# DATA DICTIONARY FOR SEVERE SEPSIS OR SEPTIC SHOCK

Version 2.0

September 17, 2015

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: <u>https://ny.sepsis.ipro.org</u>

Questions regarding this document should be sent to: <u>sepsis-ny@support.ipro.us</u>

Prepared by: Office of Quality and Patient Safety New York State Department of Health Phone: (518) 486-9012 Revised September 17, 2015

# **Table of Contents**

Points to remember during data collection	6
Demographic Variables	7
Unique Personal Identifier	8
Patient Control Number	9
Date of Birth	10
Gender	
Race	12
Ethnicity	
Payer	14
Insurance Number	15
Medical Record Number	16
Facility Identifier	
Admission Datetime	
Source of Admission	19
Discharge Datetime	20
Discharge Status	21
Transfer Status	23
Transfer Facility Identifier	24
Protocol Initiated	25
Protocol Initiated Place	
Protocol Type	27
Excluded from Protocol	
Excluded Reason	29
Excluded Datetime	30
Excluded Explain	
Adherence Variables	32
Earliest Time	
Triage Datetime	
Protocol Datetime	

Left ED Datetime	
Destination after ED	37
Lactate Reported	38
Lactate Reported Datetime	39
Lactate Level	40
Lactate Level Unit	41
Lactate Re-ordered	42
Lactate Re-ordered Datetime	43
Blood Cultures Obtained	44
Blood Cultures Obtained Datetime	45
Blood Cultures Result	46
Blood Cultures Pathogen	47
Antibiotics Given	48
Antibiotics Start Datetime	49
Adult Fluids	50
Pediatric Fluids	51
Fluids Completed Datetime	52
Fluids Assessment	53
Hypotension	54
Vasopressors Given	55
Vasopressors Given Datetime	56
CVP Measured	57
CVP Measured Datetime	58
ScVO <sub>2</sub> Measured	59
ScVO <sub>2</sub> Measured Datetime	60
Severity Adjustment Variables	61
Platelet Count	62
Bandemia	63
Lower Respiratory Infection	64
Altered Mental Status	65
Comorbidity Variables	66

Septic Shock Diagnosis
Infection Etiology
Site of Infection
Mechanical Ventilation70
Mechanical Ventilation Datetime71
ICU
ICU Admission Datetime73
ICU Discharge Datetime74
Chronic Respiratory Failure75
AIDS/HIV Disease
Metastatic Cancer
Lymphoma/Leukemia/Multiple Myeloma78
Immune Modifying Medications79
Congestive Heart Failure
Chronic Renal Failure
Chronic Liver Disease
Diabetes
Organ Transplant
Sepsis Data Submission Data Types and Constraints85
Change Log

# Points to remember during data collection

- Patients who arrive through your 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.
- Irrespective of protocol initiation, hospitals should report all data for adherence variables to enable accurate data capture of treatment provided to the patient.
- Your hospital data will be aggregated and sent back to you in a report comparing your performance to the state therefore you want to be sure that your data is as accurate and complete as possible.

**Demographic Variables** 

#### **Demographic Variables**

Data Element Name:	Unique Personal Identifier
Format – Length:	Varchar-10
SPARCS variable:	Yes
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

Dataset Segment:	Demographic Variables
Data Element Name:	Patient Control Number
Format – Length:	Varchar-20
SPARCS variable:	Yes
Mandatory:	Yes

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.

Dataset Segment:	Demographic Variables
Data Element Name:	Date of Birth
Format – Length:	Date-8
SPARCS variable:	Yes
Mandatory:	Yes

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 Date.

Demographic Variables

Data Element Name: Gender Format – Length: SPARCS variable: Yes Yes Mandatory:

# **Description:**

The gender of the patient.

# **Codes and Values:**

M = Male F = Female U = Unknown Enumerated-1

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

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

# **Edit Applications:**

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

#### **Demographic Variables**

Data Element Name:EthnicityFormat – Length:Enumerated-1SPARCS variable:YesMandatory:Yes

#### **Description:**

The code that best describes the ethnicity of the patient.

