ACS NSQIP PEDIATRIC

User Guide for the 2015 ACS NSQIP Pediatric Participant Use Data File (PUF)

American College of Surgeons National Surgical Quality Improvement Program - Pediatric

Revised Version
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AMERICAN COLLEGE OF SURGEONS
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Data Update

Initially, in October 2016, the 2015 PUF datasets was issued with a certain inconsistency that was subsequently identified and corrected in revised datasets. This inconsistency involved the following data field:

1. C. diff (NOTHCDIFF, OTHCDIFF) in the Pediatric PUF

Please make certain that in all research efforts you are using the most recent release of the PUF for any period.

Contents

1. Introduction

This document is designed to accompany the 2015 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.facs.org/quality-programs/pediatric). 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 2015 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.facs.org/quality-programs/pediatric and following the steps listed below:

1. From the ACS NSQIP Pediatric main page (www.facs.org/quality-programs/pediatric) the requestor can click on “Request Participant Use Data File” link under Quality Support Tools.
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 2015 file contains 385 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_PUF15_v2.txt	tab delimited TXT file	192 MB	Contains 385 HIPAA compliant variables on 84,056 cases submitted from 80 sites in 2015.
ACS_PEDS_PUF15_v2.sas7bdat	SAS 9.4 data file	552 MB	Same information as stated above in SAS data format.
ACS_PEDS_PUF15_v2.sav	SPSS 16.0 data file	375 MB	Same information as stated above in SPSS data format.

4. Data Collection Background and Data Quality

The ACS NSQIP Pediatric collects data on approximately 120 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.

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 2015. 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 2015. 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
- Cases involving Hyperthermic Intraperitoneal Chemotherapy (HIPEC), regardless of whether or not the procedure performed has an included CPT code(s).
- ASA 6 – (Declared brain-dead patients whose organs are being removed for donor purposes).
- 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.
- Multiple cases within 30 days – Multiple cases for the same patient within 30 days are excluded.

- 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
- Procedures performed by a surgical service not reviewed in NSQIP Pediatric.
- 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%

Case Selection

Step 1: "Essential 10" cases: ACS NSQIP Pediatric Full CPT code inclusion list.

- The first 10 "Essentials" cases are collected per 8-day cycle by applying all inclusion/exclusion criteria and collecting cases in consecutive order utilizing the ACS NSQIP Pediatric Full CPT Code inclusion list.
- If a targeted procedure (a CPT code that is on the Subspecialty inclusion list) comes up naturally in the "Essentials 10" systematic sampling process, it is counted as an "Essentials" case.

Step 2: Procedure Targeted Cases: Procedure Targeted (subspecialty) CPT Code Inclusion List

- Sampling numbers for each subspecialty area are based on each site's total annual volume in each subspecialty area and are provided by ACS in a worksheet.
- Hospitals use the volumes designated for each subspecialty area in their worksheet to collect the 25 procedure targeted cases.
- Hospitals must sample from all the CPT Codes for the subspecialty areas. A hospital cannot pick and choose a procedure or certain codes within a selected subspecialty.
- For each subspecialty, cases are selected in consecutive order by utilizing systematic sampling.

Step 3: Rounding Out to Achieve 35 Cases per Cycle

- If less than 35 cases are abstracted for a cycle, a hospital may opt to collect additional cases to round up to 35 cases utilizing the following process or they may choose to identify the cycle as "Max cases."
    - Start back where they left off on the operative log with the first "10 Essential" cases and collect additional cases from the Procedure Targeted CPT Code inclusion list using systematic sampling.
    - If 35 cases are not collected utilizing additional subspecialty procedures, additional cases may be collected by starting back where they left off with their first "10 Essential" cases and abstracting additional cases from the full CPT Code list using systematic sampling.
    - If 35 cases have not been collected after following the two previous steps, cases of the "limited procedures" (Appendectomy, Laparoscopic Cholecystectomy, and Gastrostomy) may be captured using the current sampling methodology.

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. However, surgical Targeted PUF datasets are now available which address target-specific predictors and outcomes for many types of 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 89%, 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 NSQIP-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: Yes, however, the NSQIP affiliated researcher must be the lead investigator on all PUF-based research projects and is responsible for the PUF dataset, even if forwarded to someone else. The non-participating collaborator must also sign the DUA.

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 risk-adjusted reports in 2015. 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: Yes, there are three other Pediatric PUFs going back to 2012:

PUF Year	PUF Type	Cases	Sites
2012	Pediatrics	51,008	50
2013	Pediatrics	63,387	56
2014	Pediatrics	68,838	64

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 admission 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 120 variables, but the database contains 385 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.

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: (1) Skilled Care, not home (e.g., transitional care unit, subacute hospital, ventilator bed, skilled nursing home) (2) Unskilled facility, not home (e.g., nursing home or assisted facility-if not patient’s home preoperatively) (3) Facility which was home (e.g., return to a chronic care, unskilled facility, or assisted living-which was the patient’s home preoperatively) (4) Home (5) Separate acute care (e.g., transfer to another acute care facility) (6) Rehab (7) Expired (8) Unknown	Skilled Care, Not Home Unskilled Facility Not Home Facility Which was Home Home Separate Acute Care Rehab Expired Unknown	NULL = Unknown
14	LAPTHOR	Char	Laparoscopic/MIS Procedure	Indicate the surgical approach. (1) Laparoscopic/MIS Only: Procedure was performed with a laparoscopic or other MIS approach alone. Procedures that were change to open and those that were performed entirely with a laparoscopic/or MIS approach are included. (2) Laparoscopic/MIS and Open: All procedures that were performed using both laparoscopic/MIS AND open approaches together, laparoscopic/MIS assisted procedures, laparoscopic/MiS procedures converted to open, regardless of reason. (3) Open Only or N/A: all procedures performed entirely using an open approach; all procedures for which MIS techniques are not applicable.	Laparoscopic/MIS only Laparoscopic/MIS and Open Open only or N/A	

Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
15	LAPTHOR_MIS	Char	Laparoscopic/MIS Code	Original CPT assigned to a Laparoscopic/MIS procedure. Currently only code 43659 is being captured under this variable. N/A is assigned if the cpt code for the Principle Operative Procedure is already a laparoscopic code.	43659 Other N/A	NULL = Unknown
16	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	
17	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 Cardiovascular-Thoracic General Surgery Gynecology Neurosurgery Orthopedic Otolaryngology (ENT) Urology	
18	HEIGHT	Num	Height at surgery in inches	The patient's most recent height documented in the medical record in inches (in).		-99 = Unknown
19	WEIGHT	Num	Weight at surgery in pounds	The patient's most recent weight documented in the medical record in pounds (lbs).		-99 = Unknown
20	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	NULL = Unknown Removed July 2015

Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
21	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	
22	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	
23	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	
24	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: Radiology: One definitive chest radiological exam (x-ray or CT)* with at least one of the following: • New or progressive and persistent infiltrate • Consolidation or opacity (e.g. air-space disease, patchy areas of increased density, focal opacification) • Cavitation • Pneumatoceles, in infants ≤ 1 year old 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	NULL = Unknown Removed July 2015

Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
24	CPNEUMON (continued)	Char	Current pneumonia	Signs/Symptoms/Laboratory: FOR ANY PATIENT, at least one of the following: •Fever (>38 C or >100.4 F) with no other recognized cause •Leukopenia (<4000 WBC/mm3) or leukocytosis(≥12,000 WBC/mm3) And At least one of the following: •5% Bronchoalveolar lavage (BAL) -obtained cells containing >=10,000 cfu/ml intracellular bacteria on direct microscopic exam (e.g., Gram stain) •Positive growth in blood culture not related to another source of infection •Positive growth in culture of pleural fluid •Positive quantitative culture from minimally contaminated lower respiratory tract (LRT) specimen (e.g. BAL or protected specimen brushing) OR At least two of the following: •New onset of purulent sputum, or change in character of sputum, or increased respiratory secretions, or increased suctioning requirements •New onset or worsening cough, or dyspnea, or tachypnea •Rales or bronchial breath sounds •Worsening gas exchange (e.g. O2 desaturations (e.g., PaO2/FiO2 ≤ 240), increased oxygen requirements, or increased ventilator demand) ALTERNATE CRITERIA, for infants ≤ 1 year old: Worsening gas exchange (e.g., O2 desaturations, increased oxygen requirements,or increased ventilator demand) AND at least three of the following: • 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) • 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 • Apnea, tachypnea (see age-defined parameters below), nasal flaring with retraction of chest wall or grunting • Wheezing, rales, or rhonchi • Cough • Bradycardia (<100 bpm for <30 day old, < 90 bpm for 30 day old - 1year) or tachycardia (>180 bpm) ALTERNATE CRITERIA, for child > 1 year old or ≤ 12 years old: at least three of the following: • Fever (>38.4 °C or > 101.1°F) or hypothermia (<36.5 °C or <97.7°F) with no other recognized cause • Leukopenia (<4000 WBC/mm3) or leukocytosis (≥15,000 WBC/mm3) • New onset of purulent sputum or change in character of sputum or increased respiratory secretions or increased suctioning requirements • New onset or worsening cough, or dyspnea, apnea, or tachypnea (see age-defined parameters below) • Rales or bronchial breath sounds • Worsening gas exchange [e.g. O2 desaturations (e.g. pulse oximetry <94%), increased oxygen requirements or increased ventilation demand]	Yes; No	NULL = Unknown Removed July 2015

Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
25	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	
26	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	NULL = Unknown Removed July 2015
27	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	
28	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	
29	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	
30	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.	Yes; No	
31	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	
32	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	NULL = Unknown Removed July 2015
33	CRF	Char	Cardiac Risk Factors	**No Risk Factors:** No pre-existing cardiac conditions or compromise of cardiac function requiring medication. **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). **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)]) **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	

Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
34	CRD_ICD9_1	Char	Cardiac ICD9 - 1	ICD-9 code corresponding to a cardiac condition reported in the patient's medical record		NULL = Unknown
35	CRD_ICD9_2	Char	Cardiac ICD9 - 2	ICD-9 code corresponding to a cardiac condition reported in the patient's medical record		NULL = Unknown
36	CRD_ICD9_3	Char	Cardiac ICD9 - 3	ICD-9 code corresponding to a cardiac condition reported in the patient's medical record		NULL = Unknown
37	CRD_ICD9_4	Char	Cardiac ICD9 - 4	ICD-9 code corresponding to a cardiac condition reported in the patient's medical record		NULL = Unknown
38	CRD_ICD9_5	Char	Cardiac ICD9 - 5	ICD-9 code corresponding to a cardiac condition reported in the patient's medical record		NULL = Unknown
39	CRD_ICD9_6	Char	Cardiac ICD9 - 6	ICD-9 code corresponding to a cardiac condition reported in the patient's medical record		NULL = Unknown
40	CRD_ICD9_7	Char	Cardiac ICD9 - 7	ICD-9 code corresponding to a cardiac condition reported in the patient's medical record		NULL = Unknown
41	CRD_ICD9_8	Char	Cardiac ICD9 - 8	ICD-9 code corresponding to a cardiac condition reported in the patient's medical record		NULL = Unknown
42	CRD_ICD9_9	Char	Cardiac ICD9 - 9	ICD-9 code corresponding to a cardiac condition reported in the patient's medical record		NULL = Unknown
43	CRD_ICD9_10	Char	Cardiac ICD9 - 10	ICD-9 code corresponding to a cardiac condition reported in the patient's medical record		NULL = Unknown
44	CRD_ICD10_1	Char	Cardiac ICD10 - 1	ICD-10 code corresponding to a cardiac condition reported in the patient's medical record		NULL = Unknown
45	CRD_ICD10_2	Char	Cardiac ICD10 - 2	ICD-10 code corresponding to a cardiac condition reported in the patient's medical record		NULL = Unknown
46	CRD_ICD10_3	Char	Cardiac ICD10 - 3	ICD-10 code corresponding to a cardiac condition reported in the patient's medical record		NULL = Unknown
47	CRD_ICD10_4	Char	Cardiac ICD10 - 4	ICD-10 code corresponding to a cardiac condition reported in the patient's medical record		NULL = Unknown
48	CRD_ICD10_5	Char	Cardiac ICD10 - 5	ICD-10 code corresponding to a cardiac condition reported in the patient's medical record		NULL = Unknown
49	CRD_ICD10_6	Char	Cardiac ICD10 - 6	ICD-10 code corresponding to a cardiac condition reported in the patient's medical record		NULL = Unknown
50	CRD_ICD10_7	Char	Cardiac ICD10 - 7	ICD-10 code corresponding to a cardiac condition reported in the patient's medical record		NULL = Unknown
51	CRD_ICD10_8	Char	Cardiac ICD10 - 8	ICD-10 code corresponding to a cardiac condition reported in the patient's medical record		NULL = Unknown
52	CRD_ICD10_9	Char	Cardiac ICD10 - 9	ICD-10 code corresponding to a cardiac condition reported in the patient's medical record		NULL = Unknown
53	CRD_ICD10_10	Char	Cardiac ICD10 - 10	ICD-10 code corresponding to a cardiac condition reported in the patient's medical record		NULL = Unknown
54	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	
55	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	NULL = Unknown Removed July 2015
56	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	NULL = Unknown Removed July 2015
57	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	NULL = Unknown Removed July 2015

Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
58	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	NULL = Unknown Removed July 2015
59	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	Removed January 2014
60	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. 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	
61	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	
62	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	
63	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	
64	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	
65	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 Grade 1 Grade 2 Grade 3 Grade 4 IVH reported but no grade assigned	
66	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	NULL = Unknown Removed July 2015

Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
67	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. Corticosteroids applied topically or administered rectally or by inhalation are not included. Patients who recieve a single dose of oral or IV steroids within 24 hours prior to the principle operative procedure are not included.	Yes; No	
68	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	NULL = Unknown Removed July 2015
69	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	NULL = Unknown Removed July 2015
70	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	
71	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	Removed January 2015
72	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	
73	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	NULL = Unknown Removed July 2015
74	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	
75	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	NULL = Unknown Removed July 2015
76	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	NULL = Unknown Removed July 2015

Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
77	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: 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). • Temperature of >38.5°C or < 36°C (axillary, temporal, tympanic, oral, rectal, bladder or central catheter probe) • 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. • 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. • Leukocyte count elevated or depressed for age with leukopenia not secondary to chemotherapy. B. SEPSIS: To be assigned as sepsis, criteria from **both** A. Pediatric Systemic Inflammatory Response Syndrome, AND Suspected or Proven Infection must be met. 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: Preoperative: • Positive blood culture • Positive culture from any site thought to be causative • Positive findings on clinical exam such as purulent drainage at site • Imaging evidence of abscess OR Intraoperative: • Confirmed tissue or organ infarction/devitalization requiring resection • Purulence in the operative site • Perforated bowel or other viscus (for example, ruptured appendix) • Positive intraoperative cultures C. SEPTIC SHOCK: To be assigned as septic shock criteria for Sepsis must be met AND the patient must have documented Cardiovascular dysfunction. Cardiovascular dysfunction: 1) The use of a vasoactive drug to maintain perfusion (Dopamine, Dobutamine, Epinephrine, Norepinephrine, Vasopressin, Isoproterenol, Ephedrine, Inamrinone, Milrinone). OR 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	
78	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	
79	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
80	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	Removed July 2013
81	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	
82	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
83	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
84	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
85	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
86	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
87	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
88	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
89	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
90	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
91	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
92	CM_ICD10_1	Char	Congenital Malformation ICD10 - 1	ICD-10 code corresponding to a congenital malformation reported in the patient's medical record		NULL = Unknown
93	CM_ICD10_2	Char	Congenital Malformation ICD10 - 2	ICD-10 code corresponding to a congenital malformation reported in the patient's medical record		NULL = Unknown
94	CM_ICD10_3	Char	Congenital Malformation ICD10 - 3	ICD-10 code corresponding to a congenital malformation reported in the patient's medical record		NULL = Unknown
95	CM_ICD10_4	Char	Congenital Malformation ICD10 - 4	ICD-10 code corresponding to a congenital malformation reported in the patient's medical record		NULL = Unknown
96	CM_ICD10_5	Char	Congenital Malformation ICD10 - 5	ICD-10 code corresponding to a congenital malformation reported in the patient's medical record		NULL = Unknown
97	CM_ICD10_6	Char	Congenital Malformation ICD10 - 6	ICD-10 code corresponding to a congenital malformation reported in the patient's medical record		NULL = Unknown
98	CM_ICD10_7	Char	Congenital Malformation ICD10 - 7	ICD-10 code corresponding to a congenital malformation reported in the patient's medical record		NULL = Unknown
99	CM_ICD10_8	Char	Congenital Malformation ICD10 - 8	ICD-10 code corresponding to a congenital malformation reported in the patient's medical record		NULL = Unknown
100	CM_ICD10_9	Char	Congenital Malformation ICD10 - 9	ICD-10 code corresponding to a congenital malformation reported in the patient's medical record		NULL = Unknown

Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
101	CM_ICD10_10	Char	Congenital Malformation ICD10 - 10	ICD-10 code corresponding to a congenital malformation reported in the patient's medical record		NULL = Unknown
102	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	
103	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	Past history of cancer	NULL = Unknown
				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.	Current Cancer or active treatment of cancer	
				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.	No current or prior history of cancer	
104	OSTOMY	Char	Ostomy	Existence of a previously created ostomy at the time of the principal operative procedure. An ostomy is a surgically created external opening between an organ or natural body space and the skin. Any ostomy may have an indwelling catheter, tube or external device in place.	Yes; No	NULL = Unknown Added July 2015
105	OSTOMY_TYPE	Char	Ostomy type	If "YES" is selected for ostomy, the ostomy type(s) is chosen (all that apply). Data field contains a comma separated list.	Central Nervous System, Thorax, Upper Gastrointestinal Tract, Lower Gastrointestinal Tract, Urinary Tract	NULL = Unknown Added July 2015
106	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
107	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. **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
108	GESTATIONALAGE_BIRTH	Num	Gestational Age	Patient's gestational age in weeks at time of birth		-99 = Unknown
109	GESTATIONALAGE_SURGERY	Num	Gestational Age at Surgery	Patient's gestational age in weeks at time of surgery		-99 = Unknown
110	BIRTH_LOCATION	Char	Location of Birth	Location of birth. Outborn includes patients born at home.	Inborn; Outborn	NULL = Unknown
111	SM_GESTATIONALAGE	Char	Small for gestational age	Small for gestational age.	Yes; No	NULL = Unknown
112	BIRTH_WGT_UNIT	Char	Birth weight unit	Units used to record birth weight.	lbs; kg; unknown	NULL = Missing
113	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
114	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
115	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
116	BIRTH_HGT	Num	Birth height value	Height at birth. Only recorded for neonates.		-99 = Unknown
117	BIRTH_HGT_UNIT	Char	Birth height unit	Units used to record birth height.	cm; in; unknown	NULL = Missing
118	HEAD_CIRC	Num	Head circumference value	Head circumference at birth. "Unknown" is entered if unknown. Only recorded for neonates.		-99 = Missing
119	HEAD_CIRC_UNIT	Char	Head circumference unit	Units used to record head circumference.	in; cm; unknown	NULL = Missing

Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
120	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
121	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
122	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 Scheduled C-Section Unscheduled C-Section Unknown/Not Documented	NULL = No Response
123	DPRNA	Num	Days from Na Preoperative Labs to Operation	Days from Serum Sodium Preoperative Labs to Operation		-99 = Lab value not obtained or Unknown
124	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
125	DPRCREAT	Num	Days from Creatinine Preoperative Labs to Operation	Days from Creatinine Preoperative Labs to Operation		-99 = Lab value not obtained or Unknown
126	DPRALBUM	Num	Days from Albumin Preoperative Labs to Operation	Days from Albumin Preoperative Labs to Operation		-99 = Lab value not obtained or Unknown
127	DPRBILI	Num	Days from Bilirubin Preoperative Labs to Operation	Days from Bilirubin Preoperative Labs to Operation		-99 = Lab value not obtained or Unknown
128	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
129	DPRALKPH	Num	Days from ALKPHOS Preoperative Labs to Operation	Days from Alkaline Phosphatase Preoperative Labs to Operation		-99 = Lab value not obtained or Unknown
130	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
131	DPRHCT	Num	Days from HCT Preoperative Labs to Operation	Days from Hematocrit Preoperative Labs to Operation		-99 = Lab value not obtained or Unknown
132	DPRPLATE	Num	Days from PlateCount Preoperative Labs to Operation	Days from Plate Count Preoperative Labs to Operation		-99 = Lab value not obtained or Unknown
133	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
134	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
135	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
136	PRSODM	Num	Pre-operative serum sodium	Pre-operative serum sodium		-99 = Lab value not obtained or Unknown
137	PRBUN	Num	Pre-operative BUN	Pre-operative Blood Urea Nitrogen		-99 = Lab value not obtained or Unknown
138	PRCREAT	Num	Pre-operative serum creatinine	Pre-operative serum creatinine		-99 = Lab value not obtained or Unknown
139	PRALBUM	Num	Pre-operative serum albumin	Pre-operative serum albumin		-99 = Lab value not obtained or Unknown
140	PRBILI	Num	Pre-operative total bilirubin	Pre-operative total bilirubin		-99 = Lab value not obtained or Unknown
141	PRSGOT	Num	Pre-operative SGOT	Pre-operative SGOT		-99 = Lab value not obtained or Unknown
142	PRALKPH	Num	Pre-operative alkaline phosphatase	Pre-operative alkaline phosphatase		-99 = Lab value not obtained or Unknown
143	PRWBC	Num	Pre-operative WBC	Pre-operative White Blood Cell count		-99 = Lab value not obtained or Unknown
144	PRHCT	Num	Pre-operative hematocrit	Pre-operative hematocrit		-99 = Lab value not obtained or Unknown
145	PRPLATE	Num	Pre-operative platelet count	Pre-operative platelet count		-99 = Lab value not obtained or Unknown

Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
146	PRPTT	Num	Pre-operative PTT	Pre-operative Partial Thromboplastin Time		-99 = Lab value not obtained or Unknown
147	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
148	PRPT	Num	Pre-operative PT	Pre-operative Prothrombin Time		-99 = Lab value not obtained or Unknown
149	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
150	OTHERCPT1	Char	Other CPT Code 1	CPT Code for other procedure 1		NULL = No Procedure
151	OTHERWRVU1	Num	Other Work Relative Value Unit 1	Other Work Relative Value Unit 1		-99 = No Procedure/Unknown
152	OTHERPROC2	Char	Other Procedure description - 2	See 'Other Procedure 1'		NULL = No Procedure
153	OTHERCPT2	Char	Other CPT Code 2	CPT Code for other procedure 2		NULL = No Procedure
154	OTHERWRVU2	Num	Other Work Relative Value Unit 2	Other Work Relative Value Unit 2		-99 = No Procedure/Unknown
155	OTHERPROC3	Char	Other Procedure description - 3	See 'Other Procedure 1'		NULL = No Procedure
156	OTHERCPT3	Char	Other CPT Code 3	CPT Code for other procedure 3		NULL = No Procedure
157	OTHERWRVU3	Num	Other Work Relative Value Unit 3	Other Work Relative Value Unit 3		-99 = No Procedure/Unknown
158	OTHERPROC4	Char	Other Procedure description - 4	See 'Other Procedure 1'		NULL = No Procedure
159	OTHERCPT4	Char	Other CPT Code 4	CPT Code for other procedure 4		NULL = No Procedure
160	OTHERWRVU4	Num	Other Work Relative Value Unit 4	Other Work Relative Value Unit 4		-99 = No Procedure/Unknown
161	OTHERPROC5	Char	Other Procedure description - 5	See 'Other Procedure 1'		NULL = No Procedure
162	OTHERCPT5	Char	Other CPT Code 5	CPT Code for other procedure 5		NULL = No Procedure
163	OTHERWRVU5	Num	Other Work Relative Value Unit 5	Other Work Relative Value Unit 5		-99 = No Procedure/Unknown
164	OTHERPROC6	Char	Other Procedure description - 6	See 'Other Procedure 1'		NULL = No Procedure
165	OTHERCPT6	Char	Other CPT Code 6	CPT Code for other procedure 6		NULL = No Procedure
166	OTHERWRVU6	Num	Other Work Relative Value Unit 6	Other Work Relative Value Unit 6		-99 = No Procedure/Unknown
167	OTHERPROC7	Char	Other Procedure description - 7	See 'Other Procedure 1'		NULL = No Procedure
168	OTHERCPT7	Char	Other CPT Code 7	CPT Code for other procedure 7		NULL = No Procedure
169	OTHERWRVU7	Num	Other Work Relative Value Unit 7	Other Work Relative Value Unit 7		-99 = No Procedure/Unknown
170	OTHERPROC8	Char	Other Procedure description - 8	See 'Other Procedure 1'		NULL = No Procedure
171	OTHERCPT8	Char	Other CPT Code 8	CPT Code for other procedure 8		NULL = No Procedure
172	OTHERWRVU8	Num	Other Work Relative Value Unit 8	Other Work Relative Value Unit 8		-99 = No Procedure/Unknown
173	OTHERPROC9	Char	Other Procedure description - 9	See 'Other Procedure 1'		NULL = No Procedure
174	OTHERCPT9	Char	Other CPT Code 9	CPT Code for other procedure 9		NULL = No Procedure
175	OTHERWRVU9	Num	Other Work Relative Value Unit 9	Other Work Relative Value Unit 9		-99 = No Procedure/Unknown
176	OTHERPROC10	Char	Other Procedure description - 10	See 'Other Procedure 1'		NULL = No Procedure
177	OTHERCPT10	Char	Other CPT Code 10	CPT Code for other procedure 10		NULL = No Procedure
178	OTHERWRVU10	Num	Other Work Relative Value Unit 10	Other Work Relative Value Unit 10		-99 = No Procedure/Unknown
179	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
180	CONCPT1	Char	Concurrent CPT 1	Concurrent CPT 1		NULL = No Procedure
181	CONWRVU1	Num	Concurrent Work Relative Value Unit 1	Concurrent Work Relative Value Unit 1		-99 = No Procedure/Unknown
182	CONCURR2	Char	Concurrent Procedure description - 2	See 'Concurrent Procedure 1'		NULL = No Procedure
183	CONCPT2	Char	Concurrent CPT 2	Concurrent CPT 2		NULL = No Procedure
184	CONWRVU2	Num	Concurrent Work Relative Value Unit 2	Concurrent Work Relative Value Unit 2		-99 = No Procedure/Unknown
185	CONCURR3	Char	Concurrent Procedure description - 3	See 'Concurrent Procedure 1'		NULL = No Procedure
186	CONCPT3	Char	Concurrent CPT 3	Concurrent CPT 3		NULL = No Procedure
187	CONWRVU3	Num	Concurrent Work Relative Value Unit 3	Concurrent Work Relative Value Unit 3		-99 = No Procedure/Unknown
188	CONCURR4	Char	Concurrent Procedure description - 4	See 'Concurrent Procedure 1'		NULL = No Procedure
189	CONCPT4	Char	Concurrent CPT 4	Concurrent CPT 4		NULL = No Procedure
190	CONWRVU4	Num	Concurrent Work Relative Value Unit 4	Concurrent Work Relative Value Unit 4		-99 = No Procedure/Unknown

Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
191	CONCURR5	Char	Concurrent Procedure description - 5	See 'Concurrent Procedure 1'		NULL = No Procedure
192	CONCPT5	Char	Concurrent CPT 5	Concurrent CPT 5		NULL = No Procedure
193	CONWRVU5	Num	Concurrent Work Relative Value Unit 5	Concurrent Work Relative Value Unit 5		-99 = No Procedure/Unknown
194	CONCURR6	Char	Concurrent Procedure description - 6	See 'Concurrent Procedure 1'		NULL = No Procedure
195	CONCPT6	Char	Concurrent CPT 6	Concurrent CPT 6		NULL = No Procedure
196	CONWRVU6	Num	Concurrent Work Relative Value Unit 6	Concurrent Work Relative Value Unit 6		-99 = No Procedure/Unknown
197	CONCURR7	Char	Concurrent Procedure description - 7	See 'Concurrent Procedure 1'		NULL = No Procedure
198	CONCPT7	Char	Concurrent CPT 7	Concurrent CPT 7		NULL = No Procedure
199	CONWRVU7	Num	Concurrent Work Relative Value Unit 7	Concurrent Work Relative Value Unit 7		-99 = No Procedure/Unknown
200	CONCURR8	Char	Concurrent Procedure description - 8	See 'Concurrent Procedure 1'		NULL = No Procedure
201	CONCPT8	Char	Concurrent CPT 8	Concurrent CPT 8		NULL = No Procedure
202	CONWRVU8	Num	Concurrent Work Relative Value Unit 8	Concurrent Work Relative Value Unit 8		-99 = No Procedure/Unknown
203	CONCURR9	Char	Concurrent Procedure description - 9	See 'Concurrent Procedure 1'		NULL = No Procedure
204	CONCPT9	Char	Concurrent CPT 9	Concurrent CPT 9		NULL = No Procedure
205	CONWRVU9	Num	Concurrent Work Relative Value Unit 9	Concurrent Work Relative Value Unit 9		-99 = No Procedure/Unknown
206	CONCURR10	Char	Concurrent Procedure description - 10	See 'Concurrent Procedure 1'		NULL = No Procedure
207	CONCPT10	Char	Concurrent CPT 10	Concurrent CPT 10		NULL = No Procedure
208	CONWRVU10	Num	Concurrent Work Relative Value Unit 10	Concurrent Work Relative Value Unit 10		-99 = No Procedure/Unknown
209	CASETYPE	Char	Case Status	Report if the case was scheduled for the OR as elective, urgent, or emergent based upon the following: 1) Elective: Surgical case is scheduled and performed on an elective basis with no time constraints. 2) Urgent: Surgical case is scheduled and usually performed within 24 hours of surgical evaluation. Report the case as urgent if the anesthesiologist and surgeon reort the case as urgent 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 Emergent Urgent	
210	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 has	1-Clean 2-Clean/Contaminated 3-Contaminated	NULL = Unknown

