SCOAP Pediatric Data Dictionary
Specifications for Pediatric Discharges beginning 01/01/2009

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B1) Patient initials

**Location:** Pediatric Form, B. Demographics

**Definition:** First 2 initials of last name/ First 2 initials of first name.
Example: John Smith: Last Name: SM First Name: JO
*(Historic information: Was only first initial of both names)*

**SORCE alias:**
- patlinit
- patfinit

**ARMUS Variable Name(s):**

**Field Format:** *Text*

**Value Codes:**

**Allowable Values:** two characters: A thru Z for each name

**Data Storage Type:** *Character*

**Suggested Data Source:** Admission/demographic sheet

**Abstraction Notes:** This is a required field; unable to analyze the data without this information.

**Exclusions:** None
B2) Hospital identification code

Location: Pediatric Form, B. Demographics, Question 2

Definition: Numer code assigned to each hospital by SCOAP

SORCE alias: siteid

ARMUS Variable Name(s):

Field Format: Number

Value Codes:

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: New site id numbers are assigned by FHCQ when a hospital begins participation in SCOAP

Abstraction Notes: This is a required field; unable to retrieve or analyze the data by hospital without this information. This field should be populated automatically online. Verify that it is correct at the time of data entry.

Exclusions: None
B3) Date of birth

Location: Pediatric Form, B. Demographics, Question 3

Definition: Date patient was born. This date must be earlier than current date & must be on or before the admit date. Patients age may, but should probably not exceed 18 years

SORCE alias: dobdt

ARMUS Variable Name(s):

Field Format: Date

Value Codes:

Allowable Values: mm/dd/yyyy

Data Storage Type: Date/Time

Suggested Data Source: Admission/demographic sheet

Abstraction Notes: This is a required field; must know the date of birth in order to verify that this is an adult and for potential risk adjustment. While population is generally limited to 18 years of age, some institutions may accept patients upto 21 years of age. A warning will appear if the age exceeds 18 years, but the database will accept older ages.

Exclusions: None
B4) Medical/Hospital record number *(optional)*

**Location:** Pediatric Form, B. Demographics, Question 4

**Definition:** The specific hospital record number

**SORCE alias:** medrecn

*Historic Info: variable named hosprec prior to ARMUS*

**ARMUS Variable Name(s):**

**Field Format:** Text

**Value Codes:**

**Allowable Values:** *Characters & Numbers:* Dependent on hospital

**Data Storage Type:** Character

**Suggested Data Source:** Admission/demographic sheet

**Abstraction Notes:** This is an optional field; is for hospital’s internal use only. You will want to know your hospital’s decision regarding whether or not to include this information as generation of surgeon specific reports is dependent on entering this information.

**Exclusions:** As this is totally an optional field, no entries for this data element are required.
B5) Admit date

**Location:** Pediatric Form, B. Demographics, Question 5

**Definition:** Date patient was admitted to the hospital. This date must be on or after the date of birth; on or before the discharge date; before the current date.

**SORCE alias:** admitdt

**ARMUS Variable Name(s):**

**Field Format:** Date

**Value Codes:**

**Allowable Values:** mm/dd/yyyy

**Data Storage Type:** Date/Time

**Suggested Data Source:** Admission/demographic sheet

**Abstraction Notes:** This is a required field; must know the admit date in order to calculate LOS.

**Exclusions:** None
B6) Discharge date

**Location:** Pediatric Form, B. Demographics, Question 6

**Definition:** Date patient was discharged. This date must be after the date of birth; on or after the admit date; before the current date.

**SORCE alias:** dischdt

**ARMUS Variable Name(s):**

**Field Format:** Date

**Value Codes:**

**Allowable Values:** mm/dd/yyyy

**Data Storage Type:** Date/Time

**Suggested Data Source:** Admission/demographic sheet or discharge summary

**Abstraction Notes:** This is a required field; must know the discharge date in order to calculate LOS.

**Exclusions:** None
B5/6) Length of stay

Location: Pediatric Form, B. Demographics

The data element does not appear on the hard copy of the abstraction form

Definition: Length of hospital stay is calculated from the date of admission & the date of discharge: \((\text{dischdt} - \text{admitdt})\).

SORCE alias: \textit{los} \hspace{1em} \textit{calculated length of stay}

ARMUS Variable Name(s):

Field Format: \textit{Number}

Value Codes:

Allowable Values: 0 - 999

Data Storage Type: \textit{Numeric}

Suggested Data Source: Admission/demographic sheet or discharge summary

Abstraction Notes:

Exclusions: None
B7) Age at admit

**Location:** Pediatric Form, B. Demographics; Question 7

**Definition:** Age of patient on admit date in years

**SORCE alias:** age

**ARMUS Variable Name(s):**

**Field Format:** Number

**Value Codes:**

**Allowable Values:** 0.000 – 17.999 years

**Data Storage Type:** Numeric

**Suggested Data Source:** Admission/demographic sheet or discharge summary

**Abstraction Notes:** The age will be automatically calculated when you have entered the birth date of the patient as well as the admit date. This data element is listed, not because you have to calculate the age, but because you will see this on the hard copy of the tool and in the database. If the calculated age does not appear correct there maybe a problem with either the admission date or birth date, as entered in the database. The pediatric abstraction tool is intended for cases less than 18 years old. However some patients with developmental delay or chronic illness are treated in the pediatric setting; these patients may be older than 18 years.

*(Note: 1 week ≈ 0.019 years; 6 weeks ≈ 0.115 years; 1 month ≈ 0.083 years; 3 months ≈ 0.25 years; 6 months ≈ 0.5 years)*

**Exclusions:** None. This is a required field as data analysis sometimes differentiates depending on the age of the patient and to be sure that the patient is a pediatric patient for data analysis.
B8) Gender

Location: Pediatric Form, B. Demographics, Question 8

Definition: Gender of the patient; male or female

SORCE alias: sex

ARMUS Variable Name(s):

Field Format: Multiple choice

Value Codes: 1 = male
2 = female

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: Admission/demographic sheet or discharge summary

Abstraction Notes: In case of question about gender where there has been a gender change (either via surgery and/or other treatments), answer with what the chart says the gender is with the following exception: If the gender change has been from female to male, but the ovaries remain, this patient should be coded as female.

Exclusions: None. This is a required field as data analysis sometimes differentiates males from females.
B9) Race

**Location:** Pediatric Form, B. Demographics, Question 9

**Definition:** Indicate the race of the patient. Select one from choices. If documentation indicates the patient has more than one race (e.g. Black-White or Indian-White), select the first stated listed race.

- **American Indian or Alaska Native:** A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.

- **Asian:** A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand and Vietnam.

- **Black or African American:** A person having origins in any of the black racial groups of Africa. Terms such as “Haitian” can be used in addition to “Black” or “African American”.

- **Native Hawaiian or Other Pacific Islander:** A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

- **White:** A person having origins in any of the original peoples of Europe, the Middle East or North Africa.

- **Not Available/Unknown:** If documentation does not state patient’s race, report as Not “Available/Unknown”.

**SORCE alias:** race

**ARMUS Variable Name(s):**

**Field Format:** Multiple choice

**Value Codes:**
- 1 = American Indian/Alaskan Native
- 2 = Asian
- 3 = Black/African American
- 4 = Native Hawaiian/Other Pacific Islander
- 5 = White
- 6 = NA/Unknown

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** Admission/demographic sheet or discharge summary
Abstraction Notes: For patients with more than one race, record the first listed race. The terms Hispanic and Latino are descriptions of the patient’s ethnicity, not race. If the patient’s race is documented only as Hispanic/Latino, select “White”. If the patient’s race is documented as mixed Hispanic/Latino with another race, use whatever race is listed (e.g. Black-Hispanic: select Black). Hispanic/Latino ethnicity is recorded in a separate variable.

Exclusions: None.
B10) Ethnicity

Location: Pediatric Form, B. Demographics, Question 10

Definition: Indicate the patient’s ethnicity. Document if the patient is of Hispanic ethnicity or Latino. Hispanic or Latino is defined as a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. The term, “Spanish origin” may be used in addition to “Hispanic” or “Latino”.

SORCE alias: ethnicity

ARMUS Variable Name(s):

Field Format: Multiple choice

Value Codes:
1 = Hispanic or Latino
2 = Not Hispanic nor Latino
3 = Not Available/Unknown

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: Admission/demographic sheet or discharge summary

Abstraction Notes: If the patient’s race is documented only as Hispanic/Latino, select “White” race & “Hispanic/Latino” ethnicity. If the patient’s race is documented as mixed Hispanic/Latino with another race, indicate “Hispanic/Latino” ethnicity and record race as whatever race is listed (e.g. Black-Hispanic: select Black).

Exclusions: None.
B11) Pediatric classification

**Location:** Pediatric Form, B. Demographics, Question 11

**Definition:** Indicate if patient is a Neonate/Infant or Child. Neonates are less than 6 months old. Children are 6 months old or older.

**SORCE alias:** ped_class

**ARMUS Variable Name(s):**

**Field Format:** *Multiple choice*

**Value Codes:**
- 1 = neonate
- 2 = child

**Allowable Values:**

**Data Storage Type:** *Numeric*

**Suggested Data Source:** Admission/demographic sheet or discharge summary

**Abstraction Notes:**

**Exclusions:** None. This is a required field. Subsequent data will be required or excluded based on the classification of the patient.
B12) Primary language

Location: Pediatric Form, B. Demographics, Question 10

Definition: Primary language of the parent(s); English, Spanish or other. If other, specify

SORCE alias: language
language_txt (other specified)

ARMUS Variable Name(s):

Field Format: (language) Multiple choice
(language_txt) Text or Look-up table

Value Codes: 1 = English
2 = Spanish
3 = Other

Allowable Values:

Data Storage Type: (language) Numeric
(language_txt) Character

Suggested Data Source: Nursing assessment; H&P

Abstraction Notes: The intent of this data element is to determine if there is potentially a significant communication problem. If the primary language of the parents differs, choose the primary language of the parent that is most often present when health care providers are interacting with the parent(s).

Exclusions: None
B13) Interpreter required

Location: Pediatric Form, B. Demographics, Question 13

Definition: Is an interpreter required due to the primary language of the parents or child interfering significantly with clear communication between the parents and the health care providers. No or yes

SORCE alias: interpret

Field Format: Yes/No

Value Codes: 1=Yes
2=No

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: Nursing assessment; H&P

Abstraction Notes: Indicate “yes” if the primary language of either the parent(s) or the child is such that an interpreter is required for clear communication.

Exclusions: None
B14) Admit height

Location: Pediatric Form, B. Demographics, Question 14

Definition: Height of patient in inches or cm

SORCE alias: height_na (data units & availability)
heightin
heightcm

_calculated height(cm): htcalc

ARMUS Variable Name(s):

Field Format: Multiple choice; Numbers

Value Codes: 1=English
2=Metric
3=NA (not available)

Allowable Values: (inch) 1 - 90 or (cm) 1 - 210

Data Storage Type: Numeric

Suggested Data Source: Nursing assessment; H&P

Abstraction Notes: Round rather than including a decimal. This information is especially important for the surgeries for which it is important to know the BMI, as the BMI is calculated from the height and weight.

Exclusions: None
B15) Admit weight

Location: Pediatric Form, B. Demographics, Question 15

Definition: Weight of patient in pounds or kilograms

SORCE alias: weight_na (data units & availability)
      weightlb
      weightkg
      calculated weight (kg): wtcalc

ARMUS Variable Name(s):

Field Format: Multiple choice; Numbers

Value Codes: 1=English
             2=Metric
             3=NA (not available)

Allowable Values: (lbs) 0.00 – 454.00 or (kg) 0.000 – 999.999

Data Storage Type: Numeric

Suggested Data Source: Nursing assessment; H&P

Abstraction Notes: Round to two decimal place for pounds. Round to three decimal places for kg. Remember that a 1500 gram weight is equivalent to 1.500 kilograms. The position of the decimal point is VERY important. BMI is calculated from the height and weight.

Exclusions: None
B14/15) Body Mass Index

Location: Pediatric Form, B. Demographics
The data element does not appear on the hard copy of the abstraction form

Definition: Calculated from admit height & weight: (wtcalc/(htcalc^2))*10000
Note: wtcalc = kg & htcalc = cm

SORCE alias: bmi, calculated bmi

ARMUS Variable Name(s):

Field Format: Numbers

Value Codes:

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source:

Abstraction Notes: BMI is calculated from the height and weight. If either is missing BMI will be missing.

Exclusions: None
B16) Gestational age

Location: Pediatric Form, B. Demographics, Question 16

Definition: Gestational age at birth: term. If not a full term birth, indicate gestational age in weeks. Applicable to neonates/infants only.

SORCE alias: gestterm
               gest_na (data availability)
               gestage

Field Format: (gestterm) Yes/No
              (gestage) Number

Value Codes: 1=Yes (data available)
             2=No (data not available)

Allowable Values: (gestage) 0 – 38

Data Storage Type: Numeric

Suggested Data Source: Nursing assessment; H&P

Abstraction Notes: Full term is 39 weeks or more; the record notes may refer to the number of weeks or may just indicate full term

Exclusions: Applicable only to neonates/infants.
B17) Height at birth

**Location:** Pediatric Form, B. Demographics, Question 17

**Definition:** Height at birth of patient reported in inches or cm. Applicable only to neonates/infants.

**SORCE alias:** bht_na (data units & availability)  
bhtin  
bhtcm  

*Calculated height (cm):* bhtcalc

**Field Format:** Multiple choice; Numbers

**Value Codes:**  
1=English  
2=Metric  
3=NA (not available)

**Allowable Values:**  
(inches) 0 - 30  
(cm) 0 - 75

**Data Storage Type:** Numeric

**Suggested Data Source:** Nursing assessment; H&P

**Abstraction Notes:** Round rather than including a decimal.

**Exclusions:** Applicable only to neonates/infants.
B18) Weight at birth

**Location:** Pediatric Form, B. Demographics, Question 18

**Definition:** Weight of patient at birth in lbs or kilograms. Applicable only to neonates/infants.

**SORCE alias:**
- `bwt_na` *(data units & availability)*
- `bwtlb`
- `bwtkg`

_Calculated weight (kg) bwtcalc_

**Field Format:** _Multiple choice; Numbers_

**Value Codes:**
- 1=English
- 2=Metric
- 3=NA *(not available)*

**Allowable Values:**
- (lbs) 0.00 – 15.00
- (kg) 0.000 – 10.000

**Data Storage Type:** _Numeric_

**Suggested Data Source:** Nursing assessment; H&P

**Abstraction Notes:** Round to two decimal places for pounds. Round to three decimal places for kg. Remember that a 1500 gram weight is equivalent to 1.500 kilograms. The position of the decimal point is VERY important.