# **Codes and Values:**

- 2 = Not of Spanish/Hispanic Origin
- 3 = Mexican, Mexican American, Chicano/a
- 4 = Puerto Rican
- 5 = Cuban Origin
- 6 = Other Spanish/Hispanic Origin
- 9 = Unknown
- M = Multi-ethnic

Dataset Segment:	Demographic Variables
Data Element Name:	Payer
Format – Length:	Enumerated -1
SPARCS variable:	Yes
Mandatory:	Yes

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=Commercial Insurance G=Blue Cross H=CHAMPUS I=Other Non-Federal Program J=Disability K=Title V L=Unknown

> 14 Version 2.0 Rev. 9/2015

# Demographic Variables

#### Demographic Variables

Data Element Name:	Insurance Number
Format – Length:	Varchar-19
SPARCS variable:	Yes
Mandatory:	Yes

#### **Description:**

The insurance policy identification number for the patient.

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

# **Edit Applications:**

- Allow blanks only if Element Payer is not Medicare ("C"), Medicaid ("D"), Commercial Insurance ("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 information depending on CHAMPUS regulations.
Medicaid	Enter Medicaid Client Identification Number (CIN) of the insured or case head Medicaid number shown on the Medicaid Identification Card.
Medicare	Enter the patient's Medicare HIC number as shown on the Health Insurance Card, Certificate of Award, Utilization Notice, Temporary Eligibility Notice, and Hospital Transfer Form or as reported by the Social Security Office.

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

Dataset Segment:	Demographic Variables	
Data Element Name:	Medical Record Number	
Format – Length:	Varchar-17	
SPARCS variable:	Yes	
Mandatory:	Yes	

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.

Dataset Segment:	Demographic Variables	
Data Element Name:	Facility Identifier	
Format – Length:	Varchar -6	
SPARCS variable:	Yes	
Mandatory:	Yes	

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:**

# **Edit Applications:**

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

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

The date the patient was admitted to the hospital.

This is the date the patient arrived at the Emergency Room or was admitted to inpatient status, whichever is earlier.

# Codes and Values:

# Edit Applications:

- 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 Date*. •

# Domographic Variables

#### **Demographic Variables**

Data Element Name:Source of AdmissionFormat – Length:Enumerated-1SPARCS variable:YesMandatory: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 nonfreestanding 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.

#### **Demographic Variables**

Data Element Name:Discharge DatetimeFormat – Length:Datetime-16SPARCS variable:NoMandatory:Yes

#### **Description:**

The date the patient was discharged from the hospital.

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

#### Edit Applications:

- Formatting:
  - Format must be YYYY-MM-DD hh:mm

     YYYY-MM-DDThh:mm is also valid
  - YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  - 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 Date.

\_\_\_\_\_

#### **Demographic Variables**

Data Element Name:Discharge StatusFormat – Length:Enumerated-2SPARCS variable:YesMandatory: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. 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 Units of a Hospital

63 = Discharged/transferred to a Medicare Certified Long Term Care Hospital (LTCH)
64 = Discharged/transferred to a Nursing Facility Certified under Medicaid but not certified under Medicare

65 = Discharged/transferred to a Psychiatric Hospital or Psychiatric Distinct Part Unit of a Hospital

66 = Discharged/transferred to a Critical Access Hospital (CAH)

69= Discharged/transferred to a Designated Disaster Alternative Care Site

70 = Discharged/transferred to another Type of Health Care Institution not defined Elsewhere in this Code List

81= Discharged to Home or Self Care with a Planned Acute Care Hospital Inpatient Readmission 82= Discharged/transferred to a Short-Term General Hospital for Inpatient Care with a Planned Acute Care Hospital Inpatient Readmission

83= Discharged/transferred to Skilled Nursing Facility (SNF) with Medicare Certification with a Planned Acute Care Hospital Inpatient Readmission

84= Discharged/transferred to a Facility that Provides Custodial or Supportive Care with a Planned Acute Care Hospital Inpatient Readmission

85= Discharged/transferred to a Designated Cancer Center or Children's Hospital with a Planned Acute Care Hospital Inpatient Readmission

86= Discharged/transferred to Home Under Care of Organized Home Health Service Organization with a Planned Acute Care Hospital Inpatient Readmission

87= Discharged/transferred to Court/Law Enforcement with a Planned Acute Care Hospital Inpatient Readmission

88= Discharged/transferred to a Federal Health Care Facility with a Planned Acute Care Hospital Inpatient Readmission

