", changed to "IV or IO fluids (acute, decompensated congestive heart failure, pulmonary edema and LVAD)"

Element *Insurance Number* updated to allow blanks if Element *Payer* is not Medicare (C), Medicaid (D), Commercial Insurance (F), or Blue Cross (G).

Element *Source of Admission* modified to include codes "A" and "D". "A"=Transfer from a Rural Primary Care Hospital. The patient was admitted to this facility as a transfer from a Rural Primary Care Hospital (RPCH) where he or she was an inpatient. "D"=Transfer from One Distinct Unit of the Hospital to another Distinct Unit of the Same Hospital Resulting in a Separate Claim to the Payer. Inpatient: The patient was admitted to this facility as a transfer from hospital inpatient within this facility resulting in a separate claim to the payer.

## Version 1.2

All data element Format-Length values have been modified to align with data submission specifications. A section providing general data element specifications has been added with a reference to the location of the downloadable *Table of Elements*, or template. The data dictionary was also modified as necessary to denote revised mandatory versus situational fields. For example, all Severity Adjustment and Comorbidity Variables are noted as *mandatory* data elements. The *Index* was eliminated and replaced with a hyperlink *Table of Contents* to facilitate use of the dictionary.

Element *Insurance Number* updated to provide definition clarification and alignment with SPARCS.

Element Facility Identifier updated to clarify that the PFI can range from four to six digits.

Element *Source of Admission* amended to define code value 1 to specify "from home or from an assisted living facility", all other values and codes align with SPARCS.

Element *Earliest Time* reverted to v1.0 description and further clarified edit applications.

Element *Race* updated to reflect 4/2014 SPARCS definitions and, to permit multiple race codes to be captured for a patient. If multiple race codes are chosen, this data element will no longer align with SPARCS therefore the data element is not designated as a SPARCS variable.

Element Ethnicity updated to reflect 2014 SPARCS definitions.

Example datetime now correctly reads 23:42.

Element *Excluded Explain* amended to exclude Codes and Values: *3=Antibiotics* therefore all subsequent Codes and Values were altered and the Format-Length was reduced.

Element Blood Cultures Pathogen amended to include Codes and Values: 7=Viral.

Element ScVO<sub>2</sub> Measured and ScVO<sub>2</sub> Measured Datetime amended description to include SVO<sub>2</sub>.

Element Site of Infection amended to include Codes and Values: 7=Unknown.

Element *Mechanical Ventilation* amended to specify patients with CPAP for sleep apnea as not having mechanical ventilation for reporting purposes.

Element Lactate Reordered amended element definition to clarify re-measured.

Element Lactate Reordered Datetime amended definition to clarify re-measurement results datetime.

Additionally, the edit application removed "cannot have been before Lactate Reported Datetime".

Element *Platelet Count* amended to add code value 3 = Protocol not initiated.

Element **Bandemia** amended to add code value 3 = Protocol not initiated.

Element *Date of Birth* format amended to align completely with SPARCS.

Element *Payer* amended to align completely with SPARCS; additional codes and values added.

Element *Medical Record Number* amended to align completely with SPARCS; format length modified.

Element *Admission Datetime* and *Discharge Datetime* were amended to note that they are not SPARCS aligned variables.

Element *Discharge Status* amended to align with April 2014 SPARCS definitions, codes and values.

Element Fluids Start Datetime was deleted and replaced with Fluids Completed Datetime.

### Version 1.1

Removed element First Name

Removed element Last Name

Removed element Social Security Number

Added element Unique Personal Identifier

Added element Patient Control Number

Modified Notes for Abstraction for element *Date Of Birth* 

Modified all Date elements that have a related Time element to be combined Datetime elements

(YYYY-MM-DD hh:mm)

Removed all Time elements

Modified element *Insurance Number* from AlphaNumeric-30 to AlphaNumeric-19

Modified element *Adult Fluids* to include additional code (9=Not Adult)

Modified element *Pediatric Fluids* to include additional code (9=Not Pediatric)

Protocol Initiated now specifies collection of severity adjustment and Comorbidity Variables in all cases.

Admission Datetime now specifies cannot precede January 1, 2014

Discharge Datetime now specifies cannot precede April 1, 2014

**Excluded Explain** now specifies clinical reasons for exclusions

Excluded Explain modified from AlphaNumeric 9 to AlphaNumeric 15

Septic Shock Diagnosis clarified for pediatric patients