**Exclusions:** Applicable only to neonates/infants.
B19) APGAR scores

Location: Pediatric Form, B. Demographics, Question 19

Definition: Apgar scores at 1 minute and at 5 minutes or NA

SORCE alias: apgar_na (data availability)
apgar1
apgar5

Field Format: Numbers

Value Codes: 1=Yes (data available)
2=No (data not available)

Allowable Values: 1-10

Data Storage Type: Numeric

Suggested Data Source: Nursing assessment; H&P

Abstraction Notes:

Exclusions: Applicable only to neonates/infants.
B20) Insurance

Location: Pediatric Form, B. Demographics, Question 20

Definition: What type of insurance does the patient have, if any

SORCE alias: *Insurance Variables (check all that apply)*

- ins_priv
- ins_mcare
- ins_mcaid
- ins_tri
- ins_ihs
- ins_va
- ins_self
- ins_unins

privatetype *(private insurance specification)*

ARMUS Variable Name(s):

Field Format: Yes/No

Multiple choice

Value Codes: *Insurance Variables*

1 = Yes
2 = No

Type of private insurance:

| 1=Regence | 6=Cigna |
| 2=Premera | 7=Uniform Medical |
| 3=First Choice | 8=United Healthcare |
| 4=Group Health | 9=Kaiser |
| 5=Aetna | 10=Other Private |

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: Admission/demographic/face sheet

Abstraction Notes: Check all that apply, regardless of whether or not the procedure in the record is covered or paid for by that insurance or health plan. If private insurance, check “private” and then indicate which private company. If have private insurance, but the specific insurance company isn’t identified, check “other”.

Exclusions: This section is optional if the hospital objects to providing this data.
B21) **Transfer from another hospital**

**Location:** Pediatric Form, B. Demographics, Question 21

**Definition:** Was this admission a transfer from another hospital. If yes, indicate whether the patient was on oxygen and/or mechanical ventilation.

**SORCE alias:**
- transfer
- transfer_oxy
- transfer_vent

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

**Value Codes:**
1 = Yes
2 = No

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** Admission/demographic sheet or H&P

**Abstraction Notes:** The intent of this data element is assist in data analysis as when the patient has been transferred from another hospital, this often means that the patient is more complex and/or has already had complications from a procedure. The transfer could also be from another hospital ER without being admitted at that hospital.

**Exclusions:** None.
B22) **Number of days patient had symptoms**

**Location:** Pediatric Form, B. Demographics, Question 22

**Definition:** Number of days the patient had symptoms prior to admission for this index surgery

**SORCE alias:** symptdays_na (data availability)  
  symptdays

**Field Format:** Yes/No; Numbers

**Value Codes:**  
1=Yes *(data available)*
2=No *(data not available)*

**Allowable Values:** 1 - 999

**Data Storage Type:** Numeric

**Suggested Data Source:** Nursing assessment; H&P

**Abstraction Notes:**

**Exclusions:** None
B23) Residence zip code

Location: Pediatric Form, B. Demographics, Question 23

Definition: Zip code of patient’s primary residence

SORCE alias: zip_na (data availability)  
zipcode

ARMUS Variable Name(s):

Field Format: Yes/No; Numbers

Value Codes: 1=Yes (data available) 
2=No (data not available)

Allowable Values: US or Canadian zip codes; either 5 digit or 10 digit

Data Storage Type: Character

Suggested Data Source: Admission/demographic sheet or discharge summary

Abstraction Notes: US or Canadian zip codes may be entered. This information is potentially important for data analysis by zip code.

Exclusions: None
C1) Maternal risk factors

Location: Pediatric Form, C. Risk Factors, Question 1

Definition: Indicate any of the listed risk factors reported in the patient’s mother: perinatal complications, gestational complications, Group B Strep, HIV, alcohol/illicit drug exposure, tobacco smoking, rubella or other. Give specifics where applicable.

SORCE alias:

<table>
<thead>
<tr>
<th>Risk Factors:</th>
<th>Specify:</th>
</tr>
</thead>
<tbody>
<tr>
<td>mrf_pericomptxt</td>
<td></td>
</tr>
<tr>
<td>mrf_gestcomptxt</td>
<td></td>
</tr>
<tr>
<td>mrf_bstrep</td>
<td></td>
</tr>
<tr>
<td>mrf_hiv</td>
<td></td>
</tr>
<tr>
<td>mrf_alcoholtxt</td>
<td></td>
</tr>
<tr>
<td>mrf_smoking</td>
<td></td>
</tr>
<tr>
<td>mrf_rubella</td>
<td></td>
</tr>
<tr>
<td>mrf_othertxt</td>
<td></td>
</tr>
</tbody>
</table>

Field Format: *Multiple choice*  
*Text or Look-up table*

Value Codes: 1 = Yes  
2 = No  
3 = NA

Allowable Values:

Data Storage Type: *Numeric*  
*Character*

Suggested Data Source: Nursing assessment; H&P

Abstraction Notes: Gestational/Perinatal complications may include diabetes mellitus, pre-eclampsia, maternal hypertension, polyhydramnios, maternal infections, birth trauma, preterm birth, nuchal cord

Exclusions: Applicable to neonate/infant cases only
C2) Recent laboratory values

Location: Pediatric Form, C. Risk Factors, Question 2

Definition: Most recent labs within 30 days or on admission: albumin, HCT, creatinine, hemoglobin, WBC, bilirubin, total and conjugated and unconjugated, PLT. If collected, report lab value.

SORCE alias:

<table>
<thead>
<tr>
<th>Lab Value</th>
<th>Data availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>albumin</td>
<td>alb_na</td>
</tr>
<tr>
<td>htc</td>
<td>hct_na</td>
</tr>
<tr>
<td>creat</td>
<td>creat_na</td>
</tr>
<tr>
<td>hgb</td>
<td>hgb_na</td>
</tr>
<tr>
<td>wbc</td>
<td>wbc_na</td>
</tr>
<tr>
<td>bilitotal</td>
<td>bilit_na</td>
</tr>
<tr>
<td>biliconj</td>
<td>bilic_na</td>
</tr>
<tr>
<td>biliunconj</td>
<td>biliu_na</td>
</tr>
<tr>
<td>pltcnt</td>
<td>pltcnt_na</td>
</tr>
</tbody>
</table>

ARMUS Variable Name(s):

Field Format: Number
Yes/No

Value Codes: 1=Yes (data available)
2=No (data not available)

Allowable Values: Albumin: 1.0-6.0 g/dl;
HCT: (neonate) 20.0 – 80.0% (child) 20.0 – 70.0%
Creatinine: 0.1 – 15.0 mg/dl;
Hgb: 10 - 20 g/dl;
Bilirubin, total: 0.0 – 15.5 mg/dl
Bilirubin, conjugated: 0.0 – 15.5 mg/dl
Bilirubin, unconjugated: 0.0 – 15.5 mg/dl
WBC: 0.500 – 30.0 10(3).
PLT: (neonate) 100 – 1,000 K/mm³ (child) 50 – 1,000 K/mm³

Data Storage Type: Numeric

Suggested Data Source: Nursing admission record, laboratory reports or H&P

Abstraction Notes: The intent of this question is to have information for risk adjustment.

Exclusions: None
C3) Current/recent medications

Location: Pediatric Form, C. Risk Factors, Question 3

Definition: Current/recent medications used within 30 days preoperatively: non-steroidal immunosuppressants, steroids, asthma meds, antiseizure (anticonvulsants) meds, anti-reflux meds, chemotherapy for cancer, antibiotics, diuretics, narcotics.

SORCE alias:
- med_immuno
- med_steroids
- med_asthma
- med_seizure
- med_reflux
- med_chemo
- med_antibio
- med_diuretic
- med_narcotic

ARMUS Variable Name(s):

Field Format: Yes/No

Value Codes: 1 = Yes
2 = No

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: Nursing admission record, medication record, or H&P

Abstraction Notes: The intent of this question is to have information for risk adjustment. Chemotherapy for cancer treatment is not considered to be an immunosuppressant medication.

Exclusions: None
C4) Home oxygen use

Location: Pediatric Form, C. Risk Factors, Question 4

Definition: Any use of oxygen use at home

SORCE alias: oxygenuse

ARMUS Variable Name(s):

Field Format: Multiple choice

Value Codes: 1 = Yes
2 = No
3 = NA

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: Nursing admission record, medication record, or H&P

Abstraction Notes: The intent of this question is to have information for risk adjustment. The emphasis is on current use; not just that they have it available or have used it in the past.

Exclusions: None
D1) Developmental delay

Location: Pediatric Form, D. Comorbidities, Question 1

Definition: Any documented developmental delay whether identified as a definitive diagnosis such as Down’s Syndrome or if the medical record references a general developmental delay that has no further specific diagnosis.

SORCE alias: devdelay

ARMUS Variable Name(s):

Field Format: Multiple choice

Value Codes: 1=Yes  
2=No  
3=Suspected

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: H&P, nursing assessment, Emergency Room notes, anesthesia record

Abstraction Notes: Look for any documentation of developmental delay.

Exclusions: None
D2) Congenital cardiac defect

Location: Pediatric Form, D. Comorbidities, Question 2

Definition: Any documented congenital cardiac defect. Specify AV canal, VSD, Tetrology or other

SORCE alias:
- cardiacdef
- cardeftype
- cardeftypetxt (other specified)

ARMUS Variable Name(s):

Field Format: Multiple choice
- Text or Look-up table

Value Codes:

<table>
<thead>
<tr>
<th>cardiacdef</th>
<th>cardeftype</th>
</tr>
</thead>
<tbody>
<tr>
<td>1=Yes</td>
<td>1=AV canal</td>
</tr>
<tr>
<td>2=No</td>
<td>2=VSD</td>
</tr>
<tr>
<td>3=Suspected</td>
<td>3=Tetrology</td>
</tr>
<tr>
<td></td>
<td>4=Other</td>
</tr>
</tbody>
</table>

Allowable Values:

Data Storage Type: (cardiacdef, cardeftype) Numeric
- (cardeftxt) Character

Suggested Data Source: H&P, nursing assessment, Emergency Room notes, anesthesia record

Abstraction Notes: This should be documented clearly in the medical record.

Exclusions: None
D3) Chronic lung disease

Location: Pediatric Form, D. Comorbidities, Question 3

Definition: Any type of chronic lung disease such as asthma, reactive airway disease BPD (Bronchopulmonary dysplasia), cystic fibrosis, recurrent aspiration pneumonia. If yes, check the best response of no meds, oxygen, diuretics or other; if other; specify

SORCE alias: chroniclung
            clungdmeds
            clungdmedtxt (other specified)

ARMUS Variable Name(s):

Field Format: Multiple Choice
              Text or Look-up table

Value Codes:

<table>
<thead>
<tr>
<th>chroniclung</th>
<th>clungdmeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1=Yes</td>
<td>1=No meds</td>
</tr>
<tr>
<td>2=No</td>
<td>2=O₂</td>
</tr>
<tr>
<td>3=Suspected</td>
<td>3=Diuretics</td>
</tr>
<tr>
<td></td>
<td>4=Other</td>
</tr>
</tbody>
</table>

Allowable Values:

Data Storage Type: (chroniclung, clungdmeds) Numeric
                  (clungdtext) Character

Suggested Data Source: H&P, nursing assessment, Emergency Room notes, anesthesia record

Abstraction Notes:

Exclusions: None
D4) Asthma

Location: Pediatric Form, D. Comorbidities, Question 4

Definition: Any mention of asthma in the medical record on admit, if yes, select the best response to the individual medications used in treatment: no meds, steroid use; inhalers; both steroids & inhalers, other treatment (not including steroids & inhalers). Please see Appendix A for a list of suggested medications.

SORCE alias: asthma
asth_nomded
asth_steroid
asth_inhaler
asth_othertx

ARMUS Variable Name(s):

Field Format: Multiple Choice; Yes/No

Value Codes:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>asthma</td>
<td>Medications</td>
</tr>
<tr>
<td>1=Yes</td>
<td>1=Yes</td>
</tr>
<tr>
<td>2=No</td>
<td>2=No</td>
</tr>
<tr>
<td>3=Suspected</td>
<td></td>
</tr>
</tbody>
</table>

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: H&P, nursing assessment, Emergency Room notes, anesthesia record

Abstraction Notes: Route of steroid may be IV, PO, or inhaled.

Exclusions: None
D5) **History of sleep apnea**

**Location:** Pediatric Form, D. Comorbidities, Question 5

**Definition:** Any mention of sleep apnea in the medical record on admit, if yes, does the patient use a CPAP (continuous positive airway pressure), BiPAP (bi-level positive airway pressure), or APAP (auto-titrating CPAP) machine. Also indicate if tonsillectomy was done within 30 days of admission or if there is no treatment.

**SORCE alias:** slpapnea

**ARMUS Variable Name(s):**

**Field Format:** *Multiple choice*

**Value Codes:**

<table>
<thead>
<tr>
<th>slpapnea</th>
<th>cpap</th>
</tr>
</thead>
<tbody>
<tr>
<td>1=Yes</td>
<td>1=No treatment</td>
</tr>
<tr>
<td>2=No</td>
<td>2=CPAP</td>
</tr>
<tr>
<td>3=Suspected</td>
<td>3=Tonsillectomy</td>
</tr>
</tbody>
</table>

**Allowable Values:**

**Data Storage Type:** *Numeric*

**Suggested Data Source:** H&P, nursing assessment, Emergency Room notes, anesthesia record

**Abstraction Notes:**

**Exclusions:** None
D6) Genetic defect

Location: Pediatric Form, D. Comorbidities, Question 6

Definition: A genetic defect that is identified as such in the medical record. If yes, Trisomy 21, Trisomy 18 or other; if other, specify

SORCE alias
- genedef
- genedeftype
- genedeftypetxt (other specified)

ARMUS Variable Name(s):
Field Format: Multiple Choice
Text

Value Codes:

<table>
<thead>
<tr>
<th>genedef</th>
<th>genedeftype</th>
</tr>
</thead>
<tbody>
<tr>
<td>1=Yes</td>
<td>1=Trisomy 21</td>
</tr>
<tr>
<td>2=No</td>
<td>2=Trisomy 18</td>
</tr>
<tr>
<td>3=Suspected</td>
<td>3=Other</td>
</tr>
</tbody>
</table>

Allowable Values:

Data Storage Type: (genedef, genedeftype) Numeric
(genedeftxt) Character

Suggested Data Source: H&P, nursing assessment, Emergency Room notes, anesthesia record

Abstraction Notes: Check all that apply. Note that there are many trisomy genetic defects and other genetic defects such as Prader-Willi, and Fragile X

Exclusions: None
D7) GERD

Location: Pediatric Form, D. Comorbidities, Question 7

Definition:  (from AAP)
  - Gastroesophageal reflux (GER): the retrograde passage of gastric contents into the esophagus
  - GER disease (GERD): symptoms or complications of GER

Clinical manifestations of gerd in children:
  - Vomiting • Abdominal or substernal pain • Poor weight gain • Esophagitis
  - Dysphagia • Respiratory disorders

Red flags in infants:
  - Bilious vomiting • Hematemesis

SORCE alias: gerd

ARMUS Variable Name(s):

Field Format: Multiple choice

Value Codes:  
1=Yes;  
2=No  
3=Suspected

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: H&P, nursing assessment, Emergency Room notes

Abstraction Notes:.