89= Discharged/transferred to Hospital-Based Medicare Approved Swing Bed with a Planned Acute Care Hospital Inpatient Readmission

90= Discharged/transferred to an Inpatient Rehabilitation Facility (IRF) including Rehabilitation Distinct Part Units of a Hospital with a Planned Acute Care Hospital Inpatient Readmission 91= Discharged/transferred to a Medicare Certified Long Term Care Hospital (LTCH) with a

Planned Acute Care Hospital Inpatient Readmission

92= Discharged/transferred to a Nursing Facility Certified under Medicaid but not Certified under Medicare with a Planned Acute Care Hospital Inpatient Readmission

93= Discharged/transferred to a Psychiatric Hospital or Psychiatric Distinct Part Unit of a Hospital with a Planned Acute Care Hospital Inpatient Readmission

94= Discharged/transferred to a Critical Access Hospital (CAH) with a Planned Acute Care Hospital Inpatient Readmission

95= Discharged/transferred to another Type of Health Care Institution not Defined Elsewhere in this Code List with a Planned Acute Care Hospital Inpatient Readmission

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

Hospitals are expected to report all cases of severe sepsis or septic shock regardless of transfer status. Please select the code that best represents the patient's acute care transfer status and complete all data elements. 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 hospital.

# 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 Sepsis Hospital 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 Sepsis Hospital Protocol was <u>initiated or</u> <u>completed</u> prior to transfer to the receiving acute care hospital. *Note: You will need to enter the PFI of the receiving hospital.* 

# To find a hospital PFI, please visit:

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

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

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 hospitals PFI. If you are transferring the patient in severe sepsis or septic shock, report the receiving hospitals 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:

# Edit Applications:

- Must be a valid number as maintained by the NYSDOH Division of Health Facility Planning.
- Must contain numbers 0-9.
- When transferring a patient to or from an out of state facility, please submit the two digit state identifier (<u>http://www.census.gov/geo/reference/ansi\_statetables.html</u>) to represent the transfer facility state. This is ONLY to be used when patients are transferred in/out of state therefore the code for New York will not be accepted for data submission. For example, a patient transferred to a Connecticut hospital is submitted with the Transfer Facility Identifier of 09.

# To find a hospital PFI, please visit:

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

Dataset Segment:	Demographic Variables
Data Element Name:	Protocol Initiated
Format – Length:	Enumerated-1
SPARCS variable:	No
Mandatory:	Yes

Indicate whether the severe sepsis or septic shock protocol was initiated.

#### Codes and Values:

- 0 = Protocol not initiated
- 1 = Protocol initiated

- If *Protocol Initiated* = 0 then *Protocol Initiated Place* = 0, and protocol adherence variables may be blank. However, if documentation in the medical record indicates that treatment was provided for one or more of the adherence variables, please complete these elements.
- All other data elements (i.e., Severity Adjustment and Comorbidity Variables) will have valid values.

#### **Demographic Variables**

Data Element Name: Protocol Initiated Place Format – Length: Enumerated-1 SPARCS variable: No Mandatory: Yes

#### **Description:**

The code best represents where the protocol was initiated.

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

- 1 = Protocol initiated in the emergency room
- 2 = Protocol initiated on an inpatient floor (not ICU)
- 3 = Protocol initiated in the ICU
- 0 = Protocol not initiated

#### **Edit Applications:**

- If Protocol Initiated = 0 then Protocol Initiated Place = 0, and protocol adherence variables may be blank. However, if documentation in the medical record indicates that treatment was provided for one or more of the adherence variables, please complete these elements.
- All other data elements (i.e., Severity Adjustment and Comorbidity Variables) will have valid values.

Dataset Segment:	Demographic Variables
Data Element Name:	Protocol Type
Format – Length:	Enumerated-1
SPARCS variable:	No
Mandatory:	Yes

The code 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

# **Edit Applications:**

- If *Protocol Initiated* =0 then *Protocol Initiated Place* and *Protocol Type* may = 0, and protocol adherence variables may be blank. However, if documentation in the medical record indicates that treatment was provided for one or more of the adherence variables, please complete these elements.
- All other data elements (i.e., Severity Adjustment and Comorbidity Variables) will have valid values.

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

Indicate if the patient was excluded from the protocol. If documentation in the medical record indicates that treatment was provided for one or more of the adherence variables, please complete these elements. All other data elements (i.e., Severity Adjustment and Comorbidity Variables) will have valid values.

