ACS NSQIP PEDIATRIC

# User Guide for the 2012 ACS NSQIP Pediatric Participant Use Data File

American College of Surgeons National Surgical Quality Improvement Program - Pediatric

October 2013

American College of Surgeons

*Inspiring Quality:*
*Highest Standards, Better Outcomes*

# Contents


| Section | | Page |
|---|---|---|
| 1. | Introduction | 1 |
| 2. | Data Request Process | 1 |
| 3. | File Description | 2 |
| 4. | Data Collection Background and Data Quality | 3 |
| 5. | Sampling Process and Case Inclusion/Exclusion Criteria | 4 |
| 6. | Data Limitations | 6 |
| 7. | Contact Information | 7 |
| 8. | Frequently Asked Questions | 7 |
| 9. | Data Variables and Definitions | 10 |

# 1. Introduction

This document is designed to accompany the 2012 Pediatric Participant Use Data File (PUF) available for download on the American College of Surgeons National Surgical Quality Improvement Program Pediatric (ACS NSQIP Pediatric) website (www.pediatric.acsnsqip.org). The sections contained herein will provide the user with information on how to request the Pediatric PUF, the contents of the data files, the data collection background, the inclusion and exclusion criteria for cases and hospitals, the data limitations, and the data point definitions and descriptions.

This user guide applies specifically to the 2012 Pediatric PUF. Hospitals utilizing the Pediatric PUF from a different year should refer to the user guide specifically tailored to that particular data set.

# 2. Data Request Process

An individual who has an official appointment at a fully enrolled Pediatric site and wants to obtain a copy of the Pediatric PUF can do so by visiting www.pediatric.acsnsqip.org and following the steps listed below:

1. From the ACS NSQIP Pediatric main page (www.pediatric.acsnsqip.org) the requestor can click on the "Quality Support Tools" tab and then click on the "Participant Use File" link.
2. Following a brief introduction, the requestor can click on "Request Data Set."
3. This will take the requestor to the Data Use Agreement. This is a 3-page document that implements the data protections of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and the ACS NSQIP Hospital Participation Agreement. Delivery of the PUF is contingent on agreement to the terms and conditions specified within the Data Use Agreement. You can read the Data Use Agreement from this page or download the 3-page document. The requestor is then required to type in their first and last name and click on "Request Data File." By clicking on "Request Data File" the requestor agrees to the terms and conditions of the Data Use Agreement.
4. Requestors will then be required to complete a brief online form to provide ACS with basic information about themselves, including the participating hospital in which they are currently employed and in what capacity, as well as how the requestor plans on using the Pediatric PUF data. Once all of the required fields are completed, the requestor clicks "Submit."

5. ACS NSQIP staff will review the request in a timely manner. Program contacts at participating sites will be contacted at this time to confirm the requestor's affiliation with the hospital and confirm internal approval of the PUF request.
6. Following receipt and confirmation of the information submitted, an email will be sent to the requestor containing a username and password along with the URL to download the data. The web link will be active from the time of the email for 10 full days (240 hours).
7. The file will be available in 3 different formats (Text, SPSS, SAS) and depending on the connection speed should take between 5 and 30 minutes to download.
8. The requestor may be contacted to confirm receipt of the data file and allow for feedback on the delivery mechanism, data points contained, and data file format.

# 3. File Description

Each fall a Pediatric PUF will be made available for the previous calendar year's data. The Pediatric PUF is available in 1 of 3 different formats - Text, SAS, and SPSS. The 2012 file contains 327 variables for each case, and a variable-by-variable description is provided starting on page 11. A brief description of the different formats follows:

| File Name | Type | Uncompressed File Size | Description |
|---|---|---|---|
| ACS_PEDS_PUF12.txt | tab delimited TXT file | 96 MB | Contains 327 HIPAA compliant variables on 51,008 cases submitted from 50 sites in 2012. |
| ACS_PEDS_PUF12.sas7bdat | SAS 9.2 data file | 2.7 GB | Same information as stated above in SAS data format. |
| ACS_PEDS_PUF12.sav | SPSS 16.0 data file | 909 MB | Same information as stated above in SPSS data format. |

# 4. Data Collection Background and Data Quality

The ACS NSQIP Pediatric collects data on 129 variables, including preoperative risk factors, intraoperative variables, and 30-day postoperative mortality and morbidity outcomes for patients undergoing major surgical procedures in both the inpatient and outpatient setting. A site's trained and certified Surgical Clinical Reviewer (SCR) captures these data using a variety of methods including medical chart abstraction.

Required data variables are entered via web-based data collection to the ACS NSQIP Pediatric website. Portions of the data may be automatically populated by a software program that was developed to extract data from the participating hospital's existing information systems. Requestors should contact the SCR(s) at their hospital for detailed information on how the hospital collects its ACS NSQIP Pediatric data.

To ensure the data collected are of the highest quality, the ACS NSQIP Pediatric has developed a host of different training mechanisms for the SCRs and conducts an Inter-Rater Reliability (IRR) Audit of selected participating sites. In addition to an initial web-based training program, the ACS NSQIP Pediatric requires SCRs to complete a series of web-based training modules followed by a certification exam that must be taken annually. The modules and certification exam focus on the program, processes, and analysis; preoperative, intraoperative, and postoperative definitions; and case studies. These modules are complemented by a growing online decision support system that ensures the SCRs have the knowledge and resources available to collect high-quality data.

The IRR Audit is a fundamental tool of ACS NSQIP Pediatric to assess the quality of the data collected at participating sites. The process involves the review of multiple charts, some of which are selected randomly and others selected based on criteria designed to identify potential reporting errors. For example, cases with 5 or more preoperative risk factors and no reported mortality or morbidity or cases with 2 or fewer preoperative risk factors and reported mortality or morbidity will be selected for chart review. Operating room logs are also audited to ensure correct sampling of cases.

The combined results of the audits completed to date revealed an overall disagreement rate of approximately 2% for all assessed program variables. The ACS NSQIP Pediatric has determined that an IRR Audit disagreement rate of 5% or less is acceptable. Sites that have higher than a 5% disagreement rate are not provided a hospital odds ratio in the ACS NSQIP Pediatric Semi Annual Report and may be required to undergo an additional audit following recommendations from the ACS NSQIP Pediatric.

# 5. Sampling Process and Case Inclusion/Exclusion Criteria

### *Systematic Sampling Process*

Large surgical services normally experience a significant volume of surgical cases. This presents the SCRs with the problem of managing an overwhelming workload. Therefore, a systematic sampling system called the 8-day cycle was developed to prevent bias in choosing cases for assessment. The SCR uses the 8-day cycle to select completed cases from the hospital's operative log. The schedule works as follows: If the first cycle begins on a Monday, it continues through to the following Monday (an 8-day period of time). The next cycle begins on Tuesday and continues through to the following Tuesday, and so on. There are 46 8-day cycles in 1 year, and the program requires that data be submitted for 40 of those cycles. The process ensures that cases have an equal chance of being selected from each day of the week. Case selection and case mix are monitored by the program on a weekly basis to ensure that the sampling is appropriate.

Hospitals with a high volume of surgical cases capture the first 35 consecutive cases meeting the inclusion/exclusion criteria in the 8-day cycle.

### *Case Inclusion Criteria*

The following inclusion criteria were applied to cases collected in 2012. For the current inclusion/exclusion criteria please contact the ACS NSQIP Pediatric Clinical Support Team at clinicalsupport@pediatric.acsnsqip.org.
The ACS NSQIP Pediatric includes all cases with CPT codes that are listed on the CPT inclusion list.

### *Case Exclusion Criteria*

The following exclusion criteria were applied to cases collected in 2012. For the current inclusion/exclusion criteria please contact the ACS NSQIP Pediatric Clinical Support Team at clinicalsupport@pediatric.acsnsqip.org.

- Patients 18 years of age and older
- A return to the operating room/ICU setting as the principal operative procedure, if it is related to an occurrence or complication from any procedure (surgical or otherwise) regardless of where the procedure was performed, within 30 days or within the same admission, regardless of whether the procedure was a NSQIP assessed surgical procedure.
- More than 5 of each of the following types of procedures
    - Appendectomy
    - Laparoscopic Cholecystectomy
    - Gastromstomy

- Trauma Cases - Specifically: Any injury with a principal ICD-9 diagnostic code within the range of 800-959.9. Additionally, excludes any surgical procedure related to the index trauma procedure(s), which occur during the same hospitalization. Any operation performed after the patient has been discharged from the trauma stay will be included, if they met NSQIP Pediatric program inclusion criteria. Any suspected abuse/neglect with ICD-9 code within the range of 959.50-995.59 will be excluded.
    - Exception to Trauma Criteria: Include cases where there is an isolated limb section fracture and included CPT code.
- Transplant Cases - Specifically: A patient who is admitted to the hospital for organ transplant surgery, and has additional surgical procedures performed during the same hospital stay, will be excluded. Any operation performed after the patient has been discharged from the transplant stay will be included.
- Concurrent Cases - An additional operative procedure performed by a different surgical team under the same anesthetic.
- CPT code different from that of the Principal Operative Procedure: an additional operative procedure performed by a different surgical team under the same anesthetic is not included as a separate case, but is listed as a concurrent procedure.
- Cases with CPT codes not on the CPT Code Inclusion List
- SCR on vacation - Each site is allowed to assign 6 of the 8-day cycles as vacation cycles and therefore does not need to collect cases during those cycles.

***Hospital Exclusion Criteria***

In addition to the case inclusion/exclusion criteria, hospital inclusion/exclusion criteria are also imposed. To maintain the highest level of data quality, only cases included in the odds ratio analysis are included in the Pediatric PUF. These cases go through an additional level of scrutiny as they are passed from data collection to statistical analysis. A site is excluded from the odds ratio calculations and the PUF if it fits any of the following criteria:

- 30-day follow-up rate is under 80%
- Inter-Rater Reliability Audit disagreement rate is over 5%

# 6. Data Limitations

While every effort has been made to make the Pediatric PUF as complete as possible, the data do have certain limitations. Some of these limitations have been deliberately introduced to safeguard the privacy of patients (such as removal of absolute dates). Other limitations are due to resource constraints (such as the collection of generic surgical variables only). The following items represent the most salient limitations of the data:

- Because such a wide variety of operations are tracked, the variables are necessarily generic in nature. This limitation may pose difficulties for researchers attempting in-depth research on specific conditions or operations.

- Patients are followed after surgery for a maximum of 30 days. Complications or death after that period are not included.

- In order to comply with HIPAA requirements, all absolute dates have been removed. The most critical of these is the date of surgery, which has been reduced to year of surgery only. Some dates (hospital entry, dates of laboratory tests, and so on) have been recoded into durations e.g. Date of Admission and Date of Discharge is recoded into Hospital Length of Stay.

- In order to comply with the Hospital Participation Agreement (HPA) that is agreed to between the ACS and participating sites, facility identifiers as well as geographic information regarding the case have been removed. The HPA stipulates that the ACS does not identify participating sites. Site identification could be possible even with blinded identifiers through advanced statistics. A stipulation of access to the Pediatric PUF is completion of the Data Use Agreement that strictly prohibits attempts to identify hospitals, health care providers, or patients.

- While many risk factors are tracked, preventative measures are not recorded which can lead to an overestimation of the risk of certain conditions when such measures are routinely taken before surgery.

- The data are submitted from hospitals that are participating in the ACS NSQIP Pediatric and do not represent a statistically valid nationally representative sample.

- Most patients do not receive all possible preoperative laboratory tests, so some of these variables have a high percentage of missing values (59% to 88%, depending on the tests). This high percentage of missing data can make it problematic to use these variables in a traditional logistic regression model as well as in many other types of analysis.

This list may not include all data limitations and additional limitations may apply in future versions of the data.

# 7. Contact Information

All questions about the Pediatric User Guide or Pediatric PUF, as well as comments and suggestions for improvements are welcome and may be directed to Brian Matel, ACS NSQIP Statistical Reports Manager via email at bmatel@facs.org.

# 8. Frequently Asked Questions

**Request Process**

Q: Who has access to this file?
A: Any individual with an official appointment at a fully participating pediatric site will be given access to the file following completion of the Data Use Agreement and a short set of questions that are available on the website.

Q: Is the file available to individuals from nonparticipating sites?
A: At this time the data files are only available to individuals with official appointments at fully participating pediatric sites.

Q: I am at a pediatric participating site and would like to work on a research project with others from a different site that is not participating. Will I be allowed to do that?
A: No. At this time use of the file is restricted to individuals at fully participating pediatric sites.

Q: How do I obtain a copy of this file?
A: Please see the "Data Request Process" on page 1 of this document for a step-by-step approach on how to do so.

**Contents of the Files**

Q: What is in this file?

A: The file contains Health Insurance Portability and Accountability Act (HIPAA) de-identified data from sites participating in the ACS NSQIP Pediatric that received odds ratios in 2012. Each record includes 327 variables. The variable name, variable label, data definition, and other pertinent information are provided in Section 10: Data Variables and Definitions.

Q: Are other Pediatric PUF data sets available?

A: No, 2012 is the first Pediatric PUF

Q: Are site identifiers included in the database?

A: At this time we do not provide any geographic or site-specific identification. We took this approach to ensure the privacy of both the participating sites and surgeons.

Q: Are there surgeon-specific identifiers included in the database?

A: At this time we do not provide any surgeon-specific information. We took this approach to ensure the privacy of both the participating sites and surgeons.

Q: Why does the Pediatric PUF exclude specific dates?