Exclusions: None
D8) Multiple birth

Location: Pediatric Form, D. Comorbidities, Question 8

Definition: Twin, triplet or greater number of babies born at the same time
If yes, indicate twin, triplet or greater number; if greater number; specify

SORCE alias
multiple
multitype
multinum (# greater than 3)

ARMUS Variable Name(s):

Field Format: Multiple choice
Number

Value Codes:

<table>
<thead>
<tr>
<th></th>
<th>multiple</th>
<th>multitype</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>=Yes</td>
<td>=Twin</td>
</tr>
<tr>
<td>2</td>
<td>=No</td>
<td>=Triple</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3=Greater</td>
</tr>
</tbody>
</table>

Allowable Values: (multinum) 4 - 10

Data Storage Type: (multiple, multitype, multinum) Numeric

Suggested Data Source: H&P, nursing assessment, Emergency Room notes, anesthesia record

Abstraction Notes: H&P, Nursing assessment, ER record

Exclusions: None
D9) Other comorbidity

Location: Pediatric Form, D. Comorbidities, Question 9

Definition: Other comorbidities not previously specified; list as other

SORCE alias: comorbidoth
    comorbidtxt (other specify)

ARMUS Variable Name(s):

Field Format: Yes/No

Value Codes: 1 = Yes
    2 = No

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: H&P, nursing assessment, Emergency Room notes, anesthesia record

Abstraction Notes:

Exclusions: None
E1) Primary Surgeon

Location: Pediatric Form, E. Operative, Question 1

Definition: This is an optional field that individual hospitals may use, if they choose, to identify the primary surgeon for each case. **Do not submit names;** only ID numbers as this information is to be used for specific surgeon data reports with the name of the surgeon known only to the hospital.

SORCE alias: surgeon

ARMUS Variable Name(s):

Field Format: *Text*

Value Codes: Determined by individual hospitals

Allowable Values: Codes only; no names

Data Storage Type: *Character*

Suggested Data Source: Internal physician ID#

Abstraction Notes: Consistency within site is essential for proper use of this field: If letters are used in the code, be sure that there is no distinction between upper and lower case. For example, M1234 and m1234 will be interpreted as the same id number.

Exclusions: This is an optional field, but if your hospital wants this information, there are no exclusions.
E2) Appendectomy

**Location:** Pediatric Form, E. Operative, Question 2

**Definition:** Indicate that the SCOAP eligible procedure is a non-elective appendectomy.

*Note*  Enter information for only one procedure type: Appendectomy, Gastric or Colon. An affirmative response (Yes) to either question 2, 3, or 4 will insure the appropriate questions are available for data entry. The other two procedure questions should be given a negative response (No).

**SORCE alias:** appendectomy

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

**Value Codes:**

1=Yes
2=No

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** H&P, OR record, OR log, anesthesia record, discharge record

**Abstraction Notes:** Extremely important that procedure is checked. Other data collected, recorded and reported is dependant on the procedure group reported.

**Exclusions**
E2.1) Indication: Appendicitis

**Location:** Pediatric Form, E. Operative, Question 2.1

**Definition:** Non-elective procedure only done in the context of an acute condition; procedure is not described as an elective, planned, interval, or incidental case.

**SORCE alias:** ind_appy

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

**Value Codes:**

1=Yes
2=No

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** H&P, OR record, OR log, anesthesia record, discharge record

**Abstraction Notes:** Extremely important that an operative procedure is checked. Cases are included or excluded from appropriate reports based on this element and this element is also used in many calculations for reporting.

**Exclusions:** Appendectomies that are not the primary procedure (often referred to as incidental), or are categorized as planned, interval, or are done on an elective basis. For example, a patient who was taken to the OR for another procedure and during the procedure also had her appendix removed is considered to have had an incidental appendectomy and is therefore NOT considered to be a SCOAP case.

Please note that when pulling appendectomy case lists by the SCOAP defined ICD-9 or CPT codes, all appendectomies performed at your hospital will likely appear on the list. Each abstractor is to use their judgment as to whether the case is appropriate to submit to SCOAP based on the guidance in this definition.
E2.2) Indication: Other Appendectomy

Location: Pediatric Form, E. Operative, Question 2.2

Definition: Non-elective procedure only done in the context of an acute condition; procedure was not described as an elective, planned, interval, or incidental case.

SORCE alias: ind_appoth
ind_apptxt (other specified)

ARMUS Variable Name(s):

Field Format: Yes/No
Text

Value Codes: 1=Yes
2=No

Allowable Values:

Data Storage Type: (ind_appoth) Numeric;
(ind_apptxt) Character

Suggested Data Source: H&P, OP record, OR log, anesthesia record, discharge record

Abstraction Notes: Extremely important that an operative procedure is checked. Cases are included or excluded from appropriate reports based on this element and this element is also used in many calculations for reporting. This option should be extremely rare.

Exclusions: Appendectomies that are not the primary procedure (often referred to as incidental), or are categorized as planned, interval, or are done on an elective basis. For example, a patient who was taken to the OR for another surgery, and during the procedure also had her appendix removed is considered to have had an incidental appendectomy and is therefore NOT considered to be a SCOAP case.

Please note that when pulling appendectomy case lists by the SCOAP defined ICD-9 or CPT codes, all appendectomies performed at your hospital will likely appear on the list. Each abstractor is to use their judgment as to whether the case is appropriate to submit to SCOAP based on the guidance in this definition.
E3) Gastric

Location: Pediatric Form, E. Operative, Question 3

Definition: Indicate that the SCOAP eligible procedure is a gastric procedure

Note Enter information for only one procedure type: Appendectomy, Gastric or Colon. An affirmative response (Yes) to either question 2, 3, or 4 will insure the appropriate questions are available for data entry. The other two procedure questions should be given a negative response (No).

SORCE alias: gastric

ARMUS Variable Name(s):

Field Format: Yes/No

Value Codes: 1=Yes 2=No

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: H&P, OR record, OR log, anesthesia record, discharge record

Abstraction Notes: Extremely important that procedure is checked. Other data collected, recorded and reported is dependant on the procedure group reported.

Exclusions
E3.1) Indication: Emesis

Location: Pediatric Form, E. Operative, Question 3.1

Definition: Frequent, painful, or forceful vomiting that has caused symptoms such as failure to gain weight, esophogitis, or respiratory problems

SORCE alias: ind_emesis

ARMUS Variable Name(s):

Field Format: Yes/No

Value Codes: 1=Yes 2=No

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: OR record, OR log, anesthesia record, discharge record

Abstraction Notes: Extremely important that an operative procedure is checked. Cases are included or excluded from appropriate reports based on this element and this element is also used in many calculations for reporting.

Exclusions: None
E3.2) Indication: Failure to thrive

Location: Pediatric Form, E. Operative, Question 3.2

Definition: Failure to thrive is a description applied to children whose current weight or rate of weight gain is significantly below that of other children of similar age and sex. Generally these children are not following an expected growth curve, especially in terms of weight for length.

SORCE alias: ind_failure

ARMUS Variable Name(s):

Field Format: Yes/No

Value Codes:
1=Yes
2=No

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: OR record, OR log, anesthesia record, discharge record

Abstraction Notes: Extremely important that an operative procedure is checked. Cases are included or excluded from appropriate reports based on this element and this element is also used in many calculations for reporting.

Exclusions: None
E3.3) **Indication: GERD**

**Location:** Pediatric Form, E. Operative, Question 3.3

**Definition:** *(from AAP)*
- *Gastroesophageal reflux* (GER): the retrograde passage of gastric contents into the esophagus
- *GER disease* (GERD): symptoms or complications of GER

**Clinical manifestations of gerd in children:**
- Vomiting • Abdominal or substernal pain • Poor weight gain • Esophagitis
- Dysphagia • Respiratory disorders

**Red flags in infants:**
- Bilious vomiting • Hematemesis

**SOURCE alias:** ind_gerd

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

**Value Codes:**

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
</tr>
</tbody>
</table>

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** OR record, OR log, anesthesia record, discharge record

**Abstraction Notes:** Extremely important that an operative procedure is checked. Cases are included or excluded from appropriate reports based on this element and this element is also used in many calculations for reporting.

**Exclusions:** None
E3.4) Indication: Hypertrophic Pyloric Stenosis

**Location:** Pediatric Form, E. Operative, Question 3.4

**Definition:** Pyloric stenosis is a narrowing of the pylorus, the opening from the stomach into the small intestine. The true cause of pyloric stenosis is unknown. It is believed to begin as the overworked muscle around the outside of the pyloric opening at the bottom of the stomach grows too thick. This enlarged muscle blocks the passage of food from the stomach through the pylorus into the downstream intestine. After the operation, the pyloric muscle becomes completely normal.

**SORCE alias:** ind_hps

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

**Value Codes:**

1=Yes
2=No

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** OR record, OR log, anesthesia record, discharge record

**Abstraction Notes:** Extremely important that an operative procedure is checked. Cases are included or excluded from appropriate reports based on this element and this element is also used in many calculations for reporting.

**Exclusions:** None
E3.5) **Indication: Pulmonary complications**

**Location:** Pediatric Form, E. Operative, Question 3.5

**Definition:** Pulmonary complications such as asthma, aspiration pneumonia, apnea, reactive airway disease or acute life threatening events can be associated with gastroesophageal reflux. If yes, specify type.

**SORCE alias:**
- ind_pulmonary
- ind_pulmtxt *(specify)*

**ARMUS Variable Name(s):**

**Field Format:** Yes/No  
Text

**Value Codes:**
- 1=Yes
- 2=No

**Allowable Values:**

**Data Storage Type:** Numeric; Character

**Suggested Data Source:** OR record, OR log, anesthesia record, discharge record

**Abstraction Notes:** Extremely important that an operative procedure is checked. Cases are included or excluded from appropriate reports based on this element and this element is also used in many calculations for reporting.

**Exclusions:** None
E3.6) Indication: Gastric Surgery – Other

**Location:** Pediatric Form, E. Operative, Question 3.6

**Definition:** Gastric procedures which are performed for reasons other than those listed as options

**SORCE alias:**
- `ind_gasoth`
- `ind_gastxt` *(other specified)*

**ARMUS Variable Name(s):**

**Field Format:** *Yes/No*

```
Text
```

**Value Codes:**
- 1=Yes
- 2=No

**Allowable Values:**

**Data Storage Type:** Numeric; Character

**Suggested Data Source:** OR record, OR log, anesthesia record, discharge record

**Abstraction Notes:** Extremely important that an operative procedure is checked. Cases are included or excluded from appropriate reports based on this element and this element is also used in many calculations for reporting.

**Exclusions:** None
E4) Colon

**Location:** Pediatric Form, E. Operative, Question 4

**Definition:** Indicate that the SCOAP eligible procedure is a colon/rectal operation

*Note*  Enter information for only one procedure type: Appendectomy, Gastric or Colon. An affirmative response (Yes) to either question 2, 3, or 4 will insure the appropriate questions are available for data entry. The other two procedure questions should be given a negative response (No).

**SORCE alias:** colonrectal

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

**Value Codes:**
1=Yes
2=No

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** H&P, OR record, OR log, anesthesia record, discharge record

**Abstraction Notes:** Extremely important that procedure is checked. Other data collected, recorded and reported is dependant on the procedure group reported.

**Exclusions**
E4.1) Indication: NEC

**Location:** Pediatric Form, E. Operative, Question 4.1

**Definition:** Necrotizing enterocolitis (NEC) is a disease of variable magnitude in which anywhere from a short segment to the entire GI tract dies due to ischemic necrosis. NEC occurs in approximately 25,000 babies per year. Despite modern medicine infants with the most serious form still have a one in four chance of dying. NEC is the most serious and frequent stomach and intestinal (gastrointestinal, GI) problem of low-birth-weight infants. The result of dramatic improvements in the management of the lung and nutritional needs of premature infants has improved the immediate survival of the infants so now they are living longer and, thus, have a greater chance of developing NEC.

For infants weighing less than about 3 pounds (1500 grams), the chance of developing NEC increases to approximately 1 in 18 and accounts for 1/7th of all deaths occurring after 1 week of life. The major cause for these deaths is overwhelming infection that the infants cannot fight off.

**Why does NEC occur?** Despite extensive study, the cause of NEC is uncertain. There are likely to be many causes, but a lack of blood flow to the intestine and infection are probably critical to the development of NEC. Low blood pressure, decreased blood volume, or decreased oxygen in the blood at birth, have been suggested as possible causes.

More recent studies indicate that there are overall two important factors in the development of NEC: (1) decreased blood flow to the intestine caused by something, probably bacteria, and (2) a vulnerable patient, which most often is a premature infant.

**SORCE alias:** ind_nec

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

**Value Codes:**

- 1=Yes
- 2=No

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** OR record, OR log, anesthesia record, discharge record
Abstraction Notes: Extremely important that an operative procedure is checked. Cases are included or excluded from appropriate reports based on this element and this element is also used in many calculations for reporting.

Exclusions: None
E4.2) Indication: Stricture

Location: Pediatric Form, E. Operative, Question 4.2

Definition: a fixed narrowing of colon usually caused by an earlier ischemic event – most commonly Necrotizing enterocolitis.

SORCE alias: ind_strict

ARMUS Variable Name(s):

Field Format: Yes/No

Value Codes: 1=Yes 2=No

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: OP record, OR log, anesthesia record, discharge record

Abstraction Notes: Extremely important that an operative procedure is checked. Cases are included or excluded from appropriate reports based on this element and this element is also used in many calculations for reporting.