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

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

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

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.

# **Codes and Values:**

1 = Interventions clinically contraindicated

2 = Patient has advanced directives in place that precluded one or more elements of the protocol

3 = Patient, or surrogate decision maker, declined interventions

4 = Patient is enrolled in an IRB approved trial that is inconsistent with the protocol interventions

#### Edit Applications:

- If *Excluded Reason* =1 then valid value must be reported in *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.

Dataset Segment:	Demographic variables
Data Element Name:	Excluded Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
Mandatory:	Situational

Dawaawaahia Variahlaa

# **Description:**

Detect Comment

Date the person was excluded from the protocol. For those not eligible for the protocol, this is the date of arrival. Otherwise, this is the date the person became 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
  - 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 Date*.

Dataset Segment:	Demographic Variables
Data Element Name:	Excluded Explain
Format – Length:	Set-11
SPARCS variable:	No
Mandatory:	Situational

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.

Submit a number for each applicable exclusion, separated by a colon.

Example 1:2:4 which represents options 1, 2, and 4 as <u>each</u> present as an exclusion.

# **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)

#### **Edit Applications:**

• A total of six (6) possible exclusions may be submitted, representing a case whereby all exclusions were met for the case.

**Adherence Variables** 

Dataset Segment:	Adherence Variables
Data Element Name:	Earliest Time
Format – Length:	Datetime-16
SPARCS variable:	No
Mandatory:	Situational

For patients whose protocol was initiated in the ER, this is the time of arrival to the Emergency Room. This is the first/earliest date recorded in the chart. This could be, but not necessarily, the same as the triage date.

# **Codes and Values:**

- Formatting:
  - 1. Format must be YYYY-MM-DD hh:mm
    - a. YYYY-MM-DDThh:mm is also valid
  - YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  - 3. Example: 11:42 pm November 3, 1959=1959-11-03 23:42
    a. 1959-11-03T23:42 is also valid
    - a. 1959-11-03123:42 is also
  - 4. Midnight = 00:00, not 24:00
- Cannot have been after *Discharge Datetime*.
- If the protocol was not started in the ED, then *Earliest Time* and *Triage Datetime* will be blank.

Dataset Segment:	Adherence Variables
Data Element Name:	Triage Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
Mandatory:	Situational

For patients whose protocol was initiated in the emergency room, this is the date of the triage assessment of the patient.

# Codes and Values:

- Formatting:
  - 1. Format must be YYYY-MM-DD hh:mm
    - a. YYYY-MM-DDThh:mm is also valid
  - YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  - 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 Date*.

Data Element Name:	Protocol Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
Mandatory:	Situational

**Dataset Segment:** 

The earliest date the protocol was started.

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

#### Edit Applications:

- Formatting:
  - Format must be YYYY-MM-DD hh:mm

     YYYY-MM-DDThh:mm is also valid
  - YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  - 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 Date*.

# Adherence Variables

Dataset Segment:	Adherence Variables
Data Element Name:	Left ED Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
Mandatory:	Situational

For patients whose sepsis protocol was initiated in the emergency department, this is the date they 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
  - 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 Date*.

Dataset Segment:	Adherence Variables
Data Element Name:	Destination after ED
Format – Length:	Enumerated-1
SPARCS variable:	No
Mandatory:	Situational

For patients whose sepsis protocol was initiated in the emergency department, this is where they 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

Dataset Segment:	Adherence Variables
Data Element Name:	Lactate Reported
Format – Length:	Enumerated-1
SPARCS variable:	No
Mandatory:	Situational

Indicate whether a lactate level was reported by the lab.

# **Codes and Values:**

- 0 = Lactate not reported
- 1 = Lactate was reported
- 2 = Lactate was not ordered

## **Edit Applications:**

- If *Lactate Reported*=1, answer additional lactate questions.
- If *Lactate Reported*=0 or 2 then all of the below are blank:
  - Lactate Reported Datetime
  - Lactate Level
  - Lactate Level Unit
  - Lactate Re-ordered
  - o Lactate Re-ordered Datetime

# Adherence Variables

## **Adherence Variables**

Data Element Name: Format – Length: Datetime-16 SPARCS variable: No Mandatory: Situational

## **Description:**

The date the first lactate level was reported by the lab.