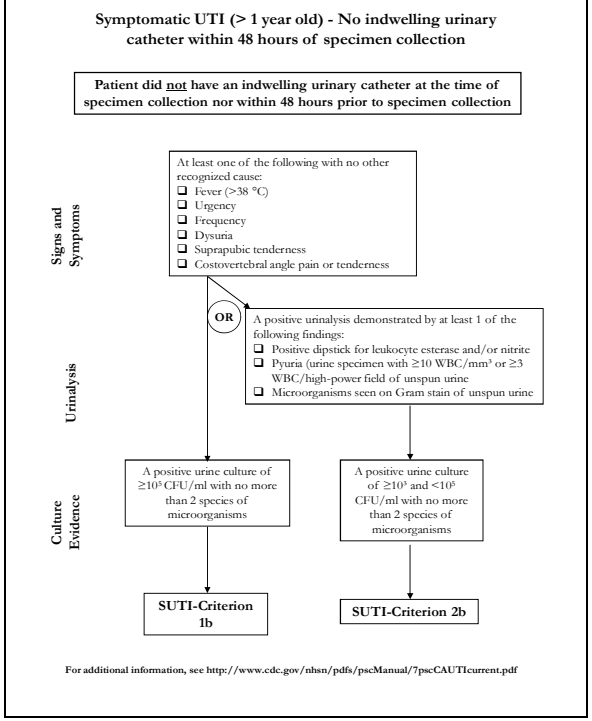
Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
210	WNDCLAS (continued)	Char	Wound classification	classified the wound as: **(1) Clean:** An uninfected operative wound in which no inflammation is encountered and the respiratory, alimentary, genital, 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	
211	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 2 -Mild Disturb 3 -Severe Disturb 4 -Life Threat 5 -Moribund None assigned	
212	ANESURG	Num	Duration from Anesthesia start to Surgery start	Duration from Anesthesia start to Surgery start in minutes		-99 = Unknown
213	SURGANE	Num	Duration from Surgery stop to Anesthesia Stop	Duration from Surgery stop to Anesthesia Stop in minutes		-99 = Unknown
214	DPATRM	Num	Duration patient is in Operating Room	Duration patient is in Room in minutes		-99 = Unknown
215	ANETIME	Num	Duration of Anesthesia	Duration of Anesthesia in minutes		-99 = Unknown
216	OPTIME	Num	Total operation time	Total operation time in minutes		-99 = Unknown
217	HDISDT	Char	Hospital discharge Year	Hospital discharge Year		NULL = Unknown
218	YRDEATH	Char	Year of death	Year of death		NULL = Unknown
219	TOTHLOS	Num	Length of total hospital stay	Length of total hospital stay		-99 = Unknown
220	HtoODay	Num	Days from Hospital Admission to Operation	Days from Hospital Admission to Operation		
221	NSUPINFEC	Num	Number of Superficial Incisional SSI Occurrences	Number of Superficial Incisional SSI Occurrences		

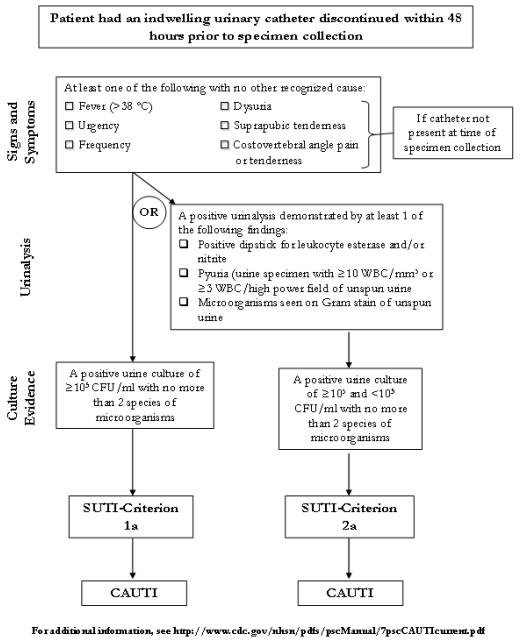
Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
222	SUPINFEC	Char	Occurrences Superficial Incisional SSI	Superficial incisional SSI is an infection that occurs within 30 days after the operation and the infection involves only skin or subcutaneous 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	
223	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
224	NWNDINFD	Num	Number of Deep Incisional SSI Occurrences	Number of Deep Incisional SSI Occurrences		
225	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	
226	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
227	NORGSPCSSI	Num	Number of Organ/Space SSI Occurrences	Number of Organ/Space SSI Occurrences		
228	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	
229	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

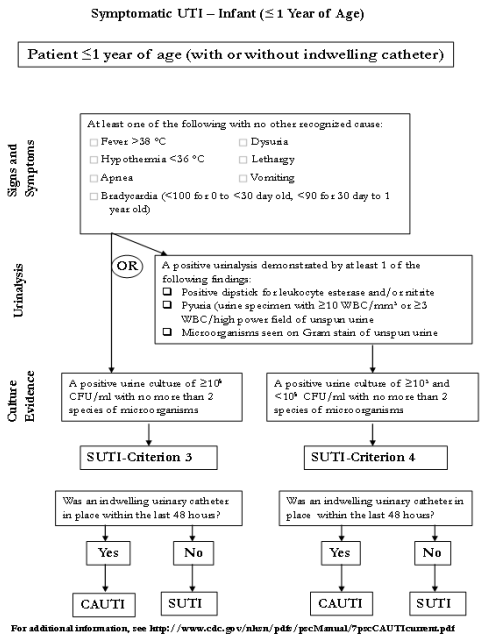
Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
230	NDEHIS	Num	Number of Deep Wound Disruption/Dehiscence Occurrences	Number of Deep Wound Disruption/Dehiscence Occurrences		
231	DEHIS	Char	Occurrences Deep Wound Disruption/Dehiscence	Separation (or disruption) of the internal (or deep) layers of the surgical wound within 30 days of the operation. Separation of wound layers below the skin and subcutaneous tissues is collected as deep wound dehiscence. Separation of both the superficial and deep layers is collected as a deep wound disruption only.	Wound Disruption; No complication	
232	DDEHIS	Num	Days from Operation until Deep Wound Disruption/Dehiscence Complication	Days from Operation until Deep Wound Disruption/Dehiscence Complication		-99 = Patient did not experience this complication at or before 30 days post operation
233	NSDEHIS	Num	Number of Superficial Wound Disruption/Dehiscence Occurrences	Number of Superficial Wound Disruption/Dehiscence Occurrences		
234	SDEHIS	Char	Occurrences Superficial Wound Disruption/Dehiscence	Separation (or disruption) of the superficial (external) layer(s) of the surgical wound. Separation of the superficial and deep layers is collected as a deep wound disruption only.	Superficial Wound Disruption/Dehiscence; No complication	
235	DSDEHIS	Num	Days from Operation until Superficial Wound Disruption/Dehiscence Complication	Days from Operation until Superficial Wound Disruption/Dehiscence Complication		-99 = Patient did not experience this complication at or before 30 days post operation
236	NOUPNEUMO	Num	Number of Pneumonia Occurrences	Number of Pneumonia Occurrences		
237	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: Radiology: One definitive chest radiological exam (x-ray or CT)* with at least one of the following: • New or progressive and persistent infiltrate • Consolidation or opacity • Cavitation • Pneumatoceles, in infants ≤ 1 year old 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).	Pneumonia; No complication	

Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
237	OUPNEUMO (continued)	Char	Occurrences Pneumonia	Signs/Symptoms/Laboratory: FOR ANY PATIENT, at least one of the following: •Fever (>38 C or >100.4 F) with no other recognized cause •Leukopenia (<4000 WBC/mm3) or leukocytosis(≥12,000 WBC/mm3) And At least one of the following: •5% Bronchoalveolar lavage (BAL) -obtained cells containing >=10,000 cfu/mL intracellular bacteria on direct microscopic exam (e.g., Gram stain) •Positive growth in blood culture not related to another source of infection •Positive growth in culture of pleural fluid •Positive quantitative culture from minimally contaminated lower respiratory tract (LRT) specimen (e.g. BAL or protected specimen brushing) OR At least two of the following: •New onset of purulent sputum, or change in character of sputum, or increased respiratory secretions, or increased suctioning requirements •New onset or worsening cough, or dyspnea, or tachypnea •Rales or bronchial breath sounds •Worsening gas exchange (e.g. O2 desaturations (e.g., PaO2/FiO2 ≤ 240), increased oxygen requirements, or increased ventilator demand) ALTERNATE CRITERIA, for infants ≤ 1 year old: Worsening gas exchange (e.g., O2 desaturations, increased oxygen requirements, or increased ventilator demand) AND At least three of the following: • 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) • 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 • Apnea, tachypnea (see age-defined parameters below), nasal flaring with retraction of chest wall or grunting • Wheezing, rales, or rhonchi • Cough • Bradycardia (<100 bpm for <30 day old, < 90 bpm for 30 day old - 1year) or tachycardia (>180 bpm) ALTERNATE CRITERIA, for child > 1 year old or ≤ 12 years old: At least three of the following: • Fever (≥38.4°C or ≥101.1°F) or hypothermia (≤36.5°C or ≤97.7°F) with no other recognized cause • Leukopenia (<4000 WBC/mm3) or leukocytosis(≥15,000 WBC/mm3•) • New onset of purulent sputum or change in character of sputum or increased respiratory secretions or increased suctioning requirements • New onset or worsening cough, or dyspnea, apnea, or tachypnea (see age-defined parameters below) • Rales or bronchial breath sounds • Worsening gas exchange [e.g. O2 desaturations (e.g. pulse oximetry <94%), increased oxygen requirements or increased ventilation demand]	Pneumonia; No complication	
238	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
239	NREINTUB	Num	Number of Unplanned Intubation Occurrences	Number of Unplanned Intubation Occurrences		

Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
240	REINTUB	Char	Occurrences Unplanned Intubation	Patient required placement of an endotracheal tube or other similar breathing tube (Laryngeal Mask Airway (LMA), nasotracheal tube, orotracheal tube) and ventilatory support which was not intended or planned.	Unplanned Intubation; No Complication	
241	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
242	NPULEMBOL	Num	Number of Pulmonary Embolism Occurrences	Number of Pulmonary Embolism Occurrences		
243	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	
244	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
245	NRENAINSF	Num	Number of Progressive Renal Insufficiency Occurrences	Number of Progressive Renal Insufficiency Occurrences		
246	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	
247	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
248	NOPRENAFL	Num	Number of Acute Renal Failure Occurrences	Number of Acute Renal Failure Occurrences		
249	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	
250	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
251	NURNINFEC	Num	Number of Urinary Tract Infection Occurrences	Number of Urinary Tract infection Occurrences		
252	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
252	URNINFEC (continued)	Char	Occurrences Urinary Tract Infection		Urinary Tract Infection; No Complication	

Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
252	URNINFEC (continued)	Char	Occurrences Urinary Tract Infection	Symptomatic UTI (> 1 year old) - Urinary catheter within 48 hours of specimen collection  For additional information, see http://www.cdc.gov/nhsn/pdfs/pscManual/7pscCAUTIcurrent.pdf	Urinary Tract Infection; No Complication	

Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
252	URNINFEC (continued)	Char	Occurrences Urinary Tract Infection		Urinary Tract Infection; No Complication	
253	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
254	NCNSCOMA	Num	Number of Coma > 24 Hours Occurrences	Number of Coma > 24 Hours Occurrences		
255	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	
256	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
257	NCNSCVA	Num	Number of CVA/Stroke or Intracranial Hemorrhage Occurrences	Number of CVA/Stroke Occurrences		
258	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	
259	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
260	NSZRE	Num	Number of Seizure Occurrences	Number of seizure occurrences		

Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
261	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	
262	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
263	NNEURODEF	Num	Number of Nerve Injury Occurrences	Number of Nerve Injury Occurrences		
264	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	
265	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
266	NIVHG1	Num	Number of IVH Grade 1 Occurrences	Number of IVH Grade 1 Occurrences. Reported only for neonates.		
267	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	
268	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
269	NIVHG2	Num	Number of IVH Grade 2 occurrences	Number of IVH Grade 2 Occurrences. Reported only for neonates.		
270	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	
271	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
272	NIVHG3	Num	Number of IVH Grade 3 Occurrences	Number of IVH Grade 3 Occurrences. Reported only for neonates.		
273	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	
274	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
275	NIVHG4	Num	Number of IVH Grade 4 Occurrences	Number of IVH Grade 4 Occurrences. Reported only for neonates.		
276	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	
277	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
278	NIVHUNK	Num	Number of IVH Grade Unknown Occurrences	Number of IVH Grade Unknown Occurrences. Reported only for neonates.		
279	CIVHUNK	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	
280	DIVHUNK	Num	Days from Operation until IVH Grade Unknown Complication	Days from Operation until IVH Grade Unknown Complication		
281	NCDARREST	Num	Number of Cardiac Arrest Requiring CPR Occurrences	Number of Cardiac Arrest Requiring CPR Occurrences		
282	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	
283	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

Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
284	NOTHBLEED	Num	Number of Bleeding/Transfusion Occurrences	Number of Bleeding/Transfusion Occurrences		
285	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	
286	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
287	BLEED_ML_TOT	Num	Total blood transfused	Total blood (in mls) transfused during bleeding complications		-99 = Unknown
288	BLEEDING_ML1	Num	Blood used in transfusion 1	Amount of blood (in mls) transfused during bleeding complication 1		-99 = Unknown
289	BLEEDING_ML2	Num	Blood used in transfusion 2	Amount of blood (in mls) transfused during bleeding complication 2		-99 = Unknown
290	BLEEDING_ML3	Num	Blood used in transfusion 3	Amount of blood (in mls) transfused during bleeding complication 3		-99 = Unknown
291	BLEEDING_ML4	Num	Blood used in transfusion 4	Amount of blood (in mls) transfused during bleeding complication 4		-99 = Unknown
292	BLEEDING_ML5	Num	Blood used in transfusion 5	Amount of blood (in mls) transfused during bleeding complication 5		-99 = Unknown
293	NOTHGRAFL	Num	Number of Graft/Prosthesis/Flap Failure Occurrences	Number of Graft/Prosthesis/Flap Failure Occurrences		
294	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	
295	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
296	NOTHSESHOCK	Num	Number of Septic Shock Occurrences	Number of Septic Shock Occurrences		
297	OTHSESHOCK	Char	Occurrences Septic Shock	Septic Shock: To be assigned as septic shock, criteria for Systemic Sepsis must be met (see OTHSYSEP) AND the patient must have documented Cardiovascular dysfunction. Cardiovascular dysfunction: • The use of a vasoactive drug to maintain perfusion (Dopamine, Dobutamine, Epinephrine, Norepinephrine, Vasopressin, Isoproterenol, Ephedrine, Inamrinone, Milrinone). OR • 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.	Septic Shock; No Complication	
298	DOTHSESHOCK	Num	Days from Operation until Septic Shock Complication	Days from Operation until Septic Shock Complication		-99 = Patient did not experience this complication at or before 30 days post operation
299	NOTHVT	Num	Number of VT Occurrences	Number of VT Occurrences		

Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
300	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	
301	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
302	NOTHSYSEP	Num	Number of Sepsis Occurrences	Number of Sepsis Occurrences		
303	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. 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. Systemic Sepsis: To be assigned as sepsis, criteria from both Pediatric Systemic Inflammatory Response Syndrome, AND Suspected or Proven Infection must be met. 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). • Temperature of >38°C or <36°C (axillary, temporal, tympanic, oral, rectal, bladder or central catheter probe) • 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. • 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. • Leukocyte count elevated or depressed for age with leukopenia not secondary to chemotherapy. 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: • Positive blood culture • Positive culture from any site thought to be causative • Positive findings on clinical exam such as purulent drainage at site • Imaging evidence of abscess • Perforated bowel or other viscus	Systemic Sepsis; No Complication	
304	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
305	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
306	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. **♦Section A: Patients any age** **Criterion 1:** • 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 **AND** • Organism cultured from blood is not related to an infection at another site. **OR** **Criterion 2: Must meet criteria from both Signs & Symptoms and Clinical Findings and is not related to infection at another site:** Signs & Symptoms: One or more of the following: ◦ Fever > 38°C (core) ◦ Chills ◦ Hypotension **AND** 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.) **♦ Section B: Additional Criteria for Patients ≤ 1 year of age** **• Must meet criteria from both Signs & Symptoms and Clinical Findings and is not related to infection at another site:** Signs & Symptoms: One or more of the following: ◦ Fever (>38°C core) ◦ Hypothermia (<360C core) ◦ Apnea ◦ Bradycardia **AND** 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	

Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
307	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
308	NOTHCDIFF	Num	Number of Postoperative Clostridium difficile (C.diff) Colitis Occurrences	Number of Postoperative Clostridium difficile (C.diff) Colitis Occurrences		
309	OTHCDIFF	Char	Occurrence of Postoperative Clostridium difficile (C.diff) Colitis	Development of C. difficile colitis within 30 days after the principal operative procedure whether or not there is a prior history of a C. difficile infection. C. difficile is diarrhea of varying severity, from mild to fulminant and life-threatening. It results from a disturbance of the normal bacterial flora of teh colon and colonization by C. difficile. which releases toxins (A&B) that cause mucosal inflammmation and damage.	C. diff; No Complication	
310	DOTHCDIFF	Num	Days from Operation until Postoperative Clostridium difficile (C.diff) Colitis Complication	Days from Operation until Postoperative Clostridium difficile (C.diff) Colitis Complication		-99 = Patient did not experience this complication at or before 30 days post operation
311	PODIAG	Char	Post-op diagnosis (ICD 9)	The appropriate ICD-10-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.		NULL = No Response
312	PODIAGTX	Char	Post-op Diagnosis Text (ICD 9)	Post-op Diagnosis text (ICD 9)		NULL = No Response
313	PODIAG10	Char	Post-op diagnosis (ICD 10)	The appropriate ICD-10-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.		NULL = No Response
314	PODIAGTX10	Char	Post-op Diagnosis Text (ICD 10)	Post-op Diagnosis text (ICD 10)		NULL = No Response
315	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
316	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	
317	DEATH30DTUNK	Char	Date of death is unknown	Date of death is unknown	Yes	NULL = No Response
318	DOptoDis	Num	Days from Operation to Discharge	Days from Operation to Discharge		-99 = Unknown
319	DAYS_VENTILATION	Char	Total Days Mechanical Ventilation	Total Days Mechanical Ventilation	0-30; >30	NULL = No Response
320	NUTRITION_AT_DISCHARGE	Char	Nutritional Requirement at Discharge or at 30 days if still in hospital	"Yes" is entered if the patient has a requirement for intravenous total parenteral nutrition (TPN) at the time of hospital discharge. If the patient remains in the hospital at 30 days, record if the patient was receiving IV TPN at 30 days.	Yes; No	NULL = No Response
321	OXYGEN_AT_DISCHARGE	Char	Oxygen at Discharge or at 30 days if still in hospital	"Yes" is entered if oxygen was required at the time of discharge. Oxygen can be delivered by any modality for any reason. Patients requiring supplemental oxygen at night are included If the patient remains in the hospital at 30 days, record if oxygen was utilized at 30 days.	Yes; No	NULL = No Response
322	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

Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
323	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	
324	RETORPODAYS	Num	Days from operation to reoperation 1	Days from operation to reoperation 1		-99 = Unknown
325	REOPORCPT1	Char	Reoperation 1 CPT	The CPT code of the principal procedure performed during reoperation 1		NULL = No Response
326	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
327	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
328	REOPORICD101	Char	Reoperation 1 ICD-10 code	ICD-10 code corresponding to a post-operative occurrence related to the principal operative procedure or concurrent procedure.		NULL = No Response
329	REOPERATION2	Char	Unplanned Reoperation 2	See 'Reoperation 1'	Yes; No	NULL = No Response
330	RETOR2PODAYS	Num	Days from operation to reoperation 2	Days from operation to reoperation 2		-99 = Unknown
331	REOPOR2CPT1	Char	Reoperation 2 CPT	The CPT code of the principal procedure performed during reoperation 2		NULL = No Response
332	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
333	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
334	REOPOR2ICD101	Char	Reoperation 2 ICD-10 code	ICD-10 code corresponding to a post-operative occurrence related to the principal operative procedure or concurrent procedure.		NULL = No Response
335	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	NULL = No Response
336	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	NULL = No Response
337	READMPODAYS1	Num	Days from operation to readmission 1	Days from operation to readmission 1		-99 = Unknown
338	UNPLANNEDREADMISSION1	Char	Unplanned Readmission 1	"Yes" is entered if the readmission was unplanned.	Yes; No	NULL = No Response
339	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
340	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 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	NULL = No Response

Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
340	READMSUSPREASON1 (cont.)	Char	Readmission suspected reason 1	The primary suspected reason for the readmission if it is likely related to the principal operating procedure.	Seizure Nerve Injury 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 time) Graft/Prosthesis/FF Septic Shock VT Requiring Therapy C. Diff Postoperative Systemic Sepsis Central line associated blood stream infection Other (list ICD9 code) Other (list ICD10 code)	NULL = No Response
341	READMUNRELATEDSUS1	Char	Readmission unrelated suspected reason	The primary suspected reason for the readmission if it is likely unrelated to the principal operating procedure.	Superficial Incisional SSI 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 Nerve Injury 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 time) Graft/Prosthesis/FF Septic Shock VT Requiring Therapy C. Diff Postoperative Systemic Sepsis Central line associated blood stream infection Other (list ICD9 code) Other (list ICD10 code)	NULL = No Response
342	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
343	READMUNRELICD91	Char	Readmission unrelated ICD-9 code 1	The ICD-9 code for the suspected reason if "Other" is chosen and the readmission is likely unrelated to the principal operating procedure.		NULL = No Response
344	READMRELICD101	Char	Readmission related ICD-10 code 1	The ICD-10 code for the suspected reason if "Other" is chosen and the readmission is likely related to the principal operating procedure.		NULL = No Response
345	READMUNRELICD101	Char	Readmission unrelated ICD-10 code 1	The ICD-10 code for the suspected reason if "Other" is chosen and the readmission is likely unrelated to the principal operating procedure.		NULL = No Response
346	READMISSION2	Char	Readmssion 2	See 'Readmission 1'	Yes; No	NULL = No Response

Position #	Variable Name	Data Type	Variable Label	Variable Definition	Variable Options at Entry	Comments
347	READMPODAYS2	Num	Days from operation to readmission 2	Days from operation to readmission 2		-99 = Unknown
348	UNPLANNEDREADMISSION2	Char	Unplanned Readmission 2	See 'Unplanned readmission 1'	Yes; No	NULL = No Response
349	READMRELATED2	Char	Related Readmission 2	See 'Related readmission 1'	Yes; No	NULL = No Response
350	READMSUSPREASON2	Char	Readmission suspected reason 2	See 'Readmission suspected reason 1'	See 'Readmission suspected reason 1'	NULL = No Response
351	READMUNRELATEDSUS2	Char	Readmission unrelated suspected reason 2	See 'Readmission unrelated suspected reason 1'	See 'Readmission unrelated suspected reason 1'	NULL = No Response
352	READMRELICD92	Char	Readmission related ICD-9 code 2	See 'Readmission related ICD-9 code 1'		NULL = No Response
353	READMUNRELICD92	Char	Readmission unrelated ICD-9 code 2	See 'Readmission unrelated ICD-9 code 1'		NULL = No Response
354	READMRELICD102	Char	Readmission related ICD-10 code 2	See 'Readmission related ICD-10 code 1'		NULL = No Response
355	READMUNRELICD102	Char	Readmission unrelated ICD-10 code 2	See 'Readmission unrelated ICD-10 code 1'		NULL = No Response
356	READMISSION3	Char	Readmssion 3	See 'Readmission 1'	Yes; No	NULL = No Response
357	READMPODAYS3	Num	Days from operation to readmission 3	Days from operation to readmission 3		-99 = Unknown
358	UNPLANNEDREADMISSION3	Char	Unplanned Readmission 3	See 'Unplanned readmission 1'	Yes; No	NULL = No Response
359	READMRELATED3	Char	Related Readmission 3	See 'Related readmission 1'	Yes; No	NULL = No Response
360	READMSUSPREASON3	Char	Readmission suspected reason 3	See 'Readmission suspected reason 1'	See 'Readmission suspected reason 1'	NULL = No Response
361	READMUNRELATEDSUS3	Char	Readmission unrelated suspected reason 3	See 'Readmission unrelated suspected reason 1'	See 'Readmission unrelated suspected reason 1'	NULL = No Response
362	READMRELICD93	Char	Readmission related ICD-9 code 3	See 'Readmission related ICD-9 code 1'		NULL = No Response
363	READMUNRELICD93	Char	Readmission unrelated ICD-9 code 3	See 'Readmission unrelated ICD-9 code 1'		NULL = No Response
364	READMRELICD103	Char	Readmission related ICD-10 code 3	See 'Readmission related ICD-10 code 1'		NULL = No Response
365	READMUNRELICD103	Char	Readmission unrelated ICD-10 code 3	See 'Readmission unrelated ICD-10 code 1'		NULL = No Response
366	READMISSION4	Char	Readmssion 4	See 'Readmission 1'	Yes; No	NULL = No Response
367	READMPODAYS4	Num	Days from operation to readmission 4	Days from operation to readmission 4		-99 = Unknown
368	UNPLANNEDREADMISSION4	Char	Unplanned Readmission 4	See 'Unplanned readmission 1'	Yes; No	NULL = No Response
369	READMRELATED4	Char	Related Readmission 4	See 'Related readmission 1'	Yes; No	NULL = No Response
370	READMSUSPREASON4	Char	Readmission suspected reason 4	See 'Readmission suspected reason 1'	See 'Readmission suspected reason 1'	NULL = No Response
371	READMUNRELATEDSUS4	Char	Readmission unrelated suspected reason 4	See 'Readmission unrelated suspected reason 1'	See 'Readmission unrelated suspected reason 1'	NULL = No Response
372	READMRELICD94	Char	Readmission related ICD-9 code 4	See 'Readmission related ICD-9 code 1'		NULL = No Response
373	READMUNRELICD94	Char	Readmission unrelated ICD-9 code 4	See 'Readmission unrelated ICD-9 code 1'		NULL = No Response
374	READMRELICD104	Char	Readmission related ICD-10 code 4	See 'Readmission related ICD-10 code 1'		NULL = No Response
375	READMUNRELICD104	Char	Readmission unrelated ICD-10 code 4	See 'Readmission unrelated ICD-10 code 1'		NULL = No Response
376	READMISSION5	Char	Readmssion 5	See 'Readmission 1'	Yes; No	NULL = No Response
377	READMPODAYS5	Num	Days from operation to readmission 5	Days from operation to readmission 5		-99 = Unknown
378	UNPLANNEDREADMISSION5	Char	Unplanned Readmission 5	See 'Unplanned readmission 1'	Yes; No	NULL = No Response
379	READMRELATED5	Char	Related Readmission 5	See 'Related readmission 1'	Yes; No	NULL = No Response
380	READMSUSPREASON5	Char	Readmission suspected reason 5	See 'Readmission suspected reason 1'	See 'Readmission suspected reason 1'	NULL = No Response
381	READMUNRELATEDSUS5	Char	Readmission unrelated suspected reason 5	See 'Readmission unrelated suspected reason 1'	See 'Readmission unrelated suspected reason 1'	NULL = No Response
382	READMRELICD95	Char	Readmission related ICD-9 code 5	See 'Readmission related ICD-9 code 1'		NULL = No Response
383	READMUNRELICD95	Char	Readmission unrelated ICD-9 code 5	See 'Readmission unrelated ICD-9 code 1'		NULL = No Response
384	READMRELICD105	Char	Readmission related ICD-10 code 5	See 'Readmission related ICD-10 code 1'		NULL = No Response
385	READMUNRELICD105	Char	Readmission unrelated ICD-10 code 5	See 'Readmission unrelated ICD-10 code 1'		NULL = No Response