Exclusions: None
E4.3) Indication: Volvulus

Location: Pediatric Form, E. Operative, Question 4.3

Definition: Volvulus is a type of intestinal obstruction that involves twisting of the colon. The condition is sometimes referred to as a mechanical obstruction meaning that the intestine is physically either partial or completely blocked. Volvulus most commonly occurs in the small intestine but does occur in the colon about 15% of the time.

SORCE alias: ind_volv

ARMUS Variable Name(s):

Field Format: Yes/No

Value Codes: 1=Yes;2=No

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: OP record, OR log, anesthesia record, discharge record

Abstraction Notes: Extremely important that an operative procedure is checked. Cases are included or excluded from appropriate reports based on this element and this element is also used in many calculations for reporting.

Exclusions: None
E4.4) Indication: Ischemic Colon

Location: Pediatric Form, E. Operative, Question 4.4

Definition: Ischemic colitis is when part of the colon becomes inflamed and injured usually due to blood clots in the arteries leading to the colon. The cause is usually impaired blood flow to the colon which can lead to permanent colon damage. Chronic ischemic colitis is usually associated with the build-up of fatty deposits (atherosclerosis), but it can also be related to diabetes, a hernia, colon cancer or radiation to the abdomen. Less often, it can be caused by medications such as NSAIDs, hormone replacement therapy, antipsychotic drugs, or blood pressure pills. The term necrotic colon may be used instead of ischemic colon.

SORCE alias: ind_isch

ARMUS Variable Name(s):

Field Format: Yes/No

Value Codes:

1 = Yes
2 = No

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: OR record, OR log, anesthesia record, discharge record

Abstraction Notes: Extremely important that an operative procedure is checked. Cases are included or excluded from appropriate reports based on this element and this element is also used in many calculations for reporting.

Exclusions: None
E4.5) **Indication: Anorectal Malformation**

**Location:** Pediatric Form, E. Operative, Question 4.5

**Definition:** Anorectal malformation; Anal atresia; Imperforate anus.

Imperforate anus is congenital (present from birth) defect in which the opening to the anus is missing or blocked. The anus is the opening to the rectum through which stools leave the body.

The most common anatomic abnormality in males – imperforate anus with rectobulbarurethral fistula.

The most common anatomic abnormality in females – rectovestibular fistula (fistula from the rectum to the vestibule, outside of the vagina).

Imperforate anus with rectoperineal fistula (fistula from the rectum to the skin, but outside of the anal sphincter complex).

Cloacal anomaly – common channel emptying urethra, vagina, and rectum.
Similar to the anomaly in the male, rectoperineal fistula with a connection between the rectum and the skin, but outside of the anal sphincter complex.

**Causes**
Imperforate anus may occur in several forms. The rectum may end in a blind pouch that does not connect with the colon. Or, it may have openings to the urethra, bladder, base of penis or scrotum in boys, or vagina/vaginal vestibule in girls. A condition of stenosis (narrowing) of the anus or absence of the anus may be present.
The problem is caused by abnormal development of the fetus, and many forms of imperforate anus are associated with other birth defects. It is a relatively common condition that occurs in about 1 out of 5,000 infants.

**Symptoms**
- Anal opening very near the vaginal opening in girls
- Missing or misplaced opening to the anus
- No passage of first stool within 24 - 48 hours after birth
- Stool passes out of the vagina/vestibule, base of penis, scrotum, or urethra
- Swollen belly area

**SORCE alias:** ind_anorectal

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

**Value Codes:**
1=Yes
2=No

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** OR record, OR log, anesthesia record, discharge record
Abstraction Notes: Extremely important that an operative procedure is checked. Cases are included or excluded from appropriate reports based on this element and this element is also used in many calculations for reporting.

Exclusions: None
E4.6) **Indication: Cancer of the Colon**

**Location:** Adult Form, E. Operative, Question 4.6

**Definition:** Procedure done for treatment for cancers of the colon or large intestine, which is the lower part of the digestive system. Most colon cancers begin as small, benign clumps of cells called adenomatous polyps. Over time these polyps become colon cancers.

**SORCE alias:** ind_cancer

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

**Value Codes:**
1=Yes
2=No

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** OR record, OR log, anesthesia record, discharge record

**Abstraction Notes:** Extremely important that an operative procedure is checked. Cases are included or excluded from appropriate reports based on this element and this element is also used in many calculations for reporting.

**Exclusions:** None

During colectomy surgery for colon cancer, the cancer and nearby tissue is removed and the remaining sections of colon are rejoined (anastomosis).

During a colostomy, the surgeon removes the cancer and surrounding tissue then creates an opening (stoma) in the abdomen through which waste can leave the body. Colostomy can be permanent or temporary depending on the specific situation.
E4.7) Indication: Ulcerative Colitis

Location: Adult Form, E. Operative, Question 4.7

Definition: Ulcerative colitis is an inflammatory bowel disease that causes chronic inflammation of the digestive tract; the innermost lining of the colon and rectum are usually the most effected. Surgery usually means ultimately removing the entire colon and rectum which is called a total abdominal proctocolectomy. This operation can occur in 1, 2, or 3 stages.

In the three stage procedure:
Step 1: Remove the abdominal colon, leaving the rectum intact, and perform a diverting ileostomy.
Step 2: Takedown the ileostomy, remove the remaining rectum, reconstruct the “reservoir” by creating a “J” or “S” pouch, perfoming an ileo-anal anastomosis between the pouch and the anus, and protect the reconstruction with another diverting ileostomy.
Step 3: takedown the ileostomy.

The 2 stage procedure combines step 1 and 2. The 1 stage procedure combines all three ie no protective diverting ileostomy is performed.

Illustrations depict the reconstruction by creating an “S” or “J” pouch from ileum, and suturing this to the anus.

SORCE alias: ind_ulc

ARMUS Variable Name(s):
Field Format: Yes/No

Value Codes:  
1=Yes  
2=No

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: OR record, OR log, anesthesia record, discharge record

Abstraction Notes: Extremely important that an operative procedure is checked. Cases are included or excluded from appropriate reports based on this element and this element is also used in many calculations for reporting.

Exclusions: None
E4.8) **Indication: Crohn’s Disease**

**Location:** Adult Form, E. Operative, Question 4.8

**Definition:** Crohn’s disease is a type of inflammatory bowel disease in which the lining of the digestive tract becomes inflamed. The inflammation often spreads deep into the layers of affected tissue which is both painful and debilitating to the patient. Surgery is only a temporary measure but can often provide the patient with years of remission. The surgeon will remove the damaged portion of the colon and reconnect the healthy sections. Sometimes the surgeon will also close fistulas or drain abscesses.

**SORCE alias:** ind_crohns

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

**Value Codes:**

1=Yes
2=No

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** OR record, OR log, anesthesia record, discharge record

**Abstraction Notes:** Extremely important that an operative procedure is checked. Cases are included or excluded from appropriate reports based on this element and this element is also used in many calculations for reporting.

**Exclusions:** None
E4.9) Indication: Perforation

**Location:** Pediatric Form, E. Operative, Question 4.9

**Definition:** Perforation of the GI tract is defined as the complete penetration of the wall of the stomach, small intestine or large bowel which results in the leak of intestinal contents into the abdominal cavity. Perforation is always treated as an emergent situation and usually an exploratory laparotomy will be performed to close the defect and a peritoneal wash will be performed. The patient will be treated aggressively with antibiotics, IV fluids, and bowel rest.

**SORCE alias:** ind_perf

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

**Value Codes:**
- 1=Yes
- 2=No

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** OR record, OR log, anesthesia record, discharge record

**Abstraction Notes:** Extremely important that an operative procedure is checked. Cases are included or excluded from appropriate reports based on this element and this element is also used in many calculations for reporting.

**Exclusions:** None
E4.10) **Indication: Hirshsprungs Disease**

**Location:** Pediatric Form, E. Operative, Question 4.10

**Definition:** Normal intestinal motility (the ability for the intestine to move food along the intestinal tract and allow digestion) depends on a coordinated contraction wave that pushes the nutrients down stream from mouth to anus. Patients with Hirschsprung's disease lack normal motility in the segment of bowel that has the Hirschsprung's. This results in a clinical picture that resembles either bowel obstruction, particularly in a newborn baby, or chronic constipation in older children.

**SORCE alias:** ind_hirsch

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

**Value Codes:**

1=Yes  
2=No

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** OP record, OR log, anesthesia record, discharge record

**Abstraction Notes:** Extremely important that an operative procedure is checked. Cases are included or excluded from appropriate reports based on this element and this element is also used in many calculations for reporting.

**Exclusions:** None
E4.11) Indication: Polyp disease (e.g. FAP)

**Location:** Pediatric Form, E. Operative, Question 4.11

**Definition:** Polyps are small clumps of cells that form on the colon lining. The vast majority are harmless, but some may become cancerous over time. They can cause rectal bleeding, a change in bowel habits and abdominal pain, but most do not cause symptoms so regular screening is recommended for early detection and removal. Most can be removed during a colonoscopy, but polyps that are too large, too numerous, or cannot be reached to be removed during the colonoscopy must be removed surgically. Children with Familial Adenomatous Polyposis are at high risk for colon cancer, and therefore often undergo total abdominal proctocolectomy.

**SORCE alias:** ind_polyp

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

**Value Codes:**

1=Yes
2=No

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** OR record, OR log, anesthesia record, discharge record

**Abstraction Notes:** Extremely important that an operative procedure is checked. Cases are included or excluded from appropriate reports based on this element and this element is also used in many calculations for reporting.

**Exclusions:** None
E4.12) **Indication: Rectal Prolapse**

**Location:** Pediatric Form, E. Operative, Question 4.12

**Definition:** Rectal Prolapse (rectum slips or falls out of place) occurs when the muscles and ligaments that hold the rectum firmly in place weaken due to age, and/or long-term constipation. Rarely, large hemorrhoids may cause rectal prolapse. Rectal prolapse can be partial, meaning that only the inner lining of the rectum protrudes from the anus. In the later stages, large portions of the rectum protrude from the anus. Corrective surgery may be done through an abdominal or perineal approach.

**SORCE alias:** ind_prolap

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

**Value Codes:**

1=Yes
2=No

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** OR record, OR log, anesthesia record, discharge record

**Abstraction Notes:** Extremely important that an operative procedure is checked. Cases are included or excluded from appropriate reports based on this element and this element is also used in many calculations for reporting.

**Exclusions:** None
E4.13) Indication: Other

Location: Pediatric Form, E. Operative, Question 4.13

Definition: Any colon surgery performed for a reason other than those listed.

SORCE alias: ind_coloth
            ind_coltxt (other specified)

ARMUS Variable Name(s):

Field Format: Yes/No
              Text

Value Codes:  1=Yes
              2=No

Allowable Values:

Data Storage Type: Numeric; Character

Suggested Data Source: OR record, OR log, anesthesia record, discharge record

Abstraction Notes: Extremely important that an operative procedure is checked. Cases are included or excluded from appropriate reports based on this element and this element is also used in many calculations for reporting.

Exclusions: None
F1) Time of first incision

Location: Pediatric Form, F. Intra Operative, Question 1

Definition: Use 24-hour clock to indicate the time of the first incision.

SORCE alias: incis_na (time not available) incistime

ARMUS Variable Name(s):

Field Format: Yes/No Time (14:00 equals 2:00 p.m.)

Value Codes: 1=Yes (data available) 2=No (data not available)

Allowable Values: 00:00 – 23:59

Data Storage Type: Date/Time ; Numeric

Suggested Data Source: Anesthesia record, OR log

Abstraction Notes: If both the anesthesia start time and the operation start time are listed, use the operation start time. Select NA if this information is not available.

Exclusions: None
F2) In-room close time

Location: Pediatric Form, F. Intra Operative, Question 2

Definition: Use 24-hour clock to indicate the time of incision closure in the OR.

SOURCE alias: close_na (time not available)  
closetime

ARMUS Variable Name(s):

Field Format: Yes/No  
Time (14:00 equals 2:00 p.m.)

Value Codes: 1=Yes (data available)  
2=No (data not available)

Allowable Values: 00:00 – 23:59

Data Storage Type: Numeric; Date/Time

Suggested Data Source: Anesthesia record, OR log

Abstraction Notes: If both the anesthesia end time and the operation end time are listed, use the operation end time. Select NA if this information is not available.

Exclusions: None
F3) Date of surgery

Location: Pediatric Form, F. Intra Operative, Question 3

Definition: Indicate the date on which the operation began. This date must be on or after the date of birth; on or before the date of discharge.

SORCE alias: surgdt

ARMUS Variable Name(s):

Field Format: Date

Value Codes:

Allowable Values: mm/dd/yyyy

Data Storage Type: Date/Time

Suggested Data Source: Anesthesia record, OR log

Abstraction Notes: This information is important as is used in data analysis for several metrics.

Exclusions: None
F4) In-room close date

Location: Pediatric Form, F. Intra Operative, Question 4

Definition: Indicate the date on which the operation ended. This date must be on or after the surgery date; on or before the discharge date.

SORCE alias: closdt

ARMUS Variable Name(s):

Field Format: Date

Value Codes:

Allowable Values: mm/dd/yyyy

Data Storage Type: Date/Time

Suggested Data Source: Anesthesia record, OR log

Abstraction Notes: This information is important as is used in data analysis for several metrics.

Exclusions: None
F5) Surgical approach

Location: Pediatric Form, F. Intra Operative, Question 5

Definition: What was the method of the surgical procedure?
- **Laparoscopic** means that the procedure was done entirely through the vision of the laparoscope usually utilizing several small incisions and trocars
- **Laparoscopic converted to open** means that after the surgeon began the operation an unexpected complication arose that made it necessary to open the abdomen
- **Laparoscopic, hand-assisted** means that an additional incision was made that is so that the surgeon’s hand could be inserted into the abdomen to assist the operation
- **Open** means that there was one incision and no lap ports were used

SORCE alias: surgproc

ARMUS Variable Name(s):

Field Format: *Multiple choice*

Value Codes: 1=Laparoscopic
2=Lap converted to open
3=Lap, hand-assisted
4=Open

Allowable Values:

Data Storage Type: *Numeric*

Suggested Data Source: Operative record; OR log

Abstraction Notes: Unless the surgeon indicates that the laparoscopic surgery was hand assisted, indicate that the approach was laparoscopic. The use of instruments through an additional incision does not mean the approach was “laparoscopic, hand assisted”. Insertion of a hand is usually done to further explore or to assist with removal of larger than expected tissue.