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

## **Edit Applications:**

- 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 Admission Date.

Lactate Reported Datetime

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

The actual lactate level of the first test.

# **Codes and Values:**

# Edit Applications:

• Must be numeric to one decimal place (example 19.8).

Dataset Segment:	Adherence Variables
Data Element Name:	Lactate Level Unit
Format – Length:	Enumerated-1
SPARCS variable:	No
Mandatory:	Situational

Select the unit in which the lactate level is reported.

# Codes and Values:

1 = mg/dL 2 = mmol/L

Dataset Segment:	Adherence Variables
Data Element Name:	Lactate Re-ordered
Format – Length:	Enumerated-1
SPARCS variable:	No
Mandatory:	Situational

Indicate whether a lactate level was re-ordered/re-measured.

# **Codes and Values:**

- 0 = Lactate not re-ordered/re-measured
- 1 = Lactate was re-ordered/re-measured

## **Edit Applications:**

- If Lactate Re-ordered=1, answer Lactate Re-ordered Datetime question.
- If Lactate Re-ordered =0 then Lactate Re-ordered Datetime is blank.

Dataset Segment:	Adherence Variables
Data Element Name:	Lactate Re-ordered Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
Mandatory:	Situational

The date the lactate level was re-measured. This would be the date the lactate remeasurement results were obtained.

# **Codes and Values:**

# **Edit Applications:**

- Formatting:
  - 1. Format must be YYYY-MM-DD hh:mm
    - a. YYYY-MM-DDThh:mm is also valid
  - YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  - 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

Dataset Segment:	Adherence Variables
Data Element Name:	Blood Cultures Obtained
Format – Length:	Enumerated-1
SPARCS variable:	No
Mandatory:	Situational

Indicate whether blood cultures were obtained. This culture could be up to 24 hours prior to the initiation of the sepsis protocol to 48 hours after the initiation of the sepsis protocol.

## **Codes and Values:**

- 0 = Blood culture not obtained
- 1 = Blood culture was obtained

## **Edit Applications:**

- If *Blood Cultures Obtained*=1, answer additional blood culture questions.
- If *Blood Cultures Obtained* =0 then all of the below are blank:
  - o Blood Cultures Obtained Datetime
  - o Blood Cultures Result
  - o Blood Cultures Pathogen

Dataset Segment:	Adherence Variables
Data Element Name:	Blood Cultures Obtained Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
Mandatory:	Situational

The date the first blood culture was obtained. This culture could be up to 24 hours prior to the initiation of the sepsis protocol to 48 hours after the initiation of the sepsis protocol.

# Codes and Values:

# Edit Applications:

- Formatting:
  - 1. Format must be YYYY-MM-DD hh:mm
    - a. YYYY-MM-DDThh:mm is also valid
  - YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  - 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 more than 24 hours prior to or 48 hours after *Protocol Datetime*.

Dataset Segment:	Adherence Variables
Data Element Name:	Blood Cultures Result
Format – Length:	Enumerated-1
SPARCS variable:	No
Mandatory:	Situational

Indicate if the result of the first blood culture was positive or negative. This culture could be up to 24 hours prior to the initiation of the sepsis protocol to 48 hours after the initiation of the sepsis protocol. 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

## Adherence Variables

Data Element Name: Format – Length: SPARCS variable: Mandatory: Blood Cultures Pathogen Enumerated-1 No 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 = Fungus
- 6 = Mixed pathogens
- 7 = Viral

## Adherence Variables

Data Element Name:AntibioFormat – Length:EnumeSPARCS variable:NoMandatory:Situation

## **Description:**

Indicate whether broad spectrum antibiotics were administered.

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

- 0 = Antibiotics not given
- 1 = Antibiotics given after the initiation of the sepsis protocol.
- 2 = Antibiotics were given prior to the initiation of the sepsis protocol.

#### **Edit Applications:**

- If Antibiotics Given=1 or 2, complete Antibiotics Start Datetime.
- If Antibiotics Given =0 then *Antibiotics Start Datetime* is blank.

48 Version 2.0 Rev. 9/2015

Antibiotics Given Enumerated-1 No Situational

## **Adherence Variables**

Data Element Name:Antibiotics StFormat – Length:Datetime-16SPARCS variable:NoMandatory:Situational

## **Description:**

The date broad spectrum antibiotics were started.