A: In order to release the Pediatric PUF, certain adjustments to the data are required to ensure proper protection of patient information. To meet these requirements, we remove all elements of dates (except quarter of admission and year) for dates directly related to an individual. For more information on the 18 data elements that are required for removal, please visit http://privacyruleandresearch.nih.gov/ or http://privacyruleandresearch.nih.gov/pdf/HIPAA_Booklet_4-14-2003.pdf.

Q: The ACS NSQIP Pediatric program collects 129 variables, but the database contains 327 variables. What are the additional variables?

A: The additional variables contained in the Pediatric PUF relate to computed durations. For example, the admission and discharge dates are used to calculate hospital length of stay. In addition, each complication in the ACS NSQIP Pediatric requires the use of 3 different variables in the database. There are a few other data elements collected in the ACS NSQIP Pediatric that require multiple variables in the database.

Q: I am the Surgeon Champion or Surgical Clinical Reviewer from a site that has records in the Pediatric PUF and would like to know which specific records are ours.

A: You may contact Brett Beemer, ACS NSQIP Application Support Specialist, via email at bbeemer@facs.org to request a file that will contain the Case IDs from your facility.

**Values in the Data**

Q: Why do some cases have complications that do not have a known duration from operation to complication?

A: In each of these cases, the date of the complication was invalid, which inhibited the calculation of duration. The number of days from operation to complication variable is coded as -99 for these cases.

Q: Why do some of the preoperative lab values have duration from lab to operation, but a value of -99 for the lab value?

A: The results of the lab tests can be entered manually and thus are susceptible to data entry error. Depending on the preoperative lab variable roughly 1% of the cases had invalid values and these invalid values were set to -99 to simplify analysis. It is also possible that some cases have valid lab values, but are missing duration from lab to operation variable. This discrepancy is also related to a data entry error and the program continues to improve the data collection software to minimize the potential for data entry errors.

Q: When performing analysis on the five digit CPT codes in the Other and Concurrent variables, how should I interpret those cases with a valid 5 digit CPT code but a CPT description set to NULL?

A: If the case has a valid 5 digit CPT code that procedure occurred and should be evaluated as such. The CPT description is a secondary variable and provided for convenience. In the processing of large amounts of data some descriptions are purposefully or inadvertently removed.

**File Formats**

Q: In what file formats are the data available?

A: The data files are made available in a tab delimited TXT file, an SPSS file, and an SAS file.

| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| 1 | CaseID | Num | Case Identification Number | Each case or record in the database has a unique CaseID number. | | |
| 2 | SEX | Char | Gender | Gender | Male; Female | |
| 3 | RACE | Char | Race | Race | American Indian or Alaska Native | |
| | | | | | Asian | |
| | | | | | Black or African American | |
| | | | | | Native Hawaiian or Pacific Islander | |
| | | | | | Unknown | |
| | | | | | White | |
| 4 | ETHNICITY_HISPANIC | Char | Hispanic Ethnicity | Hispanic Ethnicity | Yes; No | NULL = Unknown |
| 5 | PRNCPTX | Char | Principal operative procedure CPT code description | The principal operative procedure is the most complex of all the procedures performed by the primary operating team during the trip to the operating room. Additional procedures requiring separate CPT codes and/or concurrent procedures will be entered separately in the “Other Procedures” or “Concurrent Procedures” categories. | | |
| 6 | CPT | Char | CPT | The CPT code of the principal operative procedure. | | |
| 7 | WORKRVU | Num | Work Relative Value Unit | Work Relative Value Unit | | |
| 8 | INOUT | Char | Inpatient/outpatient | The hospital's definition of inpatient and outpatient status. | Outpatient; Inpatient | |
| 9 | TRANST | Char | Transfer status | The patient's transfer status which includes the following options: From outside hospital includes patients that were transferred from another facility and were considered an inpatient at that facility If the kind of facility could not be determined ‘Other’ is entered. | From home/clinic/doctor's office | |
| | | | | | Through ER, including outside ER with direct hospital admission | |
| | | | | | From outside hospital (NICU, PICU, Impatient on General floor, Adult ICU) | |
| | | | | | Chronic care/Rehab/Intermediate Care/Spinal Cord | |
| | | | | | Other | |
| 10 | AGE_DAYS | Num | Age of patient in days at time of surgery | Age of patient in days at time of suregery | | |
| 11 | AdmYR | Num | Year of Admission | Year of admission to the hospital | | |
| 12 | OperYR | Num | Year of Operation | Year the surgical procedure is performed | | |
| 13 | DISCHDEST | Char | Discharge Destination | Designate whether the patient was discharged to home or to another type of facility. Choose the patient’s discharge destination from the following selections:<br>(1) Skilled Care, not home (e.g., transitional care unit, subacute hospital, ventilator bed, skilled nursing home)<br>(2) Unskilled facility, not home (e.g., nursing home or assisted facility-if not patient’s home preoperatively)<br>(3) Facility which was home (e.g., return to a chronic care, unskilled facility, or assisted living-which was the patient’s home preoperatively)<br>(4) Home<br>(5) Separate acute care (e.g., transfer to another acute care facility)<br>(6) Rehab<br>(7) Expired<br>(8) Unknown | Skilled Care, Not Home | NULL = Unknown |
| | | | | | Unskilled Facility Not Home | |
| | | | | | Facility Which was Home | |
| | | | | | Home | |
| | | | | | Separate Acute Care | |
| | | | | | Rehab | |
| | | | | | Expired | |
| | | | | | Unknown | |
| 14 | ANESTECH | Char | Principal anesthesia technique | The principal anesthesia technique used. General anesthesia takes precedence over all other forms of anesthesia. | Epidural | |
| | | | | | General | |
| | | | | | Local | |
| | | | | | Caudal | |
| | | | | | None | |
| | | | | | Other | |
| | | | | | Regional | |
| | | | | | Spinal | |
| | | | | | Unknown | |
| 15 | SURGSPEC | Char | Surgical Specialty | The surgical specialty of the primary surgeon performing the procedure. If the procedure is performed by a surgical specialty not included in the list of 15 specialties, the closest specialty to the primary surgeon is chosen. | Pediatric Cardiovascular-Thoracic | |
| | | | | | Pediatric Neurosurgery | |
| | | | | | Pediatric Orthopedic Surgery | |
| | | | | | Pediatric Otolaryngolgy (ENT) | |
| | | | | | Pediatric Surgery | |
| | | | | | Pediatric Urology | |
| | | | | | Pediatric Plastics | |
| | | | | | Plastics | |

| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| | | | | | Cardiovascular-Thoracic | |
| | | | | | General Surgery | |
| | | | | | Gynecology | |
| | | | | | Neurosurgery | |
| | | | | | Orthopedic | |
| | | | | | Otolaryngology (ENT) | |
| | | | | | Urology | |
| 16 | HEIGHT | Num | Height at surgery in inches | The patient's most recent height documented in the medical record in inches (in). | | -99 = Unknown |
| 17 | WEIGHT | Num | Weight at surgery in pounds | The patient's most recent weight documented in the medical record in pounds (lbs). | | -99 = Unknown |
| 18 | DIABETES | Char | Diabetes mellitus requiring therapy with non-insulin agents, or insulin | The treatment regimen of the patient's chronic, long-term management (> 2 weeks). Diabetes mellitus is a metabolic disorder of the pancreas whereby the individual requires daily dosages of exogenous parenteral insulin or a non-insulin anti-diabetic agent to prevent a hyperglycemia/metabolic acidosis. Patients whose diabetes is controlled by diet alone are not included. No: no diagnosis of diabetes or diabetes controlled by diet alone. Non-Insulin: a diagnosis of diabetes requiring therapy with a non-insulin anti-diabetic agent (such as oral agents or other non-insulin agents). Insulin: a diagnosis of diabetes requiring daily insulin therapy | No; Non-Insulin; Insulin | |
| 19 | DNR | Char | Do not resuscitate (DNR) status | "YES" is entered if the patient has had a Do-Not-Resuscitate (DNR) order written in the physician's order sheet of the patient's chart and it has been signed or co-signed by an attending physician in the 30 days prior to surgery. If the DNR order as defined above was rescinded immediately prior to surgery in order to operate on the patient, "YES" is entered. "NO" is entered if DNR discussions are documented in the progress note, but no official DNR order has been written in the physician order sheet or if the attending physician has not signed the official order. | Yes; No | |
| 20 | PREM_BIRTH | Char | Premature Birth | The number of completed weeks of gestation is entered for births prior to 37 weeks of gestation. If the number of weeks is not documented, "Unknown" is | No | |
| | | | | | Less than 24 completed weeks gestation | |
| | | | | | 24 completed weeks gestation | |
| | | | | | 25-26 completed weeks | |
| | | | | | 27-28 completed weeks | |
| | | | | | 29-30 completed weeks | |
| | | | | | 31-32 completed weeks | |
| | | | | | 33-34 completed weeks | |
| | | | | | 35-36 completed weeks | |
| | | | | | Unknown | |
| 21 | VENTILAT | Char | Ventilator dependence | "YES" is entered if a preoperative patient required ventilator-assisted respiration at any time during the 48 hours preceding surgery. This includes patients on BiPAP and CPAP. | Yes; No | |
| 22 | CPNEUMON | Char | Current pneumonia | "YES" is entered if the patient has a new pneumonia or recently diagnosed pneumonia and on current antibiotic treatment at the time the patient is brought to the OR. Patients with pneumonia *must meet criteria from both Radiology and Signs/Symptoms/Laboratory sections* listed as follows:<br><br>Radiology:<br>One definitive chest radiological exam (x-ray or CT)* with at least one of the following:<br>• New or progressive and persistent infiltrate<br>• Consolidation or opacity (e.g. air-space disease, patchy areas of increased density, focal opacification)<br>• Cavitation<br>• Pneumatoceles, in infants ≤ 1 year old<br>Note: In patients with underlying pulmonary or cardiac disease (e.g. respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), two or more serial chest radiological exams (x-ray or CT) are acceptable. | Yes; No | |

| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| | | | | Signs/Symptoms/Laboratory:<br>FOR ANY PATIENT, at least one of the following:<br>•Fever (>38 C or >100.4 F) with no other recognized cause<br>•Leukopenia (<4000 WBC/mm3) or leukocytosis(≥12,000 WBC/mm3)<br>And<br>At least one of the following:<br>•5% Bronchoalveolar lavage (BAL) -obtained cells containing >=10,000 cfu/ml intracellular bacteria on direct microscopic exam (e.g., Gram stain)<br>•Positive growth in blood culture not related to another source of infection<br>•Positive growth in culture of pleural fluid<br>•Positive quantitative culture from minimally contaminated lower respiratory tract (LRT) specimen (e.g. BAL or protected specimen brushing)<br>OR<br>At least two of the following:<br>•New onset of purulent sputum, or change in character of sputum, or increased respiratory secretions, or increased suctioning requirements<br>•New onset or worsening cough, or dyspnea, or tachypnea<br>•Rales or bronchial breath sounds<br>•Worsening gas exchange (e.g. O2 desaturations (e.g., PaO2/FiO2 ≤ 240), increased oxygen requirements, or increased ventilator demand)<br><br>ALTERNATE CRITERIA, for infants ≤ 1 year old:<br>Worsening gas exchange (e.g., O2 desaturations, increased oxygen requirements,or increased ventilator demand)<br>AND<br>at least three of the following:<br>• Documentation of temperature instability with no other recognized cause<br>• Leukopenia (<4000 WBC/mm3) or leukocytosis (≥15,000 WBC/mm3) and left shift (≥10% band forms)<br>• New onset of purulent sputum (with repeated notations over 24 hours), or change in character of sputum (e.g. color, consistency, odor, or quality), or increased respiratory secretions or increased suctioning requirements<br>• Apnea, tachypnea (see age-defined parameters below), nasal flaring with retraction of chest wall or grunting<br>• Wheezing, rales, or rhonchi<br>• Cough<br>• Bradycardia (<100 bpm for <30 day old, < 90 bpm for 30 day old - 1year) or tachycardia (>180 bpm)<br><br>ALTERNATE CRITERIA, for child > 1 year old or ≤ 12 years old:<br>at least three of the following:<br>• Fever (>38.4 °C or > 101.1°F) or hypothermia (<36.5 °C or <97.7°F) with no other recognized cause<br>• Leukopenia (<4000 WBC/mm3) or leukocytosis (≥15,000 WBC/mm3)<br>• New onset of purulent sputum or change in character of sputum or increased respiratory secretions or increased suctioning requirements<br>• New onset or worsening cough, or dyspnea, apnea, or tachypnea (see age-defined parameters below)<br>• Rales or bronchial breath sounds<br>• Worsening gas exchange [e.g. O2 desaturations (e.g. pulse oximetry <94%), increased oxygen requirements or increased ventilation demand] | | |
| 23 | ASTHMA | Char | History of Asthma | "YES" is entered if the patient has a history of chronic reactive airway disease (RAD) resulting in functional disability in daily activities, chronic medication requirement, or hospitalization (not including ER visit or 23 hour observation) for treatment of RAD within one year prior to surgery. "YES" is entered for the patient who is on scheduled daily medications for asthma or RAD, but does not have a formal diagnosis in the chart. | Yes; No | |
| 24 | CYSTIC_FIB | Char | History of Cystic Fibrosis | "YES" is entered if the patient has a diagnosis of cystic fibrosis with or without respiratory compromise. | Yes; No | |
| 25 | HXCLD | Char | Bronchopulmonary Dysplasia/Chronic Lung Disease | "YES" is entered for patients with a documented diagnosis of Bronchopulmonary Dysplasia (BPD) or Chronic Lung Disease. Patients with Cystic Fibrosis are only included if their disease has a Chronic Lung Disease component. | Yes; No | |
| 26 | OXYGEN_SUP | Char | Oxygen Support | "YES" is entered for patients who require supplemental oxygen support at the time of surgery. Oxygen can be delivered by any modality for any reason. Patients requiring supplemental oxygen at night are included. Patients who only receive oxygen in the OR are not included. | Yes; No | |
| 27 | TRACHEOSTOMY | Char | Tracheostomy | "YES" is entered if the patient has a tracheostomy present at the time of surgery. The patient may or may not be receiving ventilator breaths through the tracheostomy. | Yes; No | |

| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| 28 | STRUCT_PULM_AB | Char | Structural Pulmonary/Airway Abnormalities | "YES" is entered if a structural pulmonary and/or airway abnormality is present with or without respiratory comprise. Pneumothorax or pleural effusion with respiratory compromise is included only if present within 7 days of surgery. Patients with a diagnosis of obstructive sleep apnea that is supported by a documented sleep study are included. | Yes; No | |
| 29 | ESOVAR | Char | Esophageal/Gastric/Intestinal Disease | "YES" is entered for patients diagnosed with congenital, acquired, or structural intestinal tract disorder involving esophagus, stomach, small intestine, or colon. Gastroesophageal reflux is included only if requiring medication at the time of surgery. Patients with a diagnosis of Cystic Fibrosis are only included if their disease has an intestinal/esophageal/gastric disease component. Patients with pyloric stenosis are included only if it is unrepaired. | Yes; No | |
| 30 | LBP_DISEASE | Char | Biliary/Liver/Pancreatic Disease | "YES" is entered for patients diagnosed with chronic congenital, acquired, or structural liver, biliary, or pancreatic disease resulting in a functional abnormality. Patients with a diagnosis of Cystic Fibrosis are included only if their disease has a liver or biliary disease component. Patients undergoing cholecystectomy for acute cholecystitis are not included. | Yes; No | |
| 31 | CRF | Char | Cardiac Risk Factors | **No Risk Factors:** No pre-existing cardiac conditions or compromise of cardiac function requiring medication.<br>**Minor:** 1) Cardiac condition with or without medicationa and maintenance (e.g. Atrial Septal Defect, Small to moderate Ventricular Septal Defect with no symptoms or symptoms of well controlled congestive heart failure, Patent Ductus Arteriosis). 2) S/P repair of congenital heart defect with normal cardiovascular function and no meds (e.g. Atrial Septal Defect/Patent Foramen Ovale, Ventricular Septar Defect, Patent Ductus Arteriosis, Coarctation of the aorta).<br>**Major:** 1) S/P repair of congenital heart defect with residual hemodynamic abnormality with or without medications (e.g. Tetrology of Fallot with wide open pulmonary insufficiency, Aortic valve disease with aoritc stenosis or aortic insufficiency based on presence of echocardiographic gradient, all single ventricle patients [severe Atrioventricular Canal, Hypoplastic left heart syndrome (including stage 1 repair)])<br>**Severe:** 1) Uncorrected cyanotic heart disease. 2) Patients with any documented pulmonary hypertension. 3) Patients with ventricular dysfunction requiring medications, may or may not be on heart transplant list (e.g. hypertrophic cardiomyopathy). | No Risk Factors; Minor; Major; Severe | |
| 32 | CRD_ICD9_1 | Char | Cardiac ICD9 - 1 | ICD-9 code corresponding to a cardiac condition reported in the patient's medical record | | NULL = Unknown |
| 33 | CRD_ICD9_2 | Char | Cardiac ICD9 - 2 | ICD-9 code corresponding to a cardiac condition reported in the patient's medical record | | NULL = Unknown |
| 34 | CRD_ICD9_3 | Char | Cardiac ICD9 - 3 | ICD-9 code corresponding to a cardiac condition reported in the patient's medical record | | NULL = Unknown |
| 35 | CRD_ICD9_4 | Char | Cardiac ICD9 - 4 | ICD-9 code corresponding to a cardiac condition reported in the patient's medical record | | NULL = Unknown |
| 36 | CRD_ICD9_5 | Char | Cardiac ICD9 - 5 | ICD-9 code corresponding to a cardiac condition reported in the patient's medical record | | NULL = Unknown |
| 37 | CRD_ICD9_6 | Char | Cardiac ICD9 - 6 | ICD-9 code corresponding to a cardiac condition reported in the patient's medical record | | NULL = Unknown |
| 38 | CRD_ICD9_7 | Char | Cardiac ICD9 - 7 | ICD-9 code corresponding to a cardiac condition reported in the patient's medical record | | NULL = Unknown |
| 39 | CRD_ICD9_8 | Char | Cardiac ICD9 - 8 | ICD-9 code corresponding to a cardiac condition reported in the patient's medical record | | NULL = Unknown |
| 40 | CRD_ICD9_9 | Char | Cardiac ICD9 - 9 | ICD-9 code corresponding to a cardiac condition reported in the patient's medical record | | NULL = Unknown |
| 41 | CRD_ICD9_10 | Char | Cardiac ICD9 - 10 | ICD-9 code corresponding to a cardiac condition reported in the patient's medical record | | NULL = Unknown |

| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| 42 | PRVPCS | Char | Previous cardiac surgery | "YES" is entered if the patient has had cardiac surgery or a catheter-based intervention for the repair/replacement/reconstruction of a congenital or acquired structural or functional lesion of the heart and/or great vessels. | Yes; No | |
| 43 | RENAFAIL | Char | Acute renal failure | "YES" is entered if the patient has experienced acute renal failure within 7 days prior to surgery. Acute renal failure is defined as a rising creatinine above 2.0 mg/dl within 7 days prior to surgery. | Yes; No | |
| 44 | DIALYSIS | Char | Currently on dialysis | "YES" is entered if the patient has acute or chronic renal failure requiring treatment with peritoneal dialysis, hemodialysis, hemofiltration, hemodiafiltration, or ultrafiltration within 2 weeks prior to surgery. | Yes; No | |
| 45 | COMA | Char | Coma >24 hours | "YES" is entered if patient is unconscious, or postures to painful stimuli, or is unresponsive to all stimuli entering surgery. This does not include drug-induced coma. | Yes; No | |
| 46 | CVA | Char | CVA/stroke or traumatic/acquired brain injury with resulting neurological deficit | "YES" is entered if patient has a history of a cerebrovascular accident (embolic, thrombotic, or hemorrhagic) with persistent residual motor, sensory, or cognitive dysfunction. (e.g., hemiplegia, hemiparesis, aphasia, sensory deficit, impaired memory). Includes patients with central apnea. | Yes; No | |
| 47 | TUMORCNS | Char | Tumor involving CNS | "YES" is entered if patient has a space-occupying tumor of the brain or spinal cord, which may be benign (e.g., meningiomas, ependymoma, oligodendroglioma) or primary (e.g., astrocytoma, glioma, glioblastoma multiform) or secondary malignancies (e.g., metastatic lung, breast, malignant melanoma). Other tumors that may involve the CNS include lymphomas and sarcomas. "YES" is entered even if the tumor was not treated or if the tumor was removed | Yes; No | |
| 48 | IMPCOGSTAT | Char | Developmental delay/Impaired cognitive status | "YES" is entered if the patient's medical record documentation states the patient is not appropriate for developmental age. Includes patients who are blind and/or deaf. Patients with attention deficit disorders (ADD or ADHD) or psychiatric disorders are not included.<br>Developmental status and/or cognitive ability impairment is defined whena child does not reach his/her developmental milestones at teh expected times. It is an ongoing delay in the process of development. Delays can occur in one or many areas, such as gross or fine motor, language, social or thinking skills. Delays may result from any etiology, including congenital malformations, acquired structural lesions, traumatic injury, birth asphyxia and metabolic or unknown causes. | Yes; No | |
| 49 | SEIZURE | Char | Seizure Disorder | "YES" is entered if the patient has a chronic seizure disorder requiring medical and/or dietary management with or without control. Patients with febrile seizures are not included. | Yes; No | |
| 50 | CEREBRAL_PALSY | Char | Cerebral Palsy | "YES" is entered for patients who have been diagnosed with cerebral palsy with associated motor and/or cognitive deficits due to known or unknown etiology. | Yes; No | |
| 51 | ACQ_ABNORMALITY | Char | Structural CNS Abnormality | "YES" is entered for patients with any structural CNS abnormality documented in the medical recored. This also may be noted in a visual or radiologic exam. | Yes; No | |
| 52 | NEUROMUSCDIS | Char | Neuromuscular Disorder | "YES" is entered if a patient has a congenital or acquired degenerative neuromuscular disorder that resulted in a slow, progressive deterioration in motor function. "YES" is entered if there is documentation in the medical record; radiological studies are not required to verify the presence of a neuromuscular disorder. Patients with decreased muscle tone or significant contractures which affect motor function are included. Patients with neuromuscular scoliosis are included. | Yes; No | |

| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| 53 | IVH_GRADE | Char | Intraventricular Hemorrhage (IVH) Grade | The most severe grade of IVH documented in the medical record or noted on the CT scan or ultrasound is entered. | No IVH<br>Grade 1<br>Grade 2<br>Grade 3<br>Grade 4<br>IVH reported but no grade assigned | |
| 54 | IMMUNE_DIS | Char | Immune Disease/Immunosuppressant Use | "YES" is entered if the patient has a disease of the immune system documented in the medical record such as Severe Combined Immunodeficiency (SCID), Common Variable Immunodeficiency (CVID), Hypogammaglobulinemia, IgG, IgM, IgA. "YES" is also entered if the patient regularly takes immunosuppressant medications such as those utilized for chemotherapy patients, transplant patients or patients with chronic inflammatory conditions. Lab values are not utilized to determine this variable. | Yes; No | |
| 55 | STEROID | Char | Steroid use (within 30 days) | "YES" is entered if the patient has required the administration of oral or parenteral corticosteroid medication in the 30 days prior to surgery. Includes patients who receive short course oral or IV steroids. Corticosteroids applied topically or administered rectally or by inhalation are not included. | Yes; No | |
| 56 | BONE_MARROW_TRANS | Char | Bone Marrow Transplant | "YES" is entered if the patient has received a bone marrow transplant with or without engraftment at any time prior to surgery. Patients receiving a stem cell transplant are included. | Yes; No | |
| 57 | ORGAN_TRANS | Char | Solid Organ Transplant | "YES" is entered if the patient has received a solid organ (heart, lung, thymus, liver, kidney, pancreas, intestine) transplant with or without immunosuppression at any time prior to surgery. | Yes; No | |
| 58 | WNDINF | Char | Open wound (with or without infection) | "YES" is entered for patients with evidence of an open wound (including surgical wounds) that communicates to the air by direct exposure, with or without cellulitis or purulent exudate. This does not include osteomyelitis or localized abscesses. The wound must communicate to the air by direct exposure. (Open drains should be considered an open wound: i.e. Penrose drains). | Yes; No | |
| 59 | WTLOSS | Char | weight loss or failure to thrive | "YES" is entered for patients with a greater than 10% decrease in body weight in the six month interval immediately preceding surgery as manifested by serial weight loss documented in the chart. Patients with a current diagnosis in the medical record of Failure to Thrive are included. Patients who have intentionally lost weight as part of a weight reduction program do not qualify. | Yes; No | |
| 60 | NUTR_SUPPORT | Char | Nutritional support | "YES" is entered if the patient required intravenous total parenteral nutrition (TPN) or enteral feeding support via gastrostomy, nasogastric, or jejunal feeding devices at the time of surgery. | Yes; No | |
| 61 | BLEEDDIS | Char | Bleeding Disorders | "YES" is entered for patients with any condition that places the patient at risk for excessive bleeding requiring hospitalization due to a deficiency of blood clotting elements (e.g., vitamin K deficiency, hemophilias, thrombocytopenia, chronic anticoagulation therapy that has not been discontinued prior to surgery). If there is no documentation for the discontinuation of a medication that impacts the patient's risk for bleeding, "YES" is entered. Patients who are on chronic aspirin therapy are not included. Patients with reported "family history or trait" of a Bleeding Disorder are not included. | Yes; No | |
| 62 | HEMODISORDER | Char | Hematologic Disorder | "YES" is entered for patients with an underlying acquired or congenital hematologic disorder such as sickle sell disease, thalassemia, hereditary spherocytosis, thrombocytopenia, idiopathic thrombocytopenic purpura (ITP), neutropenia, Henock-Schonlein disease, anemia (hemolytic, hypoproliferative, macrocytic, microcytic, normocytic, pernicious), basophilia, dysfinbrinogenemia, eosinophilia. Patients on chemotherapy that are neutropenic or thrombocytopenic are included. Patients with a reported "family history or trait" of a hematologic disorder are not included. Lab values are not used to determine this variable. | Yes; No | |

| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| 63 | CHEMO | Char | Chemotherapy for malignancy within 30 days | "YES" is entered if the patient had any chemotherapy treatment for cancer in the 30 days prior to surgery. Chemotherapy may include, but is not restricted to, oral and parenteral treatment with chemotherapeutic agents for malignancies such as head and neck, and gastrointestinal solid tumors, lymphatic and hematopoietic malignancies, and multiple myeloma and sarcomas. | Yes; No | |
| 64 | RADIO | Char | Radiotherapy for malignancy in last 90 days | "YES" is entered if the patient had any radiotherapy treatment for cancer in the 90 days prior to surgery. | Yes; No | |
| 65 | PRSEPIS | Char | SIRS/Sepsis/Septic Shock within 48 hours prior to surgery | Sepsis is a vast clinical entity that takes a variety of forms. The spectrum of disorders spans from relatively mild physiologic abnormalities to septic shock. The most significant level is reported using the following criteria:<br><br>A. PEDIATRIC SYSTEMIC INFLAMMATORY RESPONSE: The presence of at least two of the following criteria, one of which must be abnormal temperature or leukocyte count (WBC).<br>• Temperature of >38.5°C or < 36°C (axillary, temporal, tympanic, oral, rectal, bladder or central catheter probe)<br>• Tachycardia in the absence of drugs, external or painful stimuli which persists for >30 minutes. For children < 1 yr of age: Bradycardia in the absence of deep sedation, beta blockers, or other cardioactive drugs which persists for >30 minutes.<br>• Respiratory rate elevation in the absence of external or painful stimuli which persists for >30 minutes OR mechanical ventilation not related to underlying neuromuscular disease.<br>• Leukocyte count elevated or depressed for age with leukopenia not secondary to chemotherapy.<br><br>B. SEPSIS: To be assigned as sepsis, criteria from **both** A. Pediatric Systemic Inflammatory Response Syndrome, AND Suspected or Proven Infection must be met.<br>Suspected or Proven Infection: Infection caused by any pathogen, or Clinical Syndrome associated with a high probability of infection. Must meet at least one of the following preoperative or intraoperative criteria:<br>Preoperative:<br>• Positive blood culture<br>• Positive culture from any site thought to be causative<br>• Positive findings on clinical exam such as purulent drainage at site<br>• Imaging evidence of abscess<br>OR<br>Intraoperative:<br>• Confirmed tissue or organ infarction/devitalization requiring resection<br>• Purulence in the operative site<br>• Perforated bowel or other viscus (for example, ruptured appendix)<br>• Positive intraoperative cultures<br><br>C. SEPTIC SHOCK: To be assigned as septic shock criteria for Sepsis must be met AND the patient must have documented Cardiovascular dysfunction.<br>Cardiovascular dysfunction:<br>1) The use of a vasoactive drug to maintain perfusion (Dopamine, Dobutamine, Epinephrine, Norepinephrine, Vasopressin, Isoproterenol, Ephedrine, Inamrinone, Milrinone).<br>OR<br>2) An increase in the dosage of a vasoactive drug or the addition of a second vasoactive drug in a patient receiving a vasoactive drug prior to the diagnosis of sepsis. | SIRS; Sepsis; Septic Shock; None | |
| 66 | INOTR_SUPPORT | Char | Inotropic support at time of surgery | "YES" is entered if patient required intravenous inotropic pharmacologic support at time of surgery. Low dose Dopamine (<5mcg) is included. | Yes; No | |
| 67 | CPR_PRIOR_SURG | Char | Previous CPR within 7 days prior to surgery | "YES" is entered if patient required cardiac compressions within 7 days prior to surgery. Patients receiving ECMO (Extracorporeal membrane oxygenation) within 7 days prior to sugery are included. | Yes; No | |

| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| 68 | PrOper30 | Char | Prior Operation within 30 days | "YES" is entered if the patient has had any major surgical procedure performed within 30 days prior to the assessed operation that is listed on the CPT Code Inclusion List. Any transplant procedures or trauma procedures performed within 30 days prior to the assessed operation are included. | Yes; No | |
| 69 | CONG_MALFORM | Char | Congenital Malformation | "YES" is entered if a congenital defect is present in a neonate at the time of surgery, or if an infant, child, or teenager has a history of congenital defect at the time of surgery. Congenital malformations recorded under another peroperative risk factor are not included. Congenital malformations may include syndromes, chromosomal disorders, metabolic disorders, skeletal and organ system disorders. These malformations can involve many different or multiple organ systems including the brain, heart, lungs, liver, bones, endocrine, and intestinal tract. Malformations may be caused by genetic factors or by prenatal events that are not genetic. These defects occur for many reasons including inherited (genetic) conditions, toxic exposure of the fetus, and birth injury or for unknown reasons. | No; Yes, Neonate < 1500 grams at the time of surgery; Yes, Neonate > 1500 grams at the time of surgery or infant/child/teenager with a history of a congenital defect at the time of surgery | |
| 70 | CM_ICD9_1 | Char | Congenital Malformation ICD9 - 1 | ICD-9 code corresponding to a congenital malformation reported in the patient's medical record | | NULL = Unknown |
| 71 | CM_ICD9_2 | Char | Congenital Malformation ICD9 - 2 | ICD-9 code corresponding to a congenital malformation reported in the patient's medical record | | NULL = Unknown |
| 72 | CM_ICD9_3 | Char | Congenital Malformation ICD9 - 3 | ICD-9 code corresponding to a congenital malformation reported in the patient's medical record | | NULL = Unknown |
| 73 | CM_ICD9_4 | Char | Congenital Malformation ICD9 - 4 | ICD-9 code corresponding to a congenital malformation reported in the patient's medical record | | NULL = Unknown |
| 74 | CM_ICD9_5 | Char | Congenital Malformation ICD9 - 5 | ICD-9 code corresponding to a congenital malformation reported in the patient's medical record | | NULL = Unknown |
| 75 | CM_ICD9_6 | Char | Congenital Malformation ICD9 - 6 | ICD-9 code corresponding to a congenital malformation reported in the patient's medical record | | NULL = Unknown |
| 76 | CM_ICD9_7 | Char | Congenital Malformation ICD9 - 7 | ICD-9 code corresponding to a congenital malformation reported in the patient's medical record | | NULL = Unknown |
| 77 | CM_ICD9_8 | Char | Congenital Malformation ICD9 - 8 | ICD-9 code corresponding to a congenital malformation reported in the patient's medical record | | NULL = Unknown |
| 78 | CM_ICD9_9 | Char | Congenital Malformation ICD9 - 9 | ICD-9 code corresponding to a congenital malformation reported in the patient's medical record | | NULL = Unknown |
| 79 | CM_ICD9_10 | Char | Congenital Malformation ICD9 - 10 | ICD-9 code corresponding to a congenital malformation reported in the patient's medical record | | NULL = Unknown |
| 80 | TRANSFUS | Char | Blood transfusions within 48 hours prior to surgery | "YES" is entered for patients with any transfusion of whole blood or packed red blood cells during the 48 hours prior to surgery, including any blood transfusion in the emergency room. Transfusions of fresh frozen plasma, platelets, cryoprecipitate, or albumin are not included. | Yes; No | |
| 81 | MALIGNANCY | Char | Childhood Malignancy | **Past history of cancer:** If patient has a history of malignancy but no evidence of active disease. The patient has a history of childhood malignancy treated with surgery, chemotherapy, and/or radiotherapy, but there is no current evidence of active disease documented in the medical record and there is no plan for ongoing treatment<br>**Current cancer or active treatment:** If patient has a childhood malignancy that is currently present and documented in the medical record. Include patients for whom this is the diagnostic/definitive cancer surgery. Patients with a current cancer diagnosis who are actively undergoing treatment and also those who have not yet begun treatment are included. Patients whose treatment may be delayed for any reason are also included.<br>**No current or prior history of cancer:** If patient has no current diagnosis of cancer and no history of a cancer diagnosis documented in the medical record. If a biopsy is done of a suspicious lesion such as a liver nodule or a lymph node and pathology shows no cancer. | Past history of cancer<br>Current Cancer or active treatment of cancer<br>No current or prior history of cancer | |
| 82 | NEONATE | Char | Neonate (Y/N) | "YES" is entered when "Neonate type" is "Term neonate" and operation date is <29 days after date of birth OR "Neonate type" is "Premature neonate" and gestational age (at time of surgery) is <51 weeks. | Yes; No | NULL = Unknown |

| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| 83 | NEONATE_TYPE | Char | Neonate type | **Term Neonate:** All babies described as term birth, 37 weeks gestation or greater or gestational age not specified. They are included up to 28 full days of age.<br>**Premature Neonate:** A patient born at less than 37 weeks gestation. They are included up to 50 full weeks post-conceptual age. | Term Neonate; Premature Neonate; NA | NULL = Unknown |
| 84 | GESTATIONALAGE_BIRTH | Num | Gestational Age | Patient's gestational age in weeks at time of birth | | -99 = Unknown |
| 85 | GESTATIONALAGE_SURGERY | Num | Gestational Age at Surgery | Patient's gestational age in weeks at time of surgery | | -99 = Unknown |
| 86 | BIRTH_LOCATION | Char | Location of Birth | Location of birth. Outborn includes patients born at home. | Inborn; Outborn | NULL = Unknown |
| 87 | SM_GESTATIONALAGE | Char | Small for gestational age | Small for gestational age. | Yes; No | NULL = Unknown |
| 88 | BIRTH_WGT_UNIT | Num | Birth weight unit | Units used to record birth weight. 1=lbs, 2=kgs, 3=unknown | 1; 2; 3 | -99 = Missing |
| 89 | BIRTH_WGT_LB | Num | Birth weight in pounds (lbs) | Patient's weight in pounds (lbs) at time of birth. Combine with birth_wgt_oz to get total weight. Only recorded for neonates. | | -99 = Unknown |
| 90 | BIRTH_WGT_OZ | Num | Birth weight in ounces (oz) | Patient's weight in ounces (oz) at time of birth. Combine with birth_wgt_lb to get total weight. Only recorded for neonates. | | -99 = Unknown |
| 91 | BIRTH_WGT_KG | Num | Birth weight in kilograms (kgs) | Patinet's weight in kilograms (kgs) at time of birth. Only recorded for neonates. | | -99 = Unknown |
| 92 | BIRTH_HGT | Num | Birth height value | Height at birth. Only recorded for neonates. | | -99 = Unknown |
| 93 | BIRTH_HGT_UNIT | Char | Birth height unit | Units used to record birth height. | cm; in; unknown | NULL = Missing |
| 94 | HEAD_CIRC | Num | Head circumference value | Head circumference at birth. "Unknown" is entered if unknown. Only recorded for neonates. | | -99 = Missing |
| 95 | HEAD_CIRC_UNIT | Num | Head circumference unit | Units used to record head circumference. 1=in, 2=cm, 3=unknown | 1; 2; 3 | -99 = Missing |
| 96 | APGAR_1MIN | Char | APGAR score 1 minute | The APGAR score 1 min after delivery. Scores range from 0 to 10. "Uknown" is recoreded if the score is unknown. | | NULL = No Response |
| 97 | APGAR_5MIN | Char | APGAR score 5 minutes | The APGAR score 5 min after delivery. Scores range from 0 to 10. "Unknown" is entered if the score is unknown. | | NULL = No Response |
| 98 | DELIVERY_MODE | Char | Mode of delivery | Mode of delivery. Unscheduled cesarean-section includes emergent or urgent c-section for maternal or fetal indications. | Vaginal delivery<br>Scheduled C-Section<br>Unscheduled C-Section<br>Unknown/Not Documented | NULL = No Response |
| 99 | DPRNA | Num | Days from Na Preoperative Labs to Operation | Days from Serum Sodium Preoperative Labs to Operation | | -99 = Lab value not obtained or Unknown |
| 100 | DPRBUN | Num | Days from BUN Preoperative Labs to Operation | Days from Blood Urea Nitrogen Preoperative Labs to Operation | | -99 = Lab value not obtained or Unknown |
| 101 | DPRCREAT | Num | Days from Creatinine Preoperative Labs to Operation | Days from Creatinine Preoperative Labs to Operation | | -99 = Lab value not obtained or Unknown |
| 102 | DPRALBUM | Num | Days from Albumin Preoperative Labs to Operation | Days from Albumin Preoperative Labs to Operation | | -99 = Lab value not obtained or Unknown |
| 103 | DPRBILI | Num | Days from Bilirubin Preoperative Labs to Operation | Days from Bilirubin Preoperative Labs to Operation | | -99 = Lab value not obtained or Unknown |
| 104 | DPRSGOT | Num | Days from SGOT Preoperative Labs to Operation | Days from Serum Glutamic-Oxaloacetic Transaminase (SGOT) Preoperative Labs to Operation | | -99 = Lab value not obtained or Unknown |
| 105 | DPRALKPH | Num | Days from ALKPHOS Preoperative Labs to Operation | Days from Alkaline Phosphatase Preoperative Labs to Operation | | -99 = Lab value not obtained or Unknown |
| 106 | DPRWBC | Num | Days from WBC Preoperative Labs to Operation | Days from White Blood Cell count Preoperative Labs to Operation | | -99 = Lab value not obtained or Unknown |
| 107 | DPRHCT | Num | Days from HCT Preoperative Labs to Operation | Days from Hematocrit Preoperative Labs to Operation | | -99 = Lab value not obtained or Unknown |
| 108 | DPRPLATE | Num | Days from PlateCount Preoperative Labs to Operation | Days from Plate Count Preoperative Labs to Operation | | -99 = Lab value not obtained or Unknown |
| 109 | DPRPTT | Num | Days from PTT Preoperative Labs to Operation | Days from Partial Thromboplastin Time (PTT) Preoperative Labs to Operation | | -99 = Lab value not obtained or Unknown |
| 110 | DPRPT | Num | Days from PT Preoperative Labs to Operation | Days from Prothrombin Time (PT) Preoperative Labs to Operation | | -99 = Lab value not obtained or Unknown |
| 111 | DPRINR | Num | Days from INR Preoperative Labs to Operation | Days from International Normalized Ratio (INR) Preoperative Labs to Operation | | -99 = Lab value not obtained or Unknown |
| 112 | PRSODM | Num | Pre-operative serum sodium | Pre-operative serum sodium | | -99 = Lab value not obtained or Unknown |
| 113 | PRBUN | Num | Pre-operative BUN | Pre-operative Blood Urea Nitrogen | | -99 = Lab value not obtained or Unknown |

| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| 114 | PRCREAT | Num | Pre-operative serum creatinine | Pre-operative serum creatinine | | -99 = Lab value not obtained or Unknown |
| 115 | PRALBUM | Num | Pre-operative serum albumin | Pre-operative serum albumin | | -99 = Lab value not obtained or Unknown |
| 116 | PRBILI | Num | Pre-operative total bilirubin | Pre-operative total bilirubin | | -99 = Lab value not obtained or Unknown |
| 117 | PRSGOT | Num | Pre-operative SGOT | Pre-operative SGOT | | -99 = Lab value not obtained or Unknown |
| 118 | PRALKPH | Num | Pre-operative alkaline phosphatase | Pre-operative alkaline phosphatase | | -99 = Lab value not obtained or Unknown |
| 119 | PRWBC | Num | Pre-operative WBC | Pre-operative White Blood Cell count | | -99 = Lab value not obtained or Unknown |
| 120 | PRHCT | Num | Pre-operative hematocrit | Pre-operative hematocrit | | -99 = Lab value not obtained or Unknown |
| 121 | PRPLATE | Num | Pre-operative platelet count | Pre-operative platelet count | | -99 = Lab value not obtained or Unknown |
| 122 | PRPTT | Num | Pre-operative PTT | Pre-operative Partial Thromboplastin Time | | -99 = Lab value not obtained or Unknown |
| 123 | PRINR | Num | Pre-operative International Normalized Ratio (INR) of PT values | Pre-operative International Normalized Ratio (INR) of PT values | | -99 = Lab value not obtained or Unknown |
| 124 | PRPT | Num | Pre-operative PT | Pre-operative Prothrombin Time | | -99 = Lab value not obtained or Unknown |
| 125 | OTHERPROC1 | Char | Other Procedure description - 1 | An additional operative procedure performed by the **same surgical team** (i.e., the same specialty/service) **under the same anesthetic** which has a CPT code different from that of the Principal Operative Procedure (e.g., a splenectomy performed in the course of a cholecystectomy). **ALL additional procedures/CPT codes for the OR visit are reported.** | | NULL = No Procedure |
| 126 | OTHERCPT1 | Char | Other CPT Code 1 | CPT Code for other procedure 1 | | NULL = No Procedure |
| 127 | OTHERWRVU1 | Num | Other Work Relative Value Unit 1 | Other Work Relative Value Unit 1 | | -99 = No Procedure/Unknown |
| 128 | OTHERPROC2 | Char | Other Procedure description - 2 | See 'Other Procedure 1' | | NULL = No Procedure |
| 129 | OTHERCPT2 | Char | Other CPT Code 2 | CPT Code for other procedure 2 | | NULL = No Procedure |
| 130 | OTHERWRVU2 | Num | Other Work Relative Value Unit 2 | Other Work Relative Value Unit 2 | | -99 = No Procedure/Unknown |
| 131 | OTHERPROC3 | Char | Other Procedure description - 3 | See 'Other Procedure 1' | | NULL = No Procedure |
| 132 | OTHERCPT3 | Char | Other CPT Code 3 | CPT Code for other procedure 3 | | NULL = No Procedure |
| 133 | OTHERWRVU3 | Num | Other Work Relative Value Unit 3 | Other Work Relative Value Unit 3 | | -99 = No Procedure/Unknown |
| 134 | OTHERPROC4 | Char | Other Procedure description - 4 | See 'Other Procedure 1' | | NULL = No Procedure |
| 135 | OTHERCPT4 | Char | Other CPT Code 4 | CPT Code for other procedure 4 | | NULL = No Procedure |
| 136 | OTHERWRVU4 | Num | Other Work Relative Value Unit 4 | Other Work Relative Value Unit 4 | | -99 = No Procedure/Unknown |
| 137 | OTHERPROC5 | Char | Other Procedure description - 5 | See 'Other Procedure 1' | | NULL = No Procedure |
| 138 | OTHERCPT5 | Char | Other CPT Code 5 | CPT Code for other procedure 5 | | NULL = No Procedure |
| 139 | OTHERWRVU5 | Num | Other Work Relative Value Unit 5 | Other Work Relative Value Unit 5 | | -99 = No Procedure/Unknown |
| 140 | OTHERPROC6 | Char | Other Procedure description - 6 | See 'Other Procedure 1' | | NULL = No Procedure |
| 141 | OTHERCPT6 | Char | Other CPT Code 6 | CPT Code for other procedure 6 | | NULL = No Procedure |
| 142 | OTHERWRVU6 | Num | Other Work Relative Value Unit 6 | Other Work Relative Value Unit 6 | | -99 = No Procedure/Unknown |
| 143 | OTHERPROC7 | Char | Other Procedure description - 7 | See 'Other Procedure 1' | | NULL = No Procedure |
| 144 | OTHERCPT7 | Char | Other CPT Code 7 | CPT Code for other procedure 7 | | NULL = No Procedure |
| 145 | OTHERWRVU7 | Num | Other Work Relative Value Unit 7 | Other Work Relative Value Unit 7 | | -99 = No Procedure/Unknown |
| 146 | OTHERPROC8 | Char | Other Procedure description - 8 | See 'Other Procedure 1' | | NULL = No Procedure |
| 147 | OTHERCPT8 | Char | Other CPT Code 8 | CPT Code for other procedure 8 | | NULL = No Procedure |
| 148 | OTHERWRVU8 | Num | Other Work Relative Value Unit 8 | Other Work Relative Value Unit 8 | | -99 = No Procedure/Unknown |
| 149 | OTHERPROC9 | Char | Other Procedure description - 9 | See 'Other Procedure 1' | | NULL = No Procedure |
| 150 | OTHERCPT9 | Char | Other CPT Code 9 | CPT Code for other procedure 9 | | NULL = No Procedure |
| 151 | OTHERWRVU9 | Num | Other Work Relative Value Unit 9 | Other Work Relative Value Unit 9 | | -99 = No Procedure/Unknown |
| 152 | OTHERPROC10 | Char | Other Procedure description - 10 | See 'Other Procedure 1' | | NULL = No Procedure |
| 153 | OTHERCPT10 | Char | Other CPT Code 10 | CPT Code for other procedure 10 | | NULL = No Procedure |
| 154 | OTHERWRVU10 | Num | Other Work Relative Value Unit 10 | Other Work Relative Value Unit 10 | | -99 = No Procedure/Unknown |

| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| 155 | CONCURR1 | Char | Concurrent Procedure description - 1 | An additional operative procedure performed by a **different surgical team** (i.e., a different specialty/service) **under the same anesthetic** which has a CPT code different from that of the Principal Operative Procedure (e.g., Coronary Artery Bypass Graft procedure on a patient who is also undergoing a Carotid Endarterectomy). | | NULL = No Procedure |
| 156 | CONCPT1 | Char | Concurrent CPT 1 | Concurrent CPT 1 | | NULL = No Procedure |
| 157 | CONWRVU1 | Num | Concurrent Work Relative Value Unit 1 | Concurrent Work Relative Value Unit 1 | | -99 = No Procedure/Unknown |
| 158 | CONCURR2 | Char | Concurrent Procedure description - 2 | See 'Concurrent Procedure 1' | | NULL = No Procedure |
| 159 | CONCPT2 | Char | Concurrent CPT 2 | Concurrent CPT 2 | | NULL = No Procedure |
| 160 | CONWRVU2 | Num | Concurrent Work Relative Value Unit 2 | Concurrent Work Relative Value Unit 2 | | -99 = No Procedure/Unknown |
| 161 | CONCURR3 | Char | Concurrent Procedure description - 3 | See 'Concurrent Procedure 1' | | NULL = No Procedure |
| 162 | CONCPT3 | Char | Concurrent CPT 3 | Concurrent CPT 3 | | NULL = No Procedure |
| 163 | CONWRVU3 | Num | Concurrent Work Relative Value Unit 3 | Concurrent Work Relative Value Unit 3 | | -99 = No Procedure/Unknown |
| 164 | CONCURR4 | Char | Concurrent Procedure description - 4 | See 'Concurrent Procedure 1' | | NULL = No Procedure |
| 165 | CONCPT4 | Char | Concurrent CPT 4 | Concurrent CPT 4 | | NULL = No Procedure |
| 166 | CONWRVU4 | Num | Concurrent Work Relative Value Unit 4 | Concurrent Work Relative Value Unit 4 | | -99 = No Procedure/Unknown |
| 167 | CONCURR5 | Char | Concurrent Procedure description - 5 | See 'Concurrent Procedure 1' | | NULL = No Procedure |
| 168 | CONCPT5 | Char | Concurrent CPT 5 | Concurrent CPT 5 | | NULL = No Procedure |
| 169 | CONWRVU5 | Num | Concurrent Work Relative Value Unit 5 | Concurrent Work Relative Value Unit 5 | | -99 = No Procedure/Unknown |
| 170 | CONCURR6 | Char | Concurrent Procedure description - 6 | See 'Concurrent Procedure 1' | | NULL = No Procedure |
| 171 | CONCPT6 | Char | Concurrent CPT 6 | Concurrent CPT 6 | | NULL = No Procedure |
| 172 | CONWRVU6 | Num | Concurrent Work Relative Value Unit 6 | Concurrent Work Relative Value Unit 6 | | -99 = No Procedure/Unknown |
| 173 | CONCURR7 | Char | Concurrent Procedure description - 7 | See 'Concurrent Procedure 1' | | NULL = No Procedure |
| 174 | CONCPT7 | Char | Concurrent CPT 7 | Concurrent CPT 7 | | NULL = No Procedure |
| 175 | CONWRVU7 | Num | Concurrent Work Relative Value Unit 7 | Concurrent Work Relative Value Unit 7 | | -99 = No Procedure/Unknown |
| 176 | CONCURR8 | Char | Concurrent Procedure description - 8 | See 'Concurrent Procedure 1' | | NULL = No Procedure |
| 177 | CONCPT8 | Char | Concurrent CPT 8 | Concurrent CPT 8 | | NULL = No Procedure |
| 178 | CONWRVU8 | Num | Concurrent Work Relative Value Unit 8 | Concurrent Work Relative Value Unit 8 | | -99 = No Procedure/Unknown |
| 179 | CONCURR9 | Char | Concurrent Procedure description - 9 | See 'Concurrent Procedure 1' | | NULL = No Procedure |
| 180 | CONCPT9 | Char | Concurrent CPT 9 | Concurrent CPT 9 | | NULL = No Procedure |
| 181 | CONWRVU9 | Num | Concurrent Work Relative Value Unit 9 | Concurrent Work Relative Value Unit 9 | | -99 = No Procedure/Unknown |
| 182 | CONCURR10 | Char | Concurrent Procedure description - 10 | See 'Concurrent Procedure 1' | | NULL = No Procedure |
| 183 | CONCPT10 | Char | Concurrent CPT 10 | Concurrent CPT 10 | | NULL = No Procedure |
| 184 | CONWRVU10 | Num | Concurrent Work Relative Value Unit 10 | Concurrent Work Relative Value Unit 10 | | -99 = No Procedure/Unknown |
| 185 | CASETYPE | Char | Case Status | Report if the case was scheduled for the OR as elective, urgent, or emergent based upon the following:<br>1) Elective: Surgical case is scheduled and performed on an elective basis with no time constraints.<br>2) Urgent: Surgical case is scheduled and usually performed within 24 hours of surgical evaluation. Report the case as urgent if the anesthesiologist and<br>3) Emergent: Surgical case is scheduled and usually performed within 12 hours of surgical evaluation. Report the case as emergent if the anesthesiologist and surgeon report the case as emergent. | Elective<br>Emergent<br>Urgent | |
| 186 | WNDCLAS | Char | Wound classification | Wound classification should be assigned based on the primary principal procedure being performed. Wound class is not assigned based on an 'other' or 'concurrent' procedure. This variable indicates whether the primary surgeon | 1-Clean<br>2-Clean/Contaminated<br>3-Contaminated | |