Exclusions: None
F6) ASA class

Location: Pediatric Form, F. Intra Operative, Question 6

Definition: The American Association of Anesthesiologists (ASA) score subjectively categorizes patients into five subgroups by preoperative physical fitness. It was devised in 1941 by the ASA as a statistical tool for retrospective analysis of hospital records. ASA classification makes no adjustment for age, sex, weight, pregnancy, nature of the planned surgery, skill of the anesthesiologist or surgeon, or the degree of pre-theatre preparation or facilities for postoperative care.

<table>
<thead>
<tr>
<th>Class</th>
<th>Physical status</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>A completely healthy patient</td>
<td>A fit patient with an inguinal hernia</td>
</tr>
<tr>
<td>II</td>
<td>A patient with mild systemic disease</td>
<td>Essential hypertension, mild diabetes without end organ damage</td>
</tr>
<tr>
<td>III</td>
<td>A patient with severe systemic disease that is not incapacitating</td>
<td>Angina, moderate to severe COPD</td>
</tr>
<tr>
<td>IV</td>
<td>A patient with incapacitating disease that is a constant threat to life</td>
<td>Advanced COPD, cardiac failure</td>
</tr>
<tr>
<td>V</td>
<td>A moribund patient who is not expected to live 24 hours with or without surgery</td>
<td>Ruptured aortic aneurysm, massive pulmonary embolism</td>
</tr>
<tr>
<td>E</td>
<td>Emergency case</td>
<td></td>
</tr>
</tbody>
</table>

SORCE alias: asaclass

ARMUS Variable Name(s):

Field Format: Mulitple choice

Value Codes: 1 = I  5 = Already Intubated  
2 = II  6 = NA  
3 = III  4 = IV  
7 = V

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: Anesthesia record

Abstraction Notes: There will not be an ASA score if the patient was already intubated; if intubated, check “already intubated”.

Exclusions: None
F7) Highest perioperative blood glucose

**Location:** Pediatric Form, F. Intra Operative, Question 7

**Definition:** Record the highest of these three blood glucose test results: fasting blood glucose recorded anytime prior to incision time on same day as surgery, any blood glucose result during time frame that the patient was in the OR, blood glucose result with 60-minutes of operative close time. If no test performed indicate “No”

**SORCE alias:** peribg

**ARMUS Variable Name(s):**

**Field Format:** Number; Yes/No

**Value Codes:**
1=Yes *(data available)*
2=No  *(data not available)*

**Allowable Values:** 10 – 900 mg/dl

**Data Storage Type:** Numeric

**Suggested Data Source:** Anesthesia record; OR log; H&P, RN intake assessment; OR holding records; ED records

**Abstraction Notes:** The question applies to ALL procedures: (appendectomy, colorectal and gastric procedures).

**Exclusions:**
F8) Insulin used perioperatively

**Location:** Pediatric Form, F. Intra Operative, Question 8

**Definition:** Was insulin administered during the perioperative period—anytime prior to incision on the day of surgery, during the time that the patient was in the OR, or within 60 minutes of the closing of the incision

**SORCE alias:** periopinsulin

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

**Value Codes:**

1 = Yes
2 = No

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** Anesthesia record, OR log, nursing admit or preop notes, PACU record

**Abstraction Notes:** The question applies to all procedures..

**Exclusions:**
F9) Lowest intra-operative temperature

Location: Pediatric Form, F. Intra Operative, Question 9

Definition: The lowest temperature recorded during the operation

SORCE alias: lowtpna (temp not available)
lowtemp

ARMUS Variable Name(s):

Field Format: Number; Yes/No

Value Codes: 1=Yes (data available)
             2=No (data not available)

Allowable Values: 34.0 – 41.0 (degrees centigrade)

Data Storage Type: Numeric

Suggested Data Source: Anesthesia record

Abstraction Notes: The question applies only to colorectal and gastric procedures.

Exclusions: Appendectomy cases
F10) Death in the operating room

Location: Pediatric Form, F. Intra Operative, Question 10

Definition: Did the patient expire while in the operating room?

SORCE alias: or_death

ARMUS Variable Name(s):

Field Format: Yes/No

Value Codes: 1 = Yes
2 = No

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: Anesthesia record; OR log; OP record, Discharge summary

Abstraction Notes: The question applies to all procedures.

Exclusions: None
F11) **First recorded temperature on arrival to recovery room/ICU**

**Location:** Pediatric Form, F. Intra Operative, Question 11

**Definition:** What was the first recorded temperature upon arrival to the recovery room or ICU?

**SORCE alias:**
- firstna *(temp not available)*
- frsttemp

**ARMUS Variable Name(s):**

**Field Format:** *Number; Yes/No*

**Value Codes:**
- 1=Yes *(data available)*
- 2=No *(data not available)*

**Allowable Values:** 34.0 – 41.0 *(degrees centigrade)*

**Data Storage Type:** *Numeric*

**Suggested Data Source:** PACU record; ICU record

**Abstraction Notes:** The question applies only to colorectal and gastroc procedures.

**Exclusions:** Appendectomy cases or if death in the OR
G1) Antibiotics: Prior to arrival in OR

**Location:** Pediatric Form, G. Perioperative Interventions, Question 1

**Definition:** On antibiotics prior to arrival in OR? Yes or no. Indicate if treatment at current hospital and/or transferring hospital. For each hospital, indicate if treatment was for the surgical indication and/or a different indication.

**SORCE alias:**

<table>
<thead>
<tr>
<th>antiprev</th>
</tr>
</thead>
<tbody>
<tr>
<td>(this hospital)</td>
</tr>
<tr>
<td>anthosp1</td>
</tr>
<tr>
<td>antisurg1</td>
</tr>
<tr>
<td>antidiff1</td>
</tr>
</tbody>
</table>

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

**Value Codes:**

1 = Yes  
2 = No

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** H&P, MD or nursing admission notes, Physician orders

**Abstraction Notes:** The patient may have been placed on antibiotics for the treatment of an infection prior to admission so came into the hospital having already been placed on antibiotics at home or upon admission. Check yes if the patient was being treated with antibiotics before arriving in the OR. Indicate hospital of treatment and if the treatment was for the surgical indication or for another indication, such as **pre-existing** condition or infection.

**Exclusions:** Appendectomy cases
G2) Antibiotics: Prophylactic antibiotics indicated

**Location:** Pediatric Form, G. Perioperative Interventions, Question 2

**Definition:** Were prophylactic antibiotics indicated? Yes or no

**SORCE alias:** antiproph

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

**Value Codes:**
- 1 = Yes
- 2 = No

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** H&P, MD or nursing admission notes, Physician orders

**Abstraction Notes:** The answer should be “yes” unless the patient is already being treated for a pre-existing infection as prophylactic antibiotics are indicated for all bariatric and colorectal cases.

**Exclusions:** Appendectomy cases or if death in the OR
G2.1) Antibiotics: Administered within 60 minutes

Location: Pediatric Form, G. Perioperative Interventions, Question 2.1

Definition: Was the antibiotic delivered within 60 min of incision? Yes or no

SORCE alias: antiadmnn

ARMUS Variable Name(s):

Field Format: Yes/No

Value Codes: 1=Yes
               2= No

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: H&P, MD or nursing admission notes, Physician orders

Abstraction Notes: Within 60 minutes means within 60 minutes of the incision being made; the dose does not necessarily have to be completely infused prior to the incision being made.

Exclusions: Appendectomy cases or if death in the OR
G2.2) Antibiotics: Discontinued within 24 hours

Location: Pediatric Form, G. Perioperative Interventions, Question 2.2

Definition: Was the antibiotic discontinued within 24 after incision closure? Yes or no

SORCE alias: antidisc

ARMUS Variable Name(s):

Field Format: Yes/No

Value Codes: 1=Yes
2=No

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: Physician orders, PACU notes, nursing record, MAR

Abstraction Notes: In order to answer yes to the antibiotic being discontinued within 24 hours means that it was discontinued within 24 hours of the incision being closed.

Exclusions: Appendectomy cases or if death in the OR
G3) **Pain management: Regional anesthesia used intra-op**

**Location:** Pediatric Form, G. Perioperative Interventions, Question 3

**Definition:** Regional anesthesia numbs a large area, such as an entire arm, leg, or the entire lower half of your body. An anesthesiologist injects the medicine into a group of nerves so patient no longer feels pain. Two common types of regional anesthesia include:

- Epidural anesthesia
- Spinal anesthesia

Indicate if regional anesthesia administered any time the patient was in the OR.

**SORCE alias:** pain_region

**ARMUS Variable Name(s):**

**Field Format:** *Multiple choice*

**Value Codes:**

1=Yes
2=No
3=Contraindicated

**Allowable Values:**

**Data Storage Type:** *Numeric*

**Suggested Data Source:** Operative note, Discharge Note, Anesthesia Record

**Abstraction Notes:** The question applies only to gastric and colorectal procedures. Choose the best answer: Yes, No or Contraindicated. “Contraindicated” assumes the method of pain management was not used and the reason was recognized.

**Exclusions:** Appendectomy
G4) Pain management: Epidural

Location: Pediatric Form, G. Perioperative Interventions, Question 4

Definition: Epidural ordered for pain control within 24 hours of procedure completion.

SORCE alias: pain_epi

ARMUS Variable Name(s):

Field Format: Multiple choice

Value Codes: 1=Yes
2=No
3=Contraindicated

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: Operative note, Discharge Note, Anesthesia Record

Abstraction Notes: The question applies only to colorectal and bariatric procedures. Includes intrathecal MS placement prior to surgery. You do not need to check to see if the patient actually received the ordered medication. Choose the best answer: Yes, No or Contraindicated. “Contraindicated” assumes the method of pain management was not used and the reason was recognized. Examples of Contraindication include patient refusal, any coagulopathy, concurrent use of enoxaparin/heparin, and patient anatomy that makes epidural placement not feasible.

Exclusions: Appendectomy or death in the OR
G5) Pain management: PCA

**Location:** Pediatric Form, G. Perioperative Interventions, Question 5

**Definition:** Patient Controlled Analgesia (PCA) with the use of IV narcotics ordered for pain control within 24 hours of procedure completion.

**SORCE alias:** pain_pca

**ARMUS Variable Name(s):**

**Field Format:** *Multiple choice*

**Value Codes:**
- 1=Yes
- 2=No
- 3=Contraindicated

**Allowable Values:**

**Data Storage Type:** *Numeric*

**Suggested Data Source:** Operative note, Discharge Note, Anesthesia Record

**Abstraction Notes:** The question applies only to colorectal and bariatric procedures. You do not need to check to see that the patient actually received the medication. Choose the best answer: Yes, No or Contraindicated. “Contraindicated” assumes the method of pain management was not used and the reason was recognized. Contraindications are inability of the patient to understand or manipulate the PCA or opioid intolerance.

**Exclusions:** Appendectomy or death in the OR
G6) Pain management: NSAID

**Location:** Pediatric Form, G. Perioperative Interventions, Question 6

**Definition:** NSAID ordered for pain control within 24 hours of procedure completion.

**SORCE alias:** pain_nsaid

**ARMUS Variable Name(s):**

**Field Format:** Multiple choice

**Value Codes:**
1=Yes  
2=No  
3=Contraindicated

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** Operative note, Discharge Note, Anesthesia Record

**Abstraction Notes:** The question applies only to colorectal and gastric procedures. You do not need to check to see that the patient actually received the ordered medication. Choose the best answer: Yes, No or Contraindicated. “Contraindicated” assumes the method of pain management was not used and the reason was documented. Contraindications are intolerance of NSAIDS, kidney or liver disease, and platelet dysfunction or a coagulopathy. See separate listing for NSAID medication names for your reference; it may not include very new medications.

**Exclusions:** Appendectomy or death in the OR
G7) Pain management: Narcotic drip

Location: Pediatric Form, G. Perioperative Interventions, Question 7

Definition: Narcotic drip ordered for pain control within 24 hours of procedure completion.

SORCE alias: pain_narc

ARMUS Variable Name(s):

Field Format: Multiple choice

Value Codes: 1=Yes 2=No 3=Contraindicated

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: Operative note, Discharge Note, Anesthesia Record

Abstraction Notes: The question applies only to colorectal and gastric procedures. Choose the best answer: Yes, No or Contraindicated. “Contraindicated” assumes the method of pain management was not used and the reason was documented. Contraindication is opioid intolerance.

Exclusions: Appendectomy or death in the OR
G8) Pain management: Other

Location: Pediatric Form, G. Perioperative Interventions, Question 8

Definition: Other pain control measures ordered for pain control within 24 hours of procedure completion. Specify the modality

SORCE alias: 
  - pain_oth
  - pain_txt (other specified)

ARMUS Variable Name(s):

Field Format: Yes/No
  - Text

Value Codes: 1=Yes
  - 2=No

Allowable Values:

Data Storage Type: Numeric
  - Character

Suggested Data Source: Operative note, Discharge Note, Anesthesia Record

Abstraction Notes: The question applies only to colorectal and gastric procedures. If yes, specify other pain management modality ordered within 24 hrs post-op; name class of drug and route. PO narcotics and prn IV narcotics are not included in this data element as the intent of this set of data elements is to look at more advanced pain control approaches. An example of something that would be categorized as “other” is subarachnoid anesthesia within the first 24 hours post op. Spinal anesthesia would be an example of a type of pain management that would go in this category.

Exclusions: Appendectomy or death in the OR
G9) Nasogastric tube

**Location:** Pediatric Form, G. Perioperative Interventions, Question 9

**Definition:** Answer whether or not patient left the operating room with a nasogastric tube in place.

**SORCE alias:** nasotube

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

**Value Codes:**
1 = Yes
2 = No

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** Operative note, Anesthesia record, Nursing or Medicine progress notes, PACU record

**Abstraction Notes:**

**Exclusions:** Not applicable if death in the OR
G10) Gastrostomy tube drainage

Location: Pediatric Form, G. Perioperative Interventions, Question 10

Definition: Answer whether or not patient left the operating room with a gastrostomy tube set to drain in place.

SORCE alias: gastube

ARMUS Variable Name(s):

Field Format: Yes/No

Value Codes: 1 = Yes
2 = No

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: Operative note, Anesthesia record, Nursing or Medicine progress notes, PACU record

Abstraction Notes:

Exclusions: Not applicable if death in the OR
G11) Transfusion: Red blood cell transfusion

**Location:** Pediatric Form, G. Perioperative Interventions, Question 11

**Definition:** Answer whether or not patient received a red blood cell transfusion (RBC) or packed red blood cells (PRBC) in the OR or within 24 hours of procedure completion; If yes, how many units or ml?