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

## Edit Applications:

- Formatting:
  - Format must be YYYY-MM-DD hh:mm

     YYYY-MM-DDThh:mm is also valid
  - YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  - 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

49 Version 2.0 Rev. 9/2015

Antibiotics Start Datetime Datetime-16 No Situational

Dataset Segment:	Adherence Variables
Data Element Name:	Adult Fluids
Format – Length:	Enumerated-1
SPARCS variable:	No
Mandatory:	Situational

If *Protocol Type*= 1 (Adult), indicate if at least 30ml/kg crystalloid were given if the patient was hypotensive or had a lactate level of greater than or equal to 4 mmol/L.

## Codes and Values:

- 0 = At least 30ml/kg crystalloid were not given
- 1 = At least 30ml/kg crystalloid were given
- 2 = Volume of fluids given is unknown
- 9 = Patient is not adult

## **Edit Applications:**

- If *Pediatric Fluids* = 9 *Adult Fluids* must not = 9.
- If *Protocol Type* = 1 *Adult Fluids* must not = 9

Dataset Segment:	Adherence Variables
Data Element Name:	Pediatric Fluids
Format – Length:	Enumerated-1
SPARCS variable:	No
Mandatory:	Situational

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

# **Codes and Values:**

- 0 = At least 20cc/kg isotonic saline or colloid were not given
- 1 = At least 20cc/kg isotonic saline or colloid were given
- 2 = Volume of fluids given is unknown
- 9 = Patient is not Pediatric

# **Edit Applications:**

- If Adult Fluids = 9 Pediatric Fluids must not = 9.
- If *Protocol Type* = 2 *Pediatric Fluids* must not = 9

Dataset Segment:	Adherence Variables
Data Element Name:	Fluids Completed Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
Mandatory:	Situational

The date the fluids were completed.

For pediatric patients this is the completion of giving at least 20cc/kg isotonic saline or colloid. For adult patients this is the completion of giving at least 30ml/kg crystalloid if the patient was hypotensive or had a lactate level of greater than or equal to 4 mmol/L.

# **Codes and Values:**

# Edit Applications:

- 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

Dataset Segment:	Adherence Variables
Data Element Name:	Fluids Assessment
Format – Length:	Set-9
SPARCS variable:	No
Mandatory:	Situational

Indicate the means of evaluating response to fluid resuscitation.

Submit a number for each applicable option, separated by a colon.

Example 1:2:4 which represents options 1, 2, and 4 as <u>each</u> present.

# Codes and Values:

- 1 IVC Ultrasound
- 2 Central Venous Pressure
- 3 Clinical Judgment
- 4 -ScVO<sub>2</sub> or SVO<sub>2</sub>
- 5 -Lactate Clearance
- 6- Fluid Response Not Evaluated
- 7- Fluid Resuscitation Not Provided

# Edit Applications:

• A total of seven (7) possible options may be submitted, representing a case whereby all options were exercised for the case, though it is not expected that values 6 and/or 7 are reported with values 1-5.

Dataset Segment:	Adherence Variables
Data Element Name:	Hypotension
Format – Length:	Enumerated-1
SPARCS variable:	No
Mandatory:	Situational

Indicate if the patient has persistent hypotension or had a lactate level of greater than or equal to 4 mmol/L that is not responsive to fluids.

• Elevated lactate defined as >=4mmol/L

In determining the appropriate response to this data element, hospitals must consider patient responsiveness within the first six hours of having severe sepsis or septic shock. For example, if a patient becomes unresponsive to fluids **only** AFTER the six hour window, then the patient is NOT designated as code 0.

## Codes and Values:

- 0 = Hypotension or elevated lactate level not responsive to fluids
- 1 = Hypotension or elevated lactate level responsive to fluids
- 2 = No hypotension

Dataset Segment:	Adherence Variables
Data Element Name:	Vasopressors Given
Format – Length:	Enumerated-1
SPARCS variable:	No
Mandatory:	Situational

Indicate if the patient was given vasopressors/inotropes. For pediatric patients, indicate if cardiovascular drug therapy support was given.

# Codes and Values:

0 = No 1 = Yes

Dataset Segment:	Adherence Variables
Data Element Name:	Vasopressors Given Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
Mandatory:	Situational

The date first vasopressors/inotropes/cardiovascular drug therapy support was given.