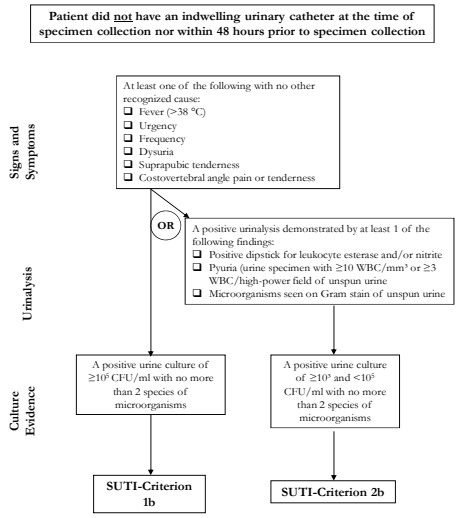
| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| | | | | has classified the wound as: **(1) Clean:** An uninfected operative wound in which no inflammation is encountered and the respiratory, alimentary, genital, or uninfected urinary tract is not entered. In addition, clean wounds are primarily closed and, if necessary, drained with closed drainage. Operative incisional wounds that follow nonpenetrating (blunt) trauma should be included in this category if they meet the criteria. *Examples of "Clean" cases include mastectomy, exploratory laparotomy, hernia repair, thyroidectomy, knee athroscopy, Note: Placement of any drain at the time of surgery does not change the classification of the wound.* **(2) Clean/Contaminated:** An operative wound in which the respiratory, alimentary, genital, or urinary tracts are entered under controlled conditions and without unusual contamination. Specifically, operations involving the biliary tract, appendix, vagina, and oropharynx are included in this category, provided no evidence of infection or major break in technique is encountered. *Examples of "Clean/Contaminated" cases include cholecystectomy, colectomy, colostomy reversals, roux-en-Y, laryngectomy, small bowel resection, routine appendectomy.* **(3) Contaminated:** Open, fresh, accidental wounds. In addition, operations with major breaks in sterile technique or gross spillage from the gastrointestinal tract, and incisions in which acute, nonpurulent inflammation is encountered including necrotic tissue without evidence of purulent drainage (e.g. dry gangrene) are included in this category. *Examples of "Contaminated" cases include appendectomy for inflamed appendicitis, bile spillage during cholecystectomy, or open cardiac massage. Examples of major break in sterile technique include but are not limited to non-sterile equipment or debris found in the operative field.* **(4) Dirty/Infected:** Old traumatic wounds with retained devitalized tissue and those that involve existing clinical infection or perforated viscera. This definition suggests that the organisms causing postoperative infection were present in the operative field before the operation. *Examples of "Dirty/Infected" cases include excision and drainage of abscess, perforated bowel, peritonitis, ruptured appendix.* | 4-Dirty/Infected | |
| 187 | ASACLAS | Char | ASA classification | The American Society of Anesthesiology (ASA) Physical Status Classification of the patient's present physical condition on a scale from 1-5 as it appears on the anesthesia record. The classifications are as follows: **ASA 1** -Normal healthy patient **ASA 2** -Patient with mild systemic disease **ASA 3** -Patient with severe systemic disease **ASA 4** -Patient with severe systemic disease that is a constant threat to life **ASA 5** -Moribund patient who is not expected to survive without the operation. | 1 -No Disturb<br>2 -Mild Disturb<br>3 -Severe Disturb<br>4 -Life Threat<br>5 -Moribund<br>None assigned | |
| 188 | ANESURG | Num | Duration from Anesthesia start to Surgery start | Duration from Anesthesia start to Surgery start in minutes | | -99 = Unknown |
| 189 | SURGANE | Num | Duration from Surgery stop to Anesthesia Stop | Duration from Surgery stop to Anesthesia Stop in minutes | | -99 = Unknown |
| 190 | DPATRM | Num | Duration patient is in Operating Room | Duration patient is in Room in minutes | | -99 = Unknown |
| 191 | ANETIME | Num | Duration of Anesthesia | Duration of Anesthesia in minutes | | -99 = Unknown |
| 192 | OPTIME | Num | Total operation time | Total operation time in minutes | | -99 = Unknown |
| 193 | HDISDT | Num | Hospital discharge Year | Hospital discharge Year | | NULL = Unknown |
| 194 | YRDEATH | Char | Year of death | Year of death | | NULL = Unknown |
| 195 | TOTHLOS | Num | Length of total hospital stay | Length of total hospital stay | | -99 = Unknown |
| 196 | AdmQtr | Char | Quarter of Admission | Quarter of Admission | 1; 2; 3; 4 | |
| 197 | HtoODay | Num | Days from Hospital Admission to Operation | Days from Hospital Admission to Operation | | |
| 198 | NSUPINFEC | Num | Number of Superficial Incisional SSI Occurrences | Number of Superficial Incisional SSI Occurrences | | |

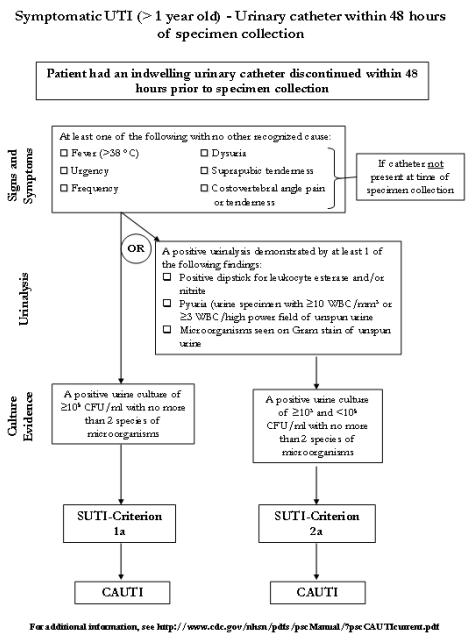
| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| 199 | SUPINFEC | Char | Occurrences Superficial Incisional SSI | Superficial incisional SSI is an infection that occurs within 30 days after the operation and the infection involves only skin or subcutaneous tissue of the incision and at least one of the following: -Purulent drainage, with or without laboratory confirmation, from the superficial incision. -Organisms isolated from an aseptically obtained culture of fluid or tissue from the superficial incision. -At least one of the following signs or symptoms of infection: pain or tenderness, localized swelling, redness, or heat AND superficial incision is deliberately opened by the surgeon, unless incision is culture-negative. -Diagnosis of superficial incisional SSI by the surgeon or attending physician. Do not report the following conditions as SSI: -Stitch abscess (minimal inflammation and discharge confined to the points of suture penetration). -Infected burn wound. -Incisional SSI that extends into the fascial and muscle layers (see deep incisional SSI). | No Complication; Superficial Incisional SSI | |
| 200 | DSUPINFEC | Num | Days from Operation until Superficial Incisional SSI Complication | Days from Operation until Superficial Incisional SSI Complication | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 201 | NWNDINFD | Num | Number of Deep Incisional SSI Occurrences | Number of Deep Incisional SSI Occurrences | | |
| 202 | WNDINFD | Char | Occurrences Deep Incisional SSI | Deep Incision SSI is an infection that occurs within 30 days after the operation and the infection appears to be related to the operation and infection involved deep soft tissues (e.g., fascial and muscle layers) of the incision and at least one of the following: -Purulent drainage from the deep incision but not from the organ/space component of the surgical site. -A deep incision spontaneously dehisces or is deliberately opened by a surgeon when the patient has at least one of the following signs or symptoms: fever (> 38 C), localized pain, or tenderness, unless site is culture-negative. -An abscess or other evidence of infection involving the deep incision is found on direct examination, during reoperation, or by histopathologic or radiologic examination. -Diagnosis of a deep incision SSI by a surgeon or attending physician. Note: -Infection that involves both superficial and deep incision sites is reported as deep incisional SSI. -An organ/space SSI that drains through the incision is reported as a deep incisional SSI. | Deep Incisional SSI; No Complication | |
| 203 | DWNDINFD | Num | Days from Operation until Deep Incisional SSI Complication | Days from Operation until Deep Incisional SSI Complication | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 204 | NORGSPCSSI | Num | Number of Organ/Space SSI Occurrences | Number of Organ/Space SSI Occurrences | | |
| 205 | ORGSPCSSI | Char | Occurrences Organ/Space SSI | Organ/Space SSI is an infection that occurs within 30 days after the operation and the infection appears to be related to the operation and the infection involves any part of the anatomy (e.g., organs or spaces), other than the incision, which was opened or manipulated during an operation and at least one of the following: -Purulent drainage from a drain that is placed through a stab wound into the organ/space. -Organisms isolated from an aseptically obtained culture of fluid or tissue in the organ/space. -An abscess or other evidence of infection involving the organ/space that is found on direct examination, during reoperation, or by histopathologic or radiologic examination. -Diagnosis of an organ/space SSI by a surgeon or attending physician. | Organ/Space SSI; No Complication | |
| 206 | DORGSPCSSI | Num | Days from Operation until Organ/Space SSI Complication | Days from Operation until Organ/Space SSI Complication | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 207 | NDEHIS | Num | Number of Wound Disruption Occurrences | Number of Wound Disruption Occurrences | | |
| 208 | DEHIS | Char | Occurrences Wound Disruption | Separation of the layers of a surgical wound, which may be partial or complete, with disruption of the fascia within 30 days of the operation. | Wound Disruption; No complication | |

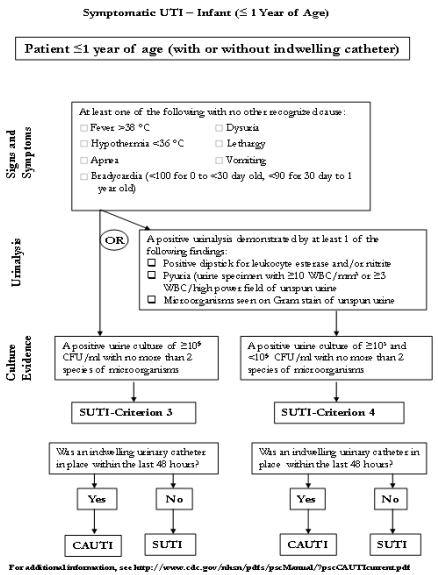
| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| 209 | DDEHIS | Num | Days from Operation until Wound Disruption Complication | Days from Operation until Wound Disruption Complication | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 210 | NOUPNEUMO | Num | Number of Pneumonia Occurrences | Number of Pneumonia Occurrences | | |
| 211 | OUPNEUMO | Char | Occurrences Pneumonia | Enter "Yes" if the patient has pneumonia meeting the definition below. Patients with pneumonia *must meet criteria from both Radiology and Signs/Symptoms/Laboratory* sections listed as follows:<br><br>Radiology:<br>One definitive chest radiological exam (x-ray or CT)* with at least one of the following:<br>• New or progressive and persistent infiltrate<br>• Consolidation or opacity<br>• Cavitation<br>• Pneumatoceles, in infants ≤ 1 year old<br>Note: In patients with underlying pulmonary or cardiac disease (e.g. respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), two or more serial chest radiological exams (x-ray or CT) are required. (Serial radiological exams should be taken no less than 12 hours apart, but not more than 7 days apart. The occurrence should be assigned on the date the patient first met all of the criteria of the definition (i.e, if the patient meets all PNA criteria on the day of the first xray, assign this date to the occurrence. Do not assign the date of the occurrence to when the second serial xray was performed).<br><br>Signs/Symptoms/Laboratory:<br>FOR ANY PATIENT, at least one of the following:<br>•Fever (>38 C or >100.4 F) with no other recognized cause<br>•Leukopenia (<4000 WBC/mm3) or leukocytosis(≥12,000 WBC/mm3)<br>And<br>At least one of the following:<br>•5% Bronchoalveolar lavage (BAL) -obtained cells containing >=10,000 cfu/mL intracellular bacteria on direct microscopic exam (e.g., Gram stain)<br>•Positive growth in blood culture not related to another source of infection<br>•Positive growth in culture of pleural fluid<br>•Positive quantitative culture from minimally contaminated lower respiratory tract (LRT) specimen (e.g. BAL or protected specimen brushing)<br>OR<br>At least two of the following:<br>•New onset of purulent sputum, or change in character of sputum, or increased respiratory secretions, or increased suctioning requirements<br>•New onset or worsening cough, or dyspnea, or tachypnea<br>•Rales or bronchial breath sounds<br>•Worsening gas exchange (e.g. O2 desaturations (e.g., PaO2/FiO2 ≤ 240), increased oxygen requirements, or increased ventilator demand) | Pneumonia; No complication | |

| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| | | | | ALTERNATE CRITERIA, for infants ≤ 1 year old:<br>Worsening gas exchange (e.g., O2 desaturations, increased oxygen requirements, or increased ventilator demand)<br>AND<br>At least three of the following:<br>• Documentation of temperature instability with no other recognized cause Leukopenia (<4000 WBC/mm3) or leukocytosis (≥15,000 WBC/mm3) and left shift (≥10% band forms)<br>• New onset of purulent sputum (with repeated notations over 24 hours), or change in character of sputum (e.g. color, consistency, odor, or quality), or increased respiratory secretions or increased suctioning requirements<br>• Apnea, tachypnea (see age-defined parameters below), nasal flaring with retraction of chest wall or grunting<br>• Wheezing, rales, or rhonchi<br>• Cough<br>• Bradycardia (<100 bpm for <30 day old, < 90 bpm for 30 day old - 1year) or tachycardia (>180 bpm)<br><br>ALTERNATE CRITERIA, for child > 1 year old or ≤ 12 years old:<br>At least three of the following:<br>• Fever (≥38.4°C or ≥101.1°F) or hypothermia (≤36.5°C or ≤97.7°F) with no other recognized cause<br>• Leukopenia (<4000 WBC/mm3) or leukocytosis(≥15,000 WBC/mm3• )<br>• New onset of purulent sputum or change in character of sputum or increased respiratory secretions or increased suctioning requirements<br>• New onset or worsening cough, or dyspnea, apnea, or tachypnea (see age-defined parameters below)<br>• Rales or bronchial breath sounds<br>• Worsening gas exchange [e.g. O2 desaturations (e.g. pulse oximetry <94%), increased oxygen requirements or increased ventilation demand] | | |
| 212 | DOUPNEUMO | Num | Days from Operation until Pneumonia Complication | Days from Operation until Pneumonia Complication | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 213 | NREINTUB | Num | Number of Unplanned Intubation Occurrences | Number of Unplanned Intubation Occurrences | | |
| 214 | REINTUB | Char | Occurrences Unplanned Intubation | Patient required placement of an endotracheal tube and mechanical or assisted ventilation because of the onset of respiratory or cardiac failure manifested by severe respiratory distress, hypoxia, hypercarbia, or respiratory acidosis within 30 days of the operation. In patients who were intubated for their surgery, unplanned intubation occurs after they have been extubated after surgery. In patients who were not intubated during surgery, intubation at any time after their surgery is considered unplanned. | Unplanned Intubation; No Complication | |
| 215 | DREINTUB | Num | Days from Operation until Unplanned Intubation Complication | Days from Operation until Unplanned Intubation Complication | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 216 | NPULEMBOL | Num | Number of Pulmonary Embolism Occurrences | Number of Pulmonary Embolism Occurrences | | |
| 217 | PULEMBOL | Char | Occurrences Pulmonary Embolism | Lodging of a blood clot in a pulmonary artery with subsequent obstruction of blood supply to the lung parenchyma. The blood clots usually originate from the deep leg veins or the pelvic venous system. "Yes" is entered if the patient has a V-Q scan interpreted as high probability of pulmonary embolism or a positive CT spiral exam, TEE, pulmonary arteriogram or CT angiogram. Treatment usually consists of: -Initiation of anticoagulation therapy -Placement of mechanical interruption (e.g. Greenfield Filter), for patients whom anticoagulation is contraindicated or already instituted. | Pulmonary Embolism; No Complication | |

| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| 218 | DPULEMBOL | Num | Days from Operation until Pulmonary Embolism Complication | Days from Operation until Pulmonary Embolism Complication | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 219 | NRENAINSF | Num | Number of Progressive Renal Insufficiency Occurrences | Number of Progressive Renal Insufficiency Occurrences | | |
| 220 | RENAINSF | Char | Occurrences Progressive Renal Insufficiency | The reduced capacity of the kidney to perform its function as evidenced by a rise in creatinine of >1 mg/dl from preoperative value, but with no requirement for dialysis within 30 days of the operation. | Progressive Renal Insufficiency; No Complication | |
| 221 | DRENAINSF | Num | Days from Operation until Progressive Renal Insufficiency Complication | Days from Operation until Progressive Renal Insufficiency Complication | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 222 | NOPRENAFL | Num | Number of Acute Renal Failure Occurrences | Number of Acute Renal Failure Occurrences | | |
| 223 | OPRENAFL | Char | Occurrences Acute Renal Fail | In a patient who did not require dialysis preoperatively, worsening of renal dysfunction postoperatively requiring hemodialysis, peritoneal dialysis, or ultrafiltration within 30 days of the operation. | Acute Renal Failure; No Complication | |
| 224 | DOPRENAFL | Num | Days from Operation until Acute Renal Failure Complication | Days from Operation until Acute Renal Failure Complication | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 225 | NURNINFEC | Num | Number of Urinary Tract Infection Occurrences | Number of Urinary Tract infection Occurrences | | |
| 226 | URNINFEC | Char | Occurrences Urinary Tract Infection | Postoperative urinary tract infections meet the criteria from one of the algorithm charts below AND a urinary tract infection was not present preoperatively. | Urinary Tract Infection; No Complication | |

| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| | | | | **Symptomatic UTI (> 1 year old) - No indwelling urinary catheter within 48 hours of specimen collection**<br>  <br>**For additional information, see http://www.cdc.gov/nhsn/pdfs/pscManual/7pscCAUTIcurrent.pdf** | | |

| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| | | | |  | | |

| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| | | | |  | | |
| 227 | DURNINFEC | Num | Days from Operation until Urinary Tract Infection Complication | Days from Operation until Urinary Tract Infection Complication | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 228 | NCNSCOMA | Num | Number of Coma > 24 Hours Occurrences | Number of Coma > 24 Hours Occurrences | | |
| 229 | CNSCOMA | Char | Coma > 24 Hours | Patient is unconscious, or postures to painful stimuli, or is unresponsive to all stimuli (exclude transient disorientation or psychosis) for greater than 24 hours within 30 days of the operation. Drug-induced coma (e.g. Propofol drips) are not included. | Coma greater than 24 hours; No Complication | |
| 230 | DCNSCOMA | Num | Days from Operation until Coma > 24 Hours Complication | Days from Operation until Coma > 24 Hours Complication | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 231 | NCNSCVA | Num | Number of CVA/Stroke or Intracranial Hemorrhage Occurrences | Number of CVA/Stroke Occurrences | | |
| 232 | CNSCVA | Char | CVA/Stroke or Intracranial Hemorrhage | Patient develops an embolic, thrombotic, or intra-parenchymal hemorrhagic event with motor, sensory, or cognitive dysfunction (e.g., hemiplegia, hemiparesis, aphasia, sensory deficit, impaired memory) within 30 days of the operation. | Stroke/CVA with neurological deficit; No Complication | |
| 233 | DCNSCVA | Num | Days from Operation until CVA/Stroke or Intracranial Hemorrhage Complication | Days from Operation until CVA/Stroke Complication | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 234 | NSZRE | Num | Number of Seizure Occurrences | Number of seizure occurrences | | |
| 235 | CSZRE | Char | Seizure Disorder | Any seizure event occurring within 30 days of the operation due to any etiology. Patients with documented preoperative seizure disorders are not included. | Seizure; No Complication | |
| 236 | DSZRE | Num | Days from Operation until Seizure Complication | Days from Operation until Seizure complication | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 237 | NNEURODEF | Num | Number of Nerve Injury Occurrences | Number of Nerve Injury Occurrences | | |

| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| 238 | NEURODEF | Char | Nerve Injury | Nerve injury occurring as a result of surgical or anesthesia techniques. Nerve injuries (e.g. motor, sensory, and mixed motor/sensory injury) to the spinal cord, cervical plexus, brachial plexus, ulnar plexus, lumbar-sacral plexus (sciatic nerve), peroneal nerve, and/or the femoral nerve should be included. | Nerve injury ; No Complication | |
| 239 | DNEURODEF | Num | Days from Operation until Nerve Injury Complication | Days from Operation until Nerve Injury Complication | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 240 | NIVHG1 | Num | Number of IVH Grade 1 Occurrences | Number of IVH Grade 1 Occurrences. Reported only for neonates. | | |
| 241 | CIVHG1 | Char | Occurrences IVH Grade 1 | An intraventricular hemorrhage of grade 1 occurring within 30 days of operation. Reported for neonates only. | IVH Grade 1; No Complication | |
| 242 | DIVHG1 | Num | Days from Operation until IVH Grade 1 Complication | Days from Operation until IVH Grade 1 Complication | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 243 | NIVHG2 | Num | Number of IVH Grade 2 occurrences | Number of IVH Grade 2 Occurrences. Reported only for neonates. | | |
| 244 | CIVHG2 | Char | Occurrences IVH Grade 2 | An intraventricular hemorrhage of grade 2 occurring within 30 days of operation. Reported for neonates only. | IVH Grade 2; No Complication | |
| 245 | DIVHG2 | Num | Days from Operation until IVH Grade 2 Complication | Days from Operation until IVH Grade 2 Complication | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 246 | NIVHG3 | Num | Number of IVH Grade 3 Occurrences | Number of IVH Grade 3 Occurrences. Reported only for neonates. | | |
| 247 | CIVHG3 | Char | Occurrences IVH Grade 3 | An intraventricular hemorrhage of grade 3 occurring within 30 days of operation. Reported for neonates only. | IVH Grade 3; No Complication | |
| 248 | DIVHG3 | Num | Days from Operation until IVH Grade 3 Complication | Days from Operation until IVH Grade 3 Complication | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 249 | NIVHG4 | Num | Number of IVH Grade 4 Occurrences | Number of IVH Grade 4 Occurrences. Reported only for neonates. | | |
| 250 | CIVHG4 | Char | Occurrences IVH Grade 4 | An intraventricular hemorrhage of grade 4 occurring within 30 days of operation. Reported for neonates only. | IVH Grade 4; No Complication | |
| 251 | DIVHG4 | Num | Days from Operation until IVH Grade 4 Complication | Days from Operation until IVH Grade 4 Complication | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 252 | NIVHGUNK | Num | Number of IVH Grade Unknown Occurrences | Number of IVH Grade Unknown Occurrences. Reported only for neonates. | | |
| 253 | CIVHGUNK | Char | Occurrences IVH Grade Unknown | An intraventricular hemorrhage of grade unknown occurring within 30 days of operation. Reported for neonates only. | Unknown/Specific Grade; No Complication | |
| 254 | DIVHGUNK | Num | Days from Operation until IVH Grade Unknown Complication | Days from Operation until IVH Grade Unknown Complication | | |
| 255 | NCDARREST | Num | Number of Cardiac Arrest Requiring CPR Occurrences | Number of Cardiac Arrest Requiring CPR Occurrences | | |
| 256 | CDARREST | Char | Occurrences Cardiac Arrest Requiring CPR | The absence of cardiac rhythm or presence of chaotic cardiac rhythm which results loss of pulse and/or blood pressure requiring the initiation of chest compressions. Patients requiring initiation of ECMO (extracorporeal membrane oxygenation) are included. | Cardiac Arrest Requiring CPR; No Complication | |
| 257 | DCDARREST | Num | Days from Operation until Cardiac Arrest Requiring CPR Complication | Days from Operation until Cardiac Arrest Requiring CPR Complication | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 258 | NOTHBLEED | Num | Number of Bleeding/Transfusion Occurrences | Number of Bleeding/Transfusion Occurrences | | |
| 259 | OTHBLEED | Char | Occurrences Bleeding/Transfusion | The number of mls of packed or whole red blood cells given from the surgical start time up to and including 72 hours postoperatively. If no blood was given intra-operatively, the number of mls given postoperatively, within 72 hours from the surgery start time. Shed blood, autologous blood, cell saver blood or pleurovac given intraoperatively or postoperatively is counted in terms of equivalent mls. The amount infused from cell saver is included, as it is considered a transfusion. The blood may be given for any reason. Transfusions of fresh frozen plasma, platelets, cryoprecipitate or albumin are not included. | Bleeding/Transfusions; No Complication | |

| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| 260 | DOTHBLEED | Num | Days from Operation until Bleeding/Transfusion Complication | Days from Operation until Bleeding/Transfusion Complication | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 261 | BLEED_ML_TOT | Num | Total blood transfused | Total blood (in mls) transfused during bleeding complications | | -99 = Unknown |
| 262 | BLEEDING_ML1 | Num | Blood used in transfusion 1 | Amount of blood (in mls) transfused during bleeding complication 1 | | -99 = Unknown |
| 263 | BLEEDING_ML2 | Num | Blood used in transfusion 2 | Amount of blood (in mls) transfused during bleeding complication 2 | | -99 = Unknown |
| 264 | BLEEDING_ML3 | Num | Blood used in transfusion 3 | Amount of blood (in mls) transfused during bleeding complication 3 | | -99 = Unknown |
| 265 | BLEEDING_ML4 | Num | Blood used in transfusion 4 | Amount of blood (in mls) transfused during bleeding complication 4 | | -99 = Unknown |
| 266 | BLEEDING_ML5 | Num | Blood used in transfusion 5 | Amount of blood (in mls) transfused during bleeding complication 5 | | -99 = Unknown |
| 267 | NOTHGRAFL | Num | Number of Graft/Prosthesis/Flap Failure Occurrences | Number of Graft/Prosthesis/Flap Failure Occurrences | | |
| 268 | OTHGRAFL | Char | Occurrences Graft/Prosthesis/Flap Failure | Mechanical failure of an extra cardiac graft or prosthesis including myocutaneous flaps and skin grafts requiring return to the operating room, interventional radiology, or a balloon angioplasty within 30 days of the operation. | Graft/Prosthesis/FF; No Complication | |
| 269 | DOTHGRAFL | Num | Days from Operation until Graft/Prosthesis/Flap Failure Complication | Days from Operation until Graft/Prosthesis/Flap Failure Complication | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 270 | NOTHVT | Num | Number of VT Occurrences | Number of VT Occurrences | | |
| 271 | OTHVT | Char | Occurrences VT | The identification of a new blood clot or thrombus within the venous system, which may be coupled with inflammation. The clot can be described in studies as present in the superficial or deep venous systems but requires therapy. This diagnosis is confirmed by a duplex, venogram or CT scan, AND the patient must be treated with anticoagulation therapy and/or placement of vena cava filter or clipping of the vena cava. Examples of clots that should be considered for this variable include internal jugular (IJ) line clots, PICC line clots and those found in the abdomen (portal vein). | VT Requiring Therapy; No Complication | |
| 272 | DOTHVT | Num | Days from Operation until VT Complication | Days from Operation until VT Complication | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 273 | NOTHSYSEP | Num | Number of Sepsis Occurrences | Number of Sepsis Occurrences | | |

| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| 274 | OTHSYSEP | Char | Occurrences Sepsis | Sepsis is a vast clinical entity that takes a variety of forms. The spectrum of disorders spans from relatively mild physiologic abnormalities to septic shock.<br>Note: For an event to be considered a Postoperative Occurrence of Systemic Sepsis when sepsis was present preoperatively, there has to be a new source of infection. If Sepsis was present preoperatively, progression to Septic Shock should be condsidered a Postoperative Occurrence of Septic Shock.<br><br>Systemic Sepsis: To be assigned as sepsis, criteria from both Pediatric Systemic Inflammatory Response Syndrome, AND Suspected or Proven Infection must be met.<br>Pediatric Systemic Inflammatory Response Syndrome: The presence of at least two of the following criteria, one of which must be abnormal temperature or leukocyte count (WBC).<br>• Temperature of >38°C or <36°C (axillary, temporal, tympanic, oral, rectal, bladder or central catheter probe)<br>• Tachycardia in the absence of drugs, external or painful stimuli which persists for >30 minutes. For children < 1 yr of age: Bradycardia, in the absence of deep sedation, beta blockers, or other cardioactive drugs which persists for >30 minutes.<br>• Respiratory rate elevation in the absence of external or painful stimuli which persists for >30 minutes OR<br>mechanical ventilation not related to underlying neuromuscular disease.<br>• Leukocyte count elevated or depressed for age with leukopenia not secondary to chemotherapy.<br><br>Suspected or Proven Infection: Infection caused by any pathogen, or Clinical Syndrome associated with a high probability of infection.<br>Must meet at least one of the following:<br>• Positive blood culture<br>• Positive culture from any site thought to be causative<br>• Positive findings on clinical exam such as purulent drainage at site<br>• Imaging evidence of abscess<br>• Perforated bowel or other viscus<br><br>Septic Shock: To be assigned as septic shock, criteria for Systemic Sepsis must be met AND the patient must have documented Cardiovascular dysfunction.<br>Cardiovascular dysfunction:<br>• The use of a vasoactive drug to maintain perfusion (Dopamine, Dobutamine, Epinephrine, Norepinephrine, Vasopressin, Isoproterenol, Ephedrine, Inamrinone, Milrinone).<br>OR<br>• An increase in the dosage of a vasoactive drug or the addition of a second vasoactive drug in a patient receiving a vasoactive drug prior to the diagnosis of sepsis. | Systemic Sepsis; No Complication | |
| 275 | DOTHSYSEP | Num | Days from Operation until Sepsis Complication | Days from Operation until Sepsis Complication | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 276 | NOTHCLAB | Num | Number of CL Associated Blood Stream Infection Occurrences | Number of CL Associated Blood Stream Infection Occurrences | | |

| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| 277 | OTHCLAB | Char | Occurrences CL Associated Blood Stream Infection | A bloodstream infection is considered to be associated with a central line if the line was in use during the 48-hour period before the development of the bloodstream infection. If the time interval between the onset of infection and device use is greater than 48 hours, there needs to be conpelling evidence that the infection is related to the central line not related to an infection at another site. This occurrence is reported if the patient meets the following criteria from both Signs & Symptoms and Clinical Findings. For patients of any age, utilize Section A, criterion 1 or 2. For patients <=1 year of age, may also utilize Section B.<br><br>**♦Section A: Patients any age**<br>**Criterion 1:**<br>• Patient has a recognized pathogen (such as S. aureus, Enterococcus spp., E. coli, Pseudomonas spp., Klebsiella spp., Candida spp., etc.) cultured from one or more blood cultures (at least one bottle from a blood draw is reported by the laboratory as having grown organisms - i.e., is a positive blood culture and not considered common skin contaminants) - preferably drawn from a peripheral site<br>**AND**<br>• Organism cultured from blood is not related to an infection at another site.<br>**OR**<br>**Criterion 2: Must meet criteria from both Signs & Symptoms and Clinical Findings and is not related to infection at another site:**<br>Signs & Symptoms: One or more of the following:<br>◦ Fever > 38˚C (core)<br>◦ Chills<br>◦ Hypotension<br>**AND**<br>Clinical Findings: At least two positive blood cultures, drawn on separate occasions (within 2 days of each other), with growth of the same organism obtained through catheter, with no other identifiable source of infection. May include common skin contaminant (i.e., diphtheroids [Corynebacterium spp.], Bacillus [not B. anthracis] spp., Propionibacterium spp., coagulase-negative staphylococci [including S. epidermidis], viridans group streptococci, Aerococcus spp., Micrococcus spp.)<br><br>**♦ Section B: Additional Criteria for Patients ≤ 1 year of age**<br>**• Must meet criteria from both Signs & Symptoms and Clinical Findings and is not related to infection at another site:**<br>Signs & Symptoms: One or more of the following:<br>◦ Fever (>38˚C core)<br>◦ Hypothermia (<360C core)<br>◦ Apnea<br>◦ Bradycardia<br>**AND**<br>Clinical Findings: At least two positive blood cultures, drawn on separate occasions (within 2 days of each other), with growth of the same organism obtained through catheter, with no other identifiable source of infection. May include common skin contaminant (i.e., diphtheroids [Corynebacterium spp.], Bacillus [not B. anthracis] spp., Propionibacterium spp., coagulase-negative staphylococci [including S. epidermidis], viridans group streptococci, Aerococcus spp., Micrococcus spp.) | CL Associated Bloodstream Infection; No Complication | |
| 278 | DOTHCLAB | Num | Days from Operation until CL Associated Blood Stream Infection Complication | Days from Operation until CL Associated Blood Stream Infection | | -99 = Patient did not experience this complication at or before 30 days post operation |
| 279 | PODIAG | Char | Post-op diagnosis (ICD 9) | The appropriate ICD-9-CM code corresponding to the condition noted as the postoperative diagnosis in the brief operative note, operative report, and/or after the return of the pathology reports are entered. | | |
| 280 | PODIAGTX | Char | Post-op Diagnosis Text | Post-op Diagnosis text | | |

| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| 281 | DOpertoD | Num | Days from Operation to Death | Days from Operation to Death. Death can be recorded after 30 days if it is the direct result of the surgery and/or is associated with postoperative complications and the patient has remained in the hospital in the acute care setting. | | -99 = Patient did not die at or before 120 days post operation |
| 282 | DEATH30YN | Char | Death in 30 days | Any death occurring within the 30 days following surgery, regardless of cause, in or out of the hospital. | Yes; No | |
| 283 | DEATH30DTUNK | Char | Date of death is unknown | Date of death is unknown | Yes | NULL = No Response |
| 284 | DOptoDis | Num | Days from Operation to Discharge | Days from Operation to Discharge | | -99 = Unknown |
| 285 | DAYS_VENTILATION | Char | Total Days Mechanical Ventilation | Total Days Mechanical Ventilation | 0-30; >30 | |
| 286 | STILLINHOSP | Char | Still in Hospital > 30 Days | "Yes" is entered if patient has a continuous stay in the acute care setting > 30 days after the surgery. However, if the patient was discharged from the acute care setting, but remained in the hospital (rehab or hospice unit), then "NO" is entered, since the stay in the acute care setting was no longer continuous. | Yes | NULL = No Response |
| 287 | REOPERATION | Char | Unplanned Reoperation 1 | "Yes" is entered if the patient had an unplanned return to the operating room for any reason, within 30 days of the principal operating procedure. The return to the OR may occur at any hospital or surgical facility (i.e. your hospital or at an outside hospital). Note: This definition is not meant to capture patients who go back to the operating room within 30 days for a follow-up procedure based on the pathology results from the index or concurrent procedure. Examples: Exclude breast biopsies which return for re-excisions; insertion of port-a-caths for chemotherapy. | Yes; No | |
| 288 | RETORPODAYS | Num | Days from operation to reoperation 1 | Days from operation to reoperation 1 | | -99 = Unknown |
| 289 | REOPORCPT1 | Char | Reoperation 1 CPT | The CPT code of the principal procedure performed during reoperation 1 | | NULL = No Response |
| 290 | RETORRELATED | Char | Related reoperation 1 | "Yes" is entered if reoperation 1 is for a post-operative occurrence possibly related to the principal operative procedure or concurrent procedure performed under the same anesthesia as the principal procedure. | Yes; No; Unknown | NULL = No Response |
| 291 | REOPORICD91 | Char | Reoperation 1 ICD-9 code | ICD-9 code corresponding to a post-operative occurrence related to the principal operative procedure or concurrent procedure. | | NULL = No Response |
| 292 | REOPERATION2 | Char | Unplanned Reoperation 2 | See 'Reoperation 1' | Yes; No | |
| 293 | RETOR2PODAYS | Num | Days from operation to reoperation 2 | Days from operation to reoperation 2 | | -99 = Unknown |
| 294 | REOPOR2CPT1 | Char | Reoperation 2 CPT | The CPT code of the principal procedure performed during reoperation 2 | | NULL = No Response |
| 295 | RETOR2RELATED | Char | Related reoperation 2 | "Yes" is entered if reoperation 2 is for a post-operative occurrence possibly related to the principal operative procedure or concurrent procedure performed under the same anesthesia as the principal procedure. | Yes; No; Unknown | NULL = No Response |
| 296 | REOPOR2ICD91 | Char | Reoperation 2 ICD-9 code | ICD-9 code corresponding to a post-operative occurrence related to the principal operative procedure or concurrent procedure. | | NULL = No Response |
| 297 | REOPERATION3 | Char | Unplanned Reoperation 3 | "Yes" is entered if the patient had more than 2 unplanned returns to the operating room for a post-operative occurrence likely related to the principal surgery within 30 days. | Yes; No | |
| 298 | READMISSION1 | Char | Readmssion 1 | "Yes" is entered for any readmission (to the same or another hospital), for any reason, within 30 days of the principal surgical procedure. The readmission has to be classified as an “inpatient” stay by the readmitting hospital, or reported by the patient/family as such. | Yes; No | |
| 299 | READMPODAYS1 | Num | Days from operation to readmission 1 | Days from operation to readmission 1 | | -99 = Unknown |
| 300 | UNPLANNEDREADMISSION1 | Char | Unplanned Readmission 1 | "Yes" is entered if the readmission was unplanned. | Yes; No | NULL = No Response |
| 301 | READMRELATED1 | Char | Related Readmission 1 | "Yes" is entered if the readmission (to the same or another hospital) was for a postoperative occurrence likely related to the principal surgical procedure within 30 days of procedure. | Yes; No | NULL = No Response |

| Position # | Variable Name | Data Type | Variable Label | Variable Definition | Variable Options at Entry | Comments |
|---|---|---|---|---|---|---|
| 302 | READMSUSPREASON1 | Char | Readmission suspected reason 1 | The primary suspected reason for the readmission if it is likely related to the principal operating procedure. | Superficial Incisional SSI | NULL = No Response |
| | | | | | Deep Incisional SSI | |
| | | | | | Organ/Space SSI | |
| | | | | | Wound Disruption | |
| | | | | | Pneumonia | |
| | | | | | Unplanned Intubation | |
| | | | | | Pulmonary Embolism | |
| | | | | | Progressive Renal Insufficiency | |
| | | | | | Acute Renal Failure | |
| | | | | | Urinary Tract Infection | |
| | | | | | Coma > 24 hours | |
| | | | | | CVA/Stroke or Intercranial Hemorrhage | |
| | | | | | Seizure; No Complication | |
| | | | | | IVH Grade 1 | |
| | | | | | IVH Grade 2 | |
| | | | | | IVH Grade 3 | |
| | | | | | IVH Grade 4 | |
| | | | | | IVH Grade unknown/Specific Grade not documented | |
| | | | | | Cardiac Arrest Requiring CPR | |
| | | | | | Bleeding Requiring Transfusion (72h of surgery start | |
| | | | | | Graft/Prosthesis/FF | |
| | | | | | Septic Shock | |
| | | | | | VT Requiring Therapy | |
| | | | | | Postoperative Systemic Sepsis | |
| | | | | | Central line associated blood stream infection | |
| | | | | | Other (list ICD9 code) | |
| 303 | READMRELICD91 | Char | Readmission related ICD-9 code 1 | The ICD-9 code for the suspected reason if "Other" is chosen and the readmission is likely related to the principal operating procedure. | | NULL = No Response |
| 304 | READMISSION2 | Char | Readmssion 2 | See 'Readmission 1' | Yes; No | |
| 305 | READMPODAYS2 | Num | Days from operation to readmission 2 | Days from operation to readmission 2 | | -99 = Unknown |
| 306 | UNPLANNEDREADMISSION2 | Char | Unplanned Readmission 2 | See 'Unplanned readmission 1' | Yes; No | NULL = No Response |
| 307 | READMRELATED2 | Char | Related Readmission 2 | See 'Related readmission 1' | Yes; No | NULL = No Response |
| 308 | READMSUSPREASON2 | Char | Readmission suspected reason 2 | See 'Readmission suspected reason 1' | See 'Readmission suspected reason 1' | NULL = No Response |
| 309 | READMRELICD92 | Char | Readmission related ICD-9 code 2 | See 'Readmission related ICD-9 code 1' | | NULL = No Response |
| 310 | READMISSION3 | Char | Readmssion 3 | See 'Readmission 1' | Yes; No | |
| 311 | READMPODAYS3 | Num | Days from operation to readmission 3 | Days from operation to readmission 3 | | -99 = Unknown |
| 312 | UNPLANNEDREADMISSION3 | Char | Unplanned Readmission 3 | See 'Unplanned readmission 1' | Yes; No | NULL = No Response |
| 313 | READMRELATED3 | Char | Related Readmission 3 | See 'Related readmission 1' | Yes; No | NULL = No Response |
| 314 | READMSUSPREASON3 | Char | Readmission suspected reason 3 | See 'Readmission suspected reason 1' | See 'Readmission suspected reason 1' | NULL = No Response |
| 315 | READMRELICD93 | Char | Readmission related ICD-9 code 3 | See 'Readmission related ICD-9 code 1' | | NULL = No Response |
| 316 | READMISSION4 | Char | Readmssion 4 | See 'Readmission 1' | Yes; No | |
| 317 | READMPODAYS4 | Num | Days from operation to readmission 4 | Days from operation to readmission 4 | | -99 = Unknown |
| 318 | UNPLANNEDREADMISSION4 | Char | Unplanned Readmission 4 | See 'Unplanned readmission 1' | Yes; No | NULL = No Response |
| 319 | READMRELATED4 | Char | Related Readmission 4 | See 'Related readmission 1' | Yes; No | NULL = No Response |
| 320 | READMSUSPREASON4 | Char | Readmission suspected reason 4 | See 'Readmission suspected reason 1' | See 'Readmission suspected reason 1' | NULL = No Response |
| 321 | READMRELICD94 | Char | Readmission related ICD-9 code 4 | See 'Readmission related ICD-9 code 1' | | NULL = No Response |
| 322 | READMISSION5 | Char | Readmssion 5 | See 'Readmission 1' | Yes; No | |
| 323 | READMPODAYS5 | Num | Days from operation to readmission 5 | Days from operation to readmission 5 | | -99 = Unknown |
| 324 | UNPLANNEDREADMISSION5 | Char | Unplanned Readmission 5 | See 'Unplanned readmission 1' | Yes; No | NULL = No Response |
| 325 | READMRELATED5 | Char | Related Readmission 5 | See 'Related readmission 1' | Yes; No | NULL = No Response |
| 326 | READMSUSPREASON5 | Char | Readmission suspected reason 5 | See 'Readmission suspected reason 1' | See 'Readmission suspected reason 1' | NULL = No Response |
| 327 | READMRELICD95 | Char | Readmission related ICD-9 code 5 | See 'Readmission related ICD-9 code 1' | | NULL = No Response |