**SORCE alias:**
- trnsfusn
- rbc_na (data units & availability)
- trnsunit
- trnsmls

**ARMUS Variable Name(s):**

**Field Format:**
- Yes/No
- Multiple choice
- Number

**Value Codes:**
- (trnsfusn) 1=Yes
- 2=No
- (rbc_na) 1=Units
- 2=mls
- 3=NA (data not available)

**Allowable Values:**
- 0 – 10 units
- 0 – 2000 ml

**Data Storage Type:** Numeric

**Suggested Data Source:** Operative note, PACU record, post-op nursing or medicine progress notes.

**Abstraction Notes:** You can indicate “yes” if the transfusion was started; do not need to verify that the transfusion was completed.

**Exclusions:** Appendectomy or if death in the OR
G12) Transfusion: PLT transfusion

Location: Pediatric Form, G. Perioperative Interventions, Question 12

Definition: Answer whether or not patient received platelet transfusion in the OR or within 24 hours of procedure completion; if yes, how many units or ml?

SORCE alias: plttran, plt_na, pltunit, pltmls

ARMUS Variable Name(s):

Field Format: Yes/No
Multiple choice
Number

Value Codes:
- (plttran) 1=Yes
  2=No
- (plt_na) 1=Units
  2=mls
  3=NA (data not available)

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: Operative note, PACU record, post-op nursing or medicine progress notes.

Abstraction Notes: You can indicate “yes” if the transfusion was started; do not need to verify that the transfusion was completed.

Exclusions: Appendectomy or if death in the OR
G13) Mechanical ventilation

**Location:** Pediatric Form, G. Perioperative Interventions, Question 13

**Definition:** Answer if there was mechanical ventilation performed at any time beyond the recovery room. If yes, indicate the number of hours.

**SORCE alias:**

vent  
venthrs_na (data availability)  
venthrs

**ARMUS Variable Name(s):**

**Field Format:** Multiple choice; Yes/No; Number

**Value Codes:**

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1=Yes</td>
<td>Yes (data available)</td>
</tr>
<tr>
<td>2=No</td>
<td>No (data not available)</td>
</tr>
<tr>
<td>3=Not applicable – chronic vent patient</td>
<td></td>
</tr>
</tbody>
</table>

**Allowable Values:** 4 digits (1 – 3000)

**Data Storage Type:** Numeric

**Suggested Data Source:** Nursing notes of care beyond the recovery room; respiratory therapy record

**Abstraction Notes:** If the patient is chronic ventilator patient, the response to this is not applicable-the number of ventilator hours post op for these patients does not represent a complication. You should round up the number to the nearest whole number, e.g. rather than enter 24.6 hrs, enter 27 hrs. Also, do not spend an inordinate amount of time to determine this number as many times the patient may be off and on the ventilator several times; documentation regarding exactly when these times occurred may not be clear.

**Exclusions:** Death in the OR or chronic ventilator patient
G14) Postoperative event: Unplanned ICU stay

Location: Pediatric Form, G. Perioperative Interventions, Question 14

Definition: Did an unplanned ICU stay or readmission to ICU occur

SORCE alias: pop_icu

ARMUS Variable Name(s):

Field Format: Yes/No

Value Codes: 1 = Yes 2 = No

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: PACU record, nursing notes, progress notes, discharge summary

Abstraction Notes: The intent of this question is to determine complications that may have affected a number of the outcomes metrics. An unplanned ICU stay refers to any ICU stay that was not planned prior to the surgery, e.g. for some surgeries, the normal progression after surgery is to move from the PACU to ICU for at least a short stay.

Exclusions: Death in the OR
G15) **Discharge disposition**

**Location:** Pediatric Form, G. Perioperative Interventions, Question 15

**Definition:** Location patient was discharged to from the hospital. If patient expired in hospital, location would be recorded as “death”.

**SORCE alias:** disption

**ARMUS Variable Name(s):**

**Field Format:** *Multiple choice*

**Value Codes:**
- 1=Home
- 2=Rehab facility
- 3=SNF (skilled nursing facility)
- 4=Other location
- 5=Other acute care hospital
- 6=Death
- 7=Foster care

**Allowable Values:** Not applicable

**Data Storage Type:** *Numeric*

**Suggested Data Source:** Discharge Summary, Nursing notes

**Abstraction Notes:** Indicate SNF if discharged to Hospice unit or care program

**Exclusions:** None
G15a) Discharge: Death Specification

Location: Pediatric Form, G. Perioperative Interventions, Question 15a

Definition: If patient expired prior to discharge from hospital, define when event occurred.

SORCE alias: disption_sp

ARMUS Variable Name(s):

Field Format: *Multiple choice*

Value Codes:  
1=Death in the O.R.  
2=Death within 24 hrs post-op  
3=Death after 24 hrs post-op

Allowable Values: Not applicable

Data Storage Type: *Numeric*

Suggested Data Source: Discharge Summary

Abstraction Notes:

Exclusions: None
H1) Reintervention: Any

Location: Pediatric Form, H. Reintervention, Question 1

Definition: If the patient had any of the surgical operations or therapies listed below during this hospitalization and following the abdominal procedure within 30 days, select “Yes” If the patient did not have any, select “No” (Not applicable if death in the O.R.)

Abdominal re-operation: Any or any of the listed Abdominal procedures below:
- Colostomy or ileostomy
- Abscess drainage
- Operative drain placement
- Gastrostomy revision
- Re-exploration/washout
- Anastomotic revision
- Wound revision or evisceration
- Negative re-exploration
- Other (specify: __________________)

Tracheal reintubation
- NG tube replacement (non-routine)
- Tracheostomy
- Placement of percutaneous drain
- Antibiotic for presumed/confirmed infection
- Wound reopened
- Radiologically demonstrated anastomotic leak
- Radiologically demonstrated enterocutaneous fistula
- Other

SORCE alias: intvn_any

ARMUS Variable Name(s):

Field Format: Yes/No

Value Codes:  
1 = Yes  
2 = No

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: OR Record, Procedural transcription, Special Procedures, CT, Endoscopy Area, Discharge Summary

Abstraction Notes: This is a required field.

Exclusions: Death in OR
H2) Reintervention: Abdominal re-operation

Location: Pediatric Form, H. Reintervention, Question 2

Definition: If the patient had any of the surgical operations listed below during this hospitalization and following the abdominal procedure and within 30 days, select “Abdominal re-operation” (Not applicable if death in the O.R.)

- Colostomy or ileostomy
- Abscess drainage
- Operative drain placement
- Gastrostomy revision
- Re-exploration/washout
- Anastomotic revision
- Wound revision or evisceration
- Negative re-exploration
- Other (specify:_________________)

SORCE alias: intvn_abreop

ARMUS Variable Name(s):

Field Format: Yes/No

Value Codes: 1=Yes 2=No

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: OR Record, Procedural transcription, Special Procedures, CT, Endoscopy Area, Discharge Summary

Abstraction Notes: This is not a required field unless a re-intervention occurred.

Exclusions: Death in OR
H2.1) Reintervention: Colostomy or ileostomy

**Location:** Pediatric Form, H. Re-intervention, Question 2.1

**Definition:** If the patient had the surgical operations “Colostomy or ileostomy” during this hospitalization and following the abdominal procedure and within 30 days, select “Colostomy or ileostomy” and enter the date of the re-intervention. *(Not applicable if death in the O.R.)*

**SORCE alias:**
- intvn_ostomy
- dt_ostomy

**ARMUS Variable Name(s):**

**Field Format:** Yes/No; Date

**Value Codes:**
- 1=Yes
- 2=No

**Allowable Values:** mm/dd/yyyy

**Data Storage Type:** Numeric; Date/Time

**Suggested Data Source:** OR Record, Procedural transcription, Special Procedures, CT, Endoscopy Area, Discharge Summary

**Abstraction Notes:** This is not a required field.

**Exclusions:** Death in OR
H2.2) Reintervention: Abscess drainage

**Location:** Pediatric Form, H. Reintervention, Question 2.2

**Definition:** If the patient had the surgical operation(s) “Abscess drainage” during this hospitalization and following the abdominal procedure and within 30 days, select “Abscess drainage” and enter the date of the reintervention. *(Not applicable if death in the O.R.)*

**SORCE alias:**

- intvn_abss
- dt_abss

**ARMUS Variable Name(s):**

**Field Format:** Yes/No; Date

**Value Codes:**

1=Yes
2=No

**Allowable Values:** mm/dd/yyyy

**Data Storage Type:** Numeric; Date/Time

**Suggested Data Source:** OR Record, Procedural transcription, Progress Notes, Discharge Summary

**Abstraction Notes:** This is not a required field.

**Exclusions:** Death in OR
H2.3) Reintervention: Operative Drain Placement

**Location:** Pediatric Form, H. Reintervention, Question 2.3

**Definition:** If the patient had the surgical operation(s) “Operative Drain Placement” during this hospitalization and following the abdominal procedure and within 30 days, select “Operative Drain Placement” and enter the date of the reintervention. *(Not applicable if death in the O.R.)*

**SORCE alias:** intvn_opdrain
dt_opdrain

**ARMUS Variable Name(s):**

**Field Format:** Yes/No; Date

**Value Codes:**

1=Yes
2=No

**Allowable Values:** mm/dd/yyyy

**Data Storage Type:** Numeric; Date/Time

**Suggested Data Source:** OR Record, Procedural transcription, Progress Notes, Discharge Summary

**Abstraction Notes:** This is not a required field.

**Exclusions:** Death in OR
H2.4) Reintervention: Gastrostomy revision

Location: Pediatric Form, H. Reintervention, Question 2.4

Definition: If the patient had the surgical operation(s) “Gastrostomy revision” during this hospitalization and following the abdominal procedure and within 30 days, select “Gastrostomy revision” and enter the date of the reintervention. (Not applicable if death in the O.R.)

SORCE alias: intvn_gasrev
dt_gasrev

ARMUS Variable Name(s):

Field Format: Yes/No; Date

Value Codes: 1=Yes 2=No

Allowable Values: mm/dd/yyyy

Data Storage Type: Numeric; Date/Time

Suggested Data Source: OR Record, Procedural transcription, Progress Notes, Discharge Summary

Abstraction Notes: This is not a required field.

Exclusions: Death in OR
H2.5) Reintervention: Re-exploration/washout

**Location:** Pediatric Form, H. Reintervention, Question 2.5

**Definition:** If the patient had the surgical operation(s) “Re-exploration/washout” during this hospitalization and following the abdominal procedure and within 30 days, select “Re-exploration/washout” and enter the date of the reintervention. *(Not applicable if death in the O.R.)*

**SORCE alias:**
- intvn_rexwash
- dt_rexwash

**ARMUS Variable Name(s):**

**Field Format:** Yes/No; Date

**Value Codes:**
- 1=Yes
- 2=No

**Allowable Values:** mm/dd/yyyy

**Data Storage Type:** Numeric; Date/Time

**Suggested Data Source:** OR Record, Procedural transcription, Progress Notes, Discharge Summary

**Abstraction Notes:** This is not a required field. If more than one re-exploration/washout occurred during this time frame, put the date of the first one only.

**Exclusions:** Death in OR
**H2.6) Reintervention: Anastomotic revision**

**Location:** Pediatric Form, H. Reintervention, Question 2.6

**Definition:** If the patient had the surgical operation(s) “Anastomotic revision” during this hospitalization and following the abdominal procedure and within 30 days, select “Anastomotic revision” and enter the date of the reintervention. *(Not applicable if death in the O.R.)*

**SORCE alias:** intvn_anast
dt_anast

**ARMUS Variable Name(s):**

**Field Format:** Yes/No; Date

**Value Codes:**
1=Yes
2=No

**Allowable Values:** mm/dd/yyyy

**Data Storage Type:** Numeric; Date/Time

**Suggested Data Source:** OR Record, Procedural transcription, Progress Notes, Discharge Summary

**Abstraction Notes:** This is not a required field.

**Exclusions:** Death in OR
H2.7) Reintervention: Wound revision or evisceration

**Location:** Pediatric Form, H. Re-intervention, Question 2.7

**Definition:** If the patient had the surgical operation(s) “Wound revision or evisceration” during this hospitalization and following the abdominal procedure and within 30 days, select “Wound revision or evisceration” and enter the date of the re-intervention. *(Not applicable if death in the O.R.)*

**SORCE alias:** intvn_evis  
dt_evis

**ARMUS Variable Name(s):**

**Field Format:** Yes/No; Date

**Value Codes:**  
1=Yes  
2=No

**Allowable Values:** mm/dd/yyyy

**Data Storage Type:** Numeric; Date/Time

**Suggested Data Source:** OR Record, Procedural transcription, Progress Notes, Discharge Summary

**Abstraction Notes:** This is not a required field.

**Exclusions:** Death in OR
H2.8) Reintervention: Negative re-exploration

**Location:** Pediatric Form, H. Reintervention, Question 2.8

**Definition:** If the patient had the surgical operation(s) “Negative re-exploration” during this hospitalization and following the abdominal procedure and within 30 days, select “Negative re-exploration” and enter the date of the reintervention. *(Not applicable if death in the O.R.)*

**SORCE alias:**
- intvn_reexp
- dt_reexp

**ARMUS Variable Name(s):**

**Field Format:** Yes/No; Date

**Value Codes:**
- 1=Yes
- 2=No

**Allowable Values:** mm/dd/yyyy

**Data Storage Type:** Numeric; Date/Time

**Suggested Data Source:** OR Record, Procedural transcription, Progress Notes, Discharge Summary

**Abstraction Notes:** This is not a required field. Negative re-exploration means that the surgeon took the patient back to surgery to determine if there was a problem in the surgical area because the patient has symptoms that suggest this, and did not find anything that was problematic; therefore, is a negative finding.

**Exclusions:** Death in OR
H2.9) Reintervention: Other Reoperation

Location: Pediatric Form, H. Re-intervention, Question 2.9

Definition: If the patient had another surgical operation(s) that is not listed and within 30 days postoperatively, please select “Other”, describe the procedure on the “specify” notation and list the date of the “Other” reintervention. (Not applicable if death in the O.R.)