## **Codes and Values:**

## **Edit Applications:**

- 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

# Adhoronco Variables

Dataset Segment:	Adherence Variables
Data Element Name:	CVP Measured
Format – Length:	Enumerated-1
SPARCS variable:	No
Mandatory:	Situational

Indicate whether CVP was measured.

# Codes and Values:

0 = CVP not measured

1 = CVP measured

## Edit Applications:

- If CVP Measured=1, report CVP Measured Datetime.
- If CVP Measured =0 then *CVP Measured Datetime* is blank.

Data Element Name: Format – Length: SPARCS variable: Mandatory:

## **Description:**

The date CVP was measured.

## Codes and Values:

## Edit Applications:

- Formatting:
  - Format must be YYYY-MM-DD hh:mm

     YYYY-MM-DDThh:mm is also valid
  - YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  - 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

# **Adherence Variables**

CVP Measured Datetime Datetime-16 No Situational

Dataset Segment:	Adherence Variables
Data Element Name:	ScVO <sub>2</sub> Measured
Format – Length:	Enumerated-1
SPARCS variable:	No
Mandatory:	Situational

Indicate whether ScVO<sub>2</sub> or SVO<sub>2</sub> was measured.

## **Codes and Values:**

- $0 = ScVO_2$  or  $SVO_2$  not measured
- 1 = ScVO<sub>2</sub> or SVO<sub>2</sub> measured

# **Edit Applications:**

- If ScVO<sub>2</sub> Measured=1, report *ScVO2 Measured Datetime*.
- If ScVO<sub>2</sub> Measured =0 then *ScVO2 Measured Datetime* is blank.

Data Element Name: Format – Length: SPARCS variable: Mandatory:

## **Description:**

The date ScVO<sub>2</sub> or SVO<sub>2</sub> was measured.

## **Codes and Values:**

## Edit Applications:

- Formatting:
  - Format must be YYYY-MM-DD hh:mm

     YYYY-MM-DDThh:mm is also valid
  - YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  - 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

# **Adherence Variables**

ScVO<sub>2</sub> Measured Datetime Datetime-16 No Situational

Severity Adjustment Variables

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

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

# **Codes and Values:**

0 = No

- 1 = Yes
- 2 = Unknown
- 3 = Protocol not initiated

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

Was the band count more than 5% of the total white blood cell count at the time of the sepsis protocol initiation?

# Codes and Values:

- 0 = No
- 1 = Yes
- 2 = Unknown
- 3 = Protocol not initiated

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

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

# Codes and Values:

0 = No 1 = Yes 2 = Unknown

Severity Adjustment Variables
Altered Mental Status
Enumerated-1
No
Yes

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 **Comorbidity Variables** 

Dataset Segment:	Comorbidity Variables
Data Element Name:	Septic Shock Diagnosis
Format – Length:	Enumerated-1
SPARCS variable:	No
Mandatory:	Yes

Indicate if the patient had severe sepsis and/or septic shock.

Record the highest level of severity of the patient. For example, if a patient had severe sepsis and progressed to septic shock, select 2 (Patient was diagnosed with septic shock).

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

## Codes and Values:

- 1 = Patient had severe sepsis
- 2 = Patient had septic shock

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

Indicate if the severe sepsis or septic shock was the result of a hospital acquired infection.

# Codes and Values:

0 = No 1 = Yes 2 = Unknown

# **Comorbidity Variables**

Site of Infection Data Element Name: Format – Length: Enumerated-1 SPARCS 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

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

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

## **Edit Applications:**

- If *Mechanical Ventilation*=1, report *Mechanical Ventilation Datetime*.
- If *Mechanical Ventilation*=0 then *Mechanical Ventilation Datetime* is blank.

## **Comorbidity Variables**

Data Element Name: Mechanical Ventilation Datetime Format – Length: Datetime-16 SPARCS variable: No Mandatory: Situational

## **Description:**

The date the patient was first started on mechanical ventilation.

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

## **Edit Applications:**

- 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

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

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

## **Edit Applications:**

- If ICU=1, report ICU Admission Datetime.
- If *ICU*=0 then *ICU Admission Datetime* is blank.