SORCE alias: intvn_reopoth
dt_reopoth
txt_reopoth (other specified)

ARMUS Variable Name(s):

Field Format: Yes/No; Date; Text

Value Codes: 1=Yes
2=No

Allowable Values: mm/dd/yyyy

Data Storage Type: Numeric; Date/Time; Character

Suggested Data Source: OR Record, Procedural transcription, Progress Notes, Discharge Summary

Abstraction Notes: This is not a required field.

Exclusions: Death in OR
H3) Reintervention: Tracheal reintubation

Location: Pediatric Form, H. Reintervention, Question 3

Definition: If the patient has to be reintubated during this hospitalization and following the abdominal procedure and within 30 days because of respiratory or other issues, select “Tracheal reintubation” and enter the date of the reintervention. (Not applicable if death in the O.R.)

SORCE alias: intvn_intube
dt_intube

ARMUS Variable Name(s):

Field Format: Yes/No; Date

Value Codes: 1=Yes
2=No

Allowable Values: mm/dd/yyyy

Data Storage Type: Numeric; Date/Time

Suggested Data Source: OR Record, Procedural transcription, Progress Notes, Discharge Summary, Respiratory therapy record, Anesthesia Record, PACU record

Abstraction Notes: This is not a required field. If this occurs more than once, enter the date of the first re-intubation only.

Exclusions: Death in OR, other procedures requiring general or spinal anesthesia after the principle procedure.
H4) Reintervention: NG tube replacement

Location: Pediatric Form, H. Reintervention, Question 4

Definition: (Non-routine) NG tube replacement during this hospitalization and following the abdominal procedure and within 30 days because of loss of initial NG tube function or other issues, select “NG tube replacement” and enter the date of the reintervention. (Not applicable if death in the O.R.)

SOURCE alias: intvn_ngrepl
dt_ngrepl

ARMUS Variable Name(s):

Field Format: Yes/No; Date

Value Codes: 1=Yes
2=No

Allowable Values: mm/dd/yyyy

Data Storage Type: Numeric; Date/Time

Suggested Data Source: OR Record, Procedural transcription, Progress Notes, Discharge Summary, Respiratory therapy record, Anesthesia Record, PACU record, Nurses Note

Abstraction Notes: This is not a required field.

Exclusions: Death in OR
H5) Reintervention: Tracheostomy

Location: Pediatric Form, H. Reintervention, Question 5

Definition: Tracheostomy performed during this hospitalization and within 30 days of the operation, perioperatively or postoperatively because of loss of airway, chronic ventilator support or other issues, select “Tracheostomy” and enter the date of the reintervention. (Not applicable if death in the O.R.)

SORCE alias: intvn_trach
dt_trach

ARMUS Variable Name(s):

Field Format: Yes/No; Date

Value Codes: 1=Yes
2=No

Allowable Values: mm/dd/yyyy

Data Storage Type: Numeric; Date/Time

Suggested Data Source: OR Record, Procedural transcription, Progress Notes, Discharge Summary, Respiratory therapy record, Anesthesia Record, PACU record, Nurses Note, ICU (flow sheet) record

Abstraction Notes: This is not a required field.

Exclusions: Death in OR, patient has Tracheostomy prior to admission.
H6) Reintervention: Percutaneous drain

Location: Pediatric Form, H. Reintervention, Question 6

Definition: Use or placement of percutaneous drain during this hospitalization and within 30 days postoperatively due to abscess, fluid collection or other issues, select “Placement of percutaneous drain” and enter the date of the reintervention. *(Not applicable if death in the O.R.)*

SORCE alias: intvn_percdrain
dt_percdrain

ARMUS Variable Name(s):

Field Format: Yes/No; Date

Value Codes:
1=Yes
2=No

Allowable Values: mm/dd/yyyy

Data Storage Type: Numeric; Date/Time

Suggested Data Source: OR Record, Procedural transcription, Progress Notes, Discharge Summary, Anesthesia Record, Nurses Note, ICU (flow sheet) record, Special Procedures record

Abstraction Notes: This is not a required field.

Exclusions: Death in OR, Appendectomy.
H7) Reintervention: Antibiotic for infection

**Location:** Pediatric Form, H. Reintervention, Question 7

**Definition:** Use of antibiotic for presumed/confirmed infection during this hospitalization and within 30 days, select “Antibiotic for presumed/confirmed infection” *(Not applicable if death in the O.R.)*

**SORCE alias:** intvn_infect

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

**Value Codes:**
1=Yes  
2=No

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** Progress Notes, Discharge Summary, Nurses Note, ICU (flow sheet) record, Radiology Report, Medication Administration Report

**Abstraction Notes:** This is not a required field.

**Exclusions:** Death in OR
H8) **Reintervention: Wound reopened**

**Location:** Pediatric Form, H. Reintervention, Question 8

**Definition:** Wound reopened during this hospitalization and within 30 days, select “Wound reopened” *(Not applicable if death in the O.R.)*

**SORCE alias:** intvn_wound

**ARMUS Variable Name(s):**

**Field Format:** *Yes/No*

**Value Codes:**

1=Yes  
2=No

**Allowable Values:**

**Data Storage Type:** *Numeric*

**Suggested Data Source:** Progress Notes, Discharge Summary, Nurses Note, ICU (flow sheet) record

**Abstraction Notes:** This is not a required field. Wound re-opened does not include routine wound care—routine wound care refers to situations where the wound may have been left open in the OR and packing/removing packing and/or probing to keep the wound open may be taking place on a daily basis. The intent of this data element is to note when the closed wound is reopened secondary to a presumed infection.

**Exclusions:** Death in OR
H9) Reintervention: Radiologically demonstrated leak

**Location:** Pediatric Form, H. Reintervention, Question 9

**Definition:** Radiologically demonstrated anastomotic leak during this hospitalization and within 30 days from the operation, select “Radiologically demonstrated anastomotic leak” *(Not applicable if death in the O.R.)*

**SORCE alias:** intvn_leak

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

**Value Codes:**

1=Yes  
2=No

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** Progress Notes, Discharge Summary, Nurses Note, ICU (flow sheet) record, Radiology Report

**Abstraction Notes:** This is not a required field. Check if a leak demonstrated by barium enema, upper GI and/or CT scan.

**Exclusions:** Death in OR
H10) Reintervention: Radiologically demonstrated fistula

**Location:** Pediatric Form, H. Reintervention, Question 10

**Definition:** Radiologically demonstrated enterocutaneous fistula during this hospitalization and within 30 days from the operation, select “Radiologically demonstrated enterocutaneous fistula.” *(Not applicable if death in the O.R.)*

**SORCE alias:** intvn_fistula

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

**Value Codes:**

1=Yes
2=No

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** Progress Notes, Discharge Summary, Nurses Note, ICU (flow sheet) record, Radiology Report

**Abstraction Notes:** This is not a required field. Check if this demonstrated by barium enema, upper GI and/or CT scan.

**Exclusions:** Death in OR
H11) Reintervention: Other

Location: Pediatric Form, H. Reintervention, Question 11

Definition: Reintervention during this hospitalization which is significant to this admission and is not listed in the list below, select “Other”. Specify with a short description in the text field provided. *(Not applicable if death in the O.R.)*

- Colostomy or ileostomy
- Abscess drainage
- Operative drain placement
- Gastrostomy revision
- Re-exploration/washout
- Anastomotic revision
- Wound revision or evisceration
- Negative re-exploration
- Other *(specify:_________________)*
- Tracheal Reintubation
- NG tube replacement (non-routine)
- Tracheostomy
- Placement of Percutaneous drain
- Antibiotic for presumed infection
- Wound reopened
- Radiologically demonstrated anastomotic leak
- Radiologically demonstrated enterocutaneous fistula

SORCE alias: intvn_other
txt_other *(other specified)*

ARMUS Variable Name(s):

Field Format: *Yes/No; Text*

Value Codes: 
1=Yes
2=No

Allowable Values:

Data Storage Type: *Numeric; Character*

Suggested Data Source: Progress Notes, Discharge Summary, Nurses Note, ICU (flow sheet) record, Radiology Report, Ultrasound Report

Abstraction Notes: This is not a required field.

Exclusions: Death in OR
I1) **Gastric: Prior foregut surgery**

**Location:** Pediatric Form, I. Gastric, Question 1

**Definition:** Documentation of any previous operation in the abdomen, regardless of date or facility. Include if it took place during this hospitalization, but prior to this operation. Foregut is the anterior part of the alimentary canal, from the mouth to the duodenum at the entrance of the bile duct. At this point it is contiguous with the midgut. Structures of the foregut are the esophagus, stomach, duodenum, liver, gallbladder and the superior portion of the pancreas. Foregut surgeries include surgeries such as small bowel surgery; cholecystectomies, surgery for biliary obstructions or for and gastric cancer.

**SORCE alias:** priorsx

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

**Value Codes:**
1=Yes
2=No

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** H&P, MD or nursing admission notes, discharge summary

**Abstraction Notes:** Usually found in surgical history in the H&P

**Exclusions:** None
I2) Gastric: Procedure of record

**Location:** Pediatric Form, I. Gastric, Question 2

**Definition:** What type of procedure did the patient have performed—pyloromyotomy, antireflux operation. If yes to antireflux operation, specify type of fundoplication, and was a concurrent gastrostomy performed no/yes, and/or was a gastrostomy tube already in place no/yes

**SORCE alias:** pyloro
refluxop
fundotxt (specify)
ccgastro
priorgastro

**ARMUS Variable Name(s):**

**Field Format:** Yes/No; Text

**Value Codes:**
1 = Yes  
2 = No

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** Operative report, discharge summary

**Abstraction Notes:**

**Exclusions:** None

Illustration depicting cutting and spreading the pylorus.
I3) **Gastric: Procedure type**

**Location:** Adult Form, I. Gastric, Question 3

**Definition:** Was the procedure a primary one or a re-operation

**SORCE alias:** primary

**ARMUS Variable Name(s):**

**Field Format:** *Multiple choice*

**Value Codes:**
1=primary
2=re-operative

**Allowable Values:**

**Data Storage Type:** *Numeric*

**Suggested Data Source:** Operative report, discharge summary

**Abstraction Notes:** Fundoplications may need to be redone as child grows or if condition reoccurs

**Exclusions:** None
I4) Gastric: Preoperative evaluation

Location: Adult Form, I. Gastric, Question 4

Definition: Was a pre-operative evaluation done no/yes or NA
If yes, indicate all that apply: Upper GI, Upper GI with Small Bowel Follow Through, Ultrasound, pH probe, Manometry, esophagoscopy, gastric emptying study or impedance study

SORCE alias: preopeval
eval_ugi
eval_manometry
eval_sbft
eval_esophscopy
eval_useval
eval_gasempty
eval_pheval
eval_impedance

ARMUS Variable Name(s):

Field Format: Multiple choice; Yes/No

Value Codes: 1 = Yes
2 = No
3 = NA

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: Operative report, discharge summary

Abstraction Notes: When GER has been entertained as the cause of the patient’s symptoms, diagnostic evaluation should be initiated. Among the possible studies used for evaluation of GER are the upper gastrointestinal (GI) contrast study, 24-hour pH monitoring, esophageal manometry (pressure monitoring), upper GI endoscopy (direct telescopic visualization), and nuclear medicine gastric emptying studies

Exclusions: None
J1) **Appendectomy: Concurrent procedure performed**

**Location:** Pediatric Form, J. Non-elective Appendectomy, Question 1

**Definition:** Another abdominal or pelvic procedure performed concurrently with the appendectomy. If yes, specify type.

**SORCE alias:** appyplus

**ARMUS Variable Name(s):**

**Field Format:** Yes/No; Text

**Value Codes:**

1=Yes  
2=No

**Allowable Values:**

**Data Storage Type:** Numeric; Character

**Suggested Data Source:** Operative note; discharge summary

**Abstraction Notes:** Answer “yes” if another procedure such as a colectomy or hernia repair was performed at the same time as the appendectomy. If yes, specify type

**Exclusions:** None
J2.1) Appendectomy: First imaging study

Location: Pediatric Form, J. Non-elective Appendectomy, Question 2.1

Definition: Initial imaging performed within 72 hrs preop. If the imaging study was done, describe the study. Was the study performed at an outside hospital? Specify the type of imaging (CT scan or ultrasound) and imaging results (consistent or not consistent with appendicitis, or results were indeterminate).

SORCE alias:  
- preopimg1
- ohospital1
- imgtype1
- imgrslt1

ARMUS Variable Name(s):

Field Format: Yes/No; Multiple choice

Value Codes:

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<th>Imaging Outside Hospital</th>
<th>Type</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Yes</td>
<td>0=CT Scan</td>
<td>0=Consistent</td>
</tr>
<tr>
<td>2 = No</td>
<td>1=Ultrasound</td>
<td>1=Not consistent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2=Indeterminate</td>
</tr>
</tbody>
</table>

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: H&P, operative note, radiology report, discharge summary

Abstraction Notes: If yes, indicate CT scan or ultrasound. No other imaging study, such as abdominal x-rays are applicable as they are not diagnostic for appendicitis. If the surgeon and radiologist statements, differ, answer according to the radiologist report. Check “consistent” if the report states “probable appendicitis”. Check “indeterminate” if report states “possible appendicitis”.

Exclusions: None
J2.2) Appendectomy: Second imaging study

Location: Pediatric Form, J. Non-elective Appendectomy, Question 2.2

Definition: Second imaging performed within 72 hrs preop. If the imaging study was done, describe the study. Was the study performed at an outside hospital? Specify the type of imaging (CT scan or ultrasound) and imaging results (consistent or not consistent with appendicitis, or results were indeterminate). This item is not applicable if no previous study was performed.

SORCE alias: preopimg2, ohospital2, imgtype2, imgrslt2

ARMUS Variable Name(s):

Field Format: Yes/No; Multiple choice

Value Codes:

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<th>Type</th>
<th>Results</th>
</tr>
</thead>
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<tr>
<td>1 = Yes</td>
<td>0=CT Scan</td>
<td>0=Consistent</td>
</tr>
<tr>
<td>2 = No</td>
<td>1=Ultrasound</td>
<td>1=Not consistent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2=Indeterminate</td>
</tr>
</tbody>
</table>

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: H&P, operative note, radiology report, discharge summary

Abstraction Notes: If yes, indicate CT scan or ultrasound. No other imaging study, such as abdominal x-rays are applicable as they are not diagnostic for appendicitis. If the surgeon and radiologist statements differ, answer according to the radiologist report. Check “consistente” if the report states “probable appendicitis”. Check “indeterminate” if report states “possible appendicitis”.