-	· · · · · · · · · · · · · · · · · · ·
Data Element Name:	ICU Admission Datetime
Format – Length:	Datetime-16
SPARCS variable:	No
Mandatory:	Situational

**Dataset Segment:** 

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

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

#### Edit Applications:

- Formatting:
  - Format must be YYYY-MM-DD hh:mm

     YYYY-MM-DDThh:mm is also valid
  - YYYY = four-digit year
     MM = two-digit month (01=January, etc.)
     DD = two-digit day of month (01 through 31)
     hh = two digits of hour (00 through 23) (am/pm NOT allowed)
     mm = two digits of minute (00 through 59)
  - 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

#### **Comorbidity Variables**

#### **Dataset Segment:**

#### **Comorbidity Variables**

Data Element Name: ICU Discharge Datetime Format – Length: Datetime-16 SPARCS variable: No Mandatory: Situational

#### **Description:**

The date the patient was first discharged from the Intensive Care Unit (ICU).

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

#### **Edit Applications:**

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

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

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.

- 0 = Not present
- 1 = Present on admission
- 2 = Not present on admission, but developed prior to initiation of sepsis protocol
- 3 = Developed after the initiation of sepsis protocol

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

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.

- 0 = Not present
- 1 = Present on admission
- 2 = Not present on admission, but discovered prior to initiation of sepsis protocol
- 3 = Discovered after the initiation of sepsis protocol

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

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.

- 0 = Not present
- 1 = Present on admission
- 2 = Not present on admission, but discovered prior to initiation of sepsis protocol
- 3 = Discovered after the initiation of sepsis protocol

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

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.

- 0 = Not present
- 1 = Present on admission
- 2 = Not present on admission, but discovered prior to initiation of sepsis protocol
- 3 = Discovered after the initiation of sepsis protocol

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

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.

- 0 = Not present
- 1 = Present on admission
- 2 = Not present on admission, but started prior to initiation of sepsis protocol
- 3 = Started after the initiation of sepsis protocol

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

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
- 1 = Present on admission
- 2 = Not present on admission, but developed prior to initiation of sepsis protocol
- 3 = Developed after the initiation of sepsis protocol

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

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.

- 0 = Not present
- 1 = Present on admission
- 2 = Not present on admission, but developed prior to initiation of sepsis protocol
- 3 = Developed after the initiation of sepsis protocol

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

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
- 1 = Present on admission
- 2 = Not present on admission, but developed prior to initiation of sepsis protocol
- 3 = Developed after the initiation of sepsis protocol

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

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.

- 0 = Not present
- 1 = Present on admission
- 2 = Not present on admission, but developed prior to initiation of sepsis protocol
- 3 = Developed after the initiation of sepsis protocol

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

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.

- 0 = Not present
- 1 = Present on admission
- 2 = Not present on admission, but received transplant prior to initiation of sepsis protocol
- 3 = Received transplant after the initiation of sepsis protocol

## **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 <u>https://ny.sepsis.ipro.org</u>.

### **Blanks:**

If *Protocol Initiated* equals 0; *protocol not initiated*, then all adherence variables may be blank. However, if documentation in the medical record indicates that treatment was provided for one or more of the adherence variables, please complete these elements.

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. For example, if a protocol was <u>not</u> initiated in the emergency room, then *Triage Datetime* will be blank. Potential blank data element fields are listed below.

Potential blank data fields (other than all adherence elements excluded for no protocol implementation) include:

Excluded_reason	Excluded_datetime
Excluded_explain	Earliest_datetime
Triage_datetime	Protocol_datetime
Destination_after_ed	Left_ed_datetime
Lactate_level	Lactate_reported_datetime
Lactate_reordered	Lactate_level_unit
Blood_cultures_obtained_datetime	Lactate_reordered_datetime
Blood_cultures_pathogen	Blood_cultures_result
Fluids_completed_datetime	Antibiotics_start_datetime
Vasopressors_given_datetime	Fluid_assessment
Scvo2_measured_datetime	Cvp_measured_datetime
Icu_admission_datetime	Mechanical_ventilation_datetime
Icu_discharge_datetime	

# **Change Log**

## 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 (<u>http://www.census.gov/geo/reference/ansi\_statetables.html</u>) 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 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 <u>https://ny.sepsis.ipro.org</u>. 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 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 Edit Applications 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