Exclusions: None
J2.3) Appendectomy: Third imaging study

**Location:** Pediatric Form, J. Non-elective Appendectomy, Question 2.3

**Definition:** Third imaging performed within 72 hrs preop. If the imaging study was done, describe the study. Was the study performed at an outside hospital? Specify the type of imaging (CT scan or ultrasound) and imaging results (consistent or not consistent with appendicitis, or results were indeterminate). *This item is not applicable if no previous study was performed.*

**SORCE alias:**
- preopimg3
- ohospital3
- imgtype3
- imgrslt3

**ARMUS Variable Name(s):**

**Field Format:** Yes/No; Multiple choice

**Value Codes:**

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<th>Type</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Yes</td>
<td>0=CT Scan</td>
<td>0=Consistent</td>
</tr>
<tr>
<td>2 = No</td>
<td>1=Ultrasound</td>
<td>1=Not consistent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2=Indeterminate</td>
</tr>
</tbody>
</table>

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** H&P, operative note, radiology report, discharge summary

**Abstraction Notes:** If yes, indicate CT scan or ultrasound. No other imaging study, such as abdominal x-rays are applicable as they are not diagnostic for appendicitis. If the surgeon and radiologist statements differ, answer according to the radiologist report. Check “consistent” if the report states “probable appendicitis”. Check “indeterminate” if report states “possible appendicitis”.

**Exclusions:** None
J3) Appendectomy: ER/urgent visit

Location: Pediatric Form, J. Non-elective Appendectomy, Question 3

Definition: Any urgent care visit within one week of this operation; includes a clinic or ED visit; may also include an admission to a hospital for s/s of appendicitis but the surgery was not done until another admission within the same week. If yes, indicate if imaging was performed. If imaging was performed, indicate what kind of imaging.

SORCE alias: ervisit
erimage
erimgtype

ARMUS Variable Name(s):

Field Format: Yes/No; Multiple choice

Value Codes:

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<th>Type</th>
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<tbody>
<tr>
<td>1 = Yes</td>
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<td>0=CT Scan</td>
</tr>
<tr>
<td>2 = No</td>
<td>2 = No</td>
<td>1=Ultrasound</td>
</tr>
</tbody>
</table>

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: ER record, H&P, operative note; discharge summary

Abstraction Notes: Answer “yes” if patient seen in an urgent care visit of any kind within one week prior to the surgery. Answer “no” if patient only seen in this hospital’s ER and admitted immediately from that ER visit. The intent of this question is to identify patients who were seen for suspected appendicitis in an urgent or emergent situation within a week prior to this procedure. If there was an ER/urgent care visit in this time frame that is clearly non-abdominal, e.g. fracture, answer “no”.

Exclusions: None
J4) Appendectomy: Appendiceal pathology

Location: Pediatric Form, J. Non-elective Appendectomy, Question 4

Definition: Appendiceal pathology confirmation consistent with acute appendicitis, early appendicitis, mild appendicitis, inflammation or appendiceal tumor

SORCE alias: pathrslt

ARMUS Variable Name(s):

Field Format: Yes/No

Value Codes: 1 = Yes
              2 = No

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: Operative note; discharge summary

Abstraction Notes: Statements in the pathology report such as “mild early” or “very early” appendicitis also indicate appendiceal pathology. Fibrous obliteration of the tip of the appendix does not indicate appendiceal pathology.

Exclusions: None
J5) Appendectomy: Perforated appendix

Location: Pediatric Form, J. Non-elective Appendectomy, Question 5

Definition: Pathology reports confirms perforated appendix. Pathology reports state perforated appendix, ruptured appendix, peritonitis due to perforated appendix or periappendicitis. Per surgeon no/yes Per pathology no/yes. Indicate if microperforation was reported.

SORCE alias: perfappx_surg
               perfappx_path
               perfappx_micro

ARMUS Variable Name(s):

Field Format: Yes/No

Value Codes: 1 = Yes
             2 = No

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: Operative note; pathology report, discharge summary

Abstraction Notes: If the operative report and the pathology report differ, answer according to the pathology report with the following exception: In some cases, the surgeon will state clearly that the appendix was ruptured, but the pathology report may not be clear as in some cases of rupture, the appendix may be so badly damaged that pathology only receives fragments and the pathologist will not be able to say the appendix was ruptured.

Exclusions: None
K1) Colon/rectal: Prior surgery

Location: Pediatric Form, K. Colon Operation, Question 1

Definition: Documentation of any previous colon or pelvic surgery, regardless of date or facility. This includes small bowel resection. Include if it took place during this hospitalization but prior to this operation.

SORCE Alias: priorsrg

ARMUS Variable Name(s):

Field Format: Yes/No

Value Codes: 1 = Yes
2 = No

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: H&P, Admit note (Nsg or MD), Progress notes.

Abstraction Notes: This is to determine the complexity of the case. For instance, a change in the anatomy or multiple adhesions. Does not include a prior colonoscopy.

Exclusions: none
K2) Colon/rectal: Resection within 30 days

Location: Pediatric Form, K. Colon Operation, Question 2

Definition: Was there a prior colon resection done anywhere within 30 days prior to this surgery? Indicate, if known, the name of the previous hospital via the Washington state hospitals in the pull-down menu. If the hospital is not listed, select “other”.

SORCE alias: resectn
hospital

ARMUS Variable Name(s):

Field Format: Yes/No; Look-up table

Value Codes: 1 = Yes
2 = No

Allowable Values:

Data Storage Type: Numeric; Character

Suggested Data Source: H&P, Admit note (Nsg or MD), Progress Notes

Abstraction Notes: This is to determine if there had been a leak or is a complication of the previous surgery. Naming the facility will indicate if there has been a transfer due to complications.

Exclusions: None
K3) Colon/rectal: Procedure priority

**Location:** Pediatric Form, K. Colon Operation, Question 3

**Definition:** Elective or Non-elective. An elective procedure is one that is performed on a patient whose symptoms and/or disease has been stable in the days or weeks prior to the procedure. Typically elective cases are scheduled at least several days in advance. Non-elective procedures (including urgent or emergent) are required to minimize or address further clinical deterioration.

**SORCE alias:** procpri

**ARMUS Variable Name(s):**

**Field Format:** *Multiple choice.*

**Value Codes:**
- 0=E elective
- 1=Non-Elective

**Allowable Values:**

**Data Storage Type:** *Numeric*

**Suggested Data Source:** H&P, Anesthesia note, Admit note, Progress note.

**Abstraction Notes:** This assists in the determination of the risk of complications.

**Exclusions:** None
K4.1) Colon/rectal: Anorectal malformation – Operation type

Location: Pediatric Form, K. Colon Operation, Question 4.1

Definition: Was this surgery a PSARP (Posterior- Sagittal Anorectoplasty), laparoscopic pull-through or other (no/yes) If other, specify type

SORCE Alias:  
arm_psarp  
arm_pullthru  
arm_other  
arm_othertxt (other specified)

ARMUS Variable Name(s): 

Field Format: Yes/No  
Text

Value Codes:  
1=Yes  
2=No

Allowable Values: 

Data Storage Type: Numeric; Character

Suggested Data Source: Op record and discharge summary

Abstraction Notes: If there is a case of 2 different types of colon surgery in one operation use the original intention. For instance need example

Exclusions: None

Although numerous surgical approaches have been proposed for the repair of intermediate and high-lying anomalies in boys and girls, currently the posterior sagittal anorectoplasty (PSARP) procedure described by de Vries and Pena is the preferred technique. This approach is also useful for repair of complicated cloacal malformations and for remedial procedures for previously operated patients who are incontinent. At times, an abdominal approach is required in addition to the posterior sagittal approach. A PSARP includes an incision from near to tail bone to near the scrotum or vagina. In the depths of this incision the rectum can be found and its abnormal connection to the urinary tract or vagina if one exists. This connection is repaired and the rectum and the muscles around it are replaced in as normal a position as possible. A new anus is created by sewing the rectum to the skin. In most patients, the entire procedure can be done with this incision from behind, but occasionally an abnormalities higher in the abdomen will require an abdominal incision as well. Two to three weeks later, the new anus is dilated
gently with a dilator, and after 6-8 weeks or so, another colostogram may be performed if needed to verify that complete healing has occurred. At that point, the colostomy may be closed. Some surgeons may prefer a laparoscopic approach to some of these repairs.
K4.2) Colon/rectal: Anorectal malformation-Protective ostomy

**Location:** Pediatric Form, K. Colon Operation, Question 4.2

**Definition:** Was protective ostomy done  no/ yes
If yes, location of the ostomy: ileostomy or colostomy  If colostomy, was it right, transverse, left, or sigmoid area

**SORCE Alias:**
- arm_ostomy
- arm_ostomyloc
- arm_colostype

**ARMUS Variable Name(s):**

**Field Format:** Yes/No
Multiple choice

**Value Codes:**

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<td>2=No</td>
<td>2=ileostomy</td>
<td>2=transverse</td>
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<td></td>
<td>4=sigmoid</td>
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<td></td>
<td></td>
<td>5=unknown</td>
</tr>
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</table>

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** Op record and discharge summary

**Abstraction Notes:**

**Exclusions:** None
**K4.3) Colon/rectal: Anorectal malformation-Fistula**

**Location:** Pediatric Form, K. Colon Operation, Question 4.3

**Definition:** Indicate if the procedure involved a fistula. If yes, indicate the location of the fistula. Choose the best answer.

**SORCE Alias:**
- fistula
- fistulaloc

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

*Multiple choice*

**Value Codes:**
1=Bladder
2=Perineal
3=Prostatic urethra
4=Urethra
5=Vaginal
6=Vestibular

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** Op record and discharge summary

**Abstraction Notes:**

**Exclusions:** None
K5.1) Colon/rectal: Hirschsprung’s Disease – Operation type

Location: Pediatric Form, K. Colon Operation, Question 5.1

Definition: Indicate the operation type: diverting ostomy (yes/no); Pull-thru procedure (yes/no)

SORCE Alias: hd_divert
               hd_pullthru

ARMUS Variable Name(s):

Field Format: Yes/No

Value Codes:  1=Yes
               2=No

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: Op record and discharge summary

Abstraction Notes:

Exclusions: None
K5.2) Colon/rectal: Hirschsprung’s Disease - Diverting ostomy

**Location:** Pediatric Form, K. Colon Operation, Question 5.2

**Definition:** Was protective ostomy done  no/ yes
If yes, location of the ostomy: ileostomy or colostomy  If colostomy, was it right, transverse, left, or sigmoid area

**SORCE Alias:**
- div_ostomyloc
- div_colostype
- div_level

**ARMUS Variable Name(s):**

**Field Format:** Yes/No
Multiple choice

**Value Codes:**

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**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** Op record and discharge summary

**Abstraction Notes:**

**Exclusions:** None
K5.3) Colon/rectal: Hirschsprung’s Disease-Primary Pull-through

**Location:** Pediatric Form, K. Colon Operation, Question 5.3

**Definition:** Was this a primary pull-through no/yes  One stage repair that may be done depending upon the condition of the child and the initial response to treatment

If yes, was it a Soave, Swenson, Duhamel, or other-specify  The first definitive operation was described by Swenson and Bill in 1948. Commonly called the Swenson procedure, this procedure involves removal of the aganglionic bowel and sewing ganglionic colon to the rectum very near the anus.

Duhamel introduced his technique in 1956. In this procedure, the pelvic dissection is limited to the space behind the rectum. This avoids potential injury to the pelvic nerves. The normal bowel is brought down behind the rectum and the end of this bowel is sewn to the side of the rectum near the anus. A surgical stapler is used to then further connect the pulled-through bowel to the rectum. The patient ends up with a new rectum, the front half of which is composed of the old aganglionic rectum and the back half is composed of the new pulled-through ganglionic colon.

The Soave or endorectal pull-through was introduced by Soave in 1960. Conceptually, this procedure consists of removing the mucosa (the lining) of the rectum and pulling ganglionic bowel through a short aganglionic muscular cuff

If primary, was it it laparoscopic  no/yes

If primary, was there a protective ostomy  no/yes

Describe the protective ostomy:  the location of the ostomy: ileostomy or colostomy; If colostomy, was it in the right, transverse, left or sigmoid area?

If not primary, level of prior ostomy: ileostomy or colostomy, If colostomy, was it in the right, transverse, left or sigmoid area

**SORCE Alias:**
- `primpullthru`
- `ppt_type`
- `ppt_txt` *(other specified)*
- `ppt_lap`
- `ppt_ostomy`
- `ppt_ostomyloc`
- `ppt_colostype`
- `prior_ostomyloc`
- `prior_colostype`

**ARMUS Variable Name(s):**
**Field Format:** Yes/No; Multiple Choice; Text

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<td>2=Swenson</td>
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<td>2=ileostomy</td>
<td>2=transverse</td>
<td>3=Duhamel</td>
<td>3=left</td>
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**Allowable Values:**

**Data Storage Type:** Numeric; Character

**Suggested Data Source:** Op record and discharge summary

**Abstraction Notes:**

**Exclusions:** None

Figure 12: The bold lines in each drawing indicate the retained aganglionic rectum.
K6.1) Colon/rectal: Ulcerative colitis-Procedure type

**Location:** Pediatric Form, K. Colon Operation, Question 6.1

**Definition:** Check if was a total abdominal colectomy with ileostomy, total abdominal protocolectomy with ileoanal pull-through or protocolectomy with ileoanal pull-through.

**SORCE Alias:**
- uc_totabdcol
- uc_totabdproc
- uc_proctocol

**ARMUS Variable Name(s):**

**Field Format:** Yes/No

**Value Codes:**
- 1=Yes
- 2=No

**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** Op record and discharge summary

**Abstraction Notes:**

**Exclusions:** None
K6.2) Colon/rectal: Ulcerative colitis-Ileoanal pull-through

**Location:** Pediatric Form, K. Colon Operation, Question 6.2

**Definition:** For procedures indicating a ileoanal pull-through: b. total abdominal protocolectomy with ileoanal pull-through or c. protocolectomy with ileoanal pull-through, indicate the protective ileostomy & pouch.

**SORCE Alias:**
- uc_ostomy
- uc_pouch
- uc_pouchtype
- uc_pouchnxt (other specified)

**ARMUS Variable Name(s):**

**Field Format:** Yes/No; Multiple choice; Text

**Value Codes:**

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<td>1=Yes</td>
<td>1=J pouch</td>
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<tr>
<td>2=No</td>
<td>2=S pouch</td>
</tr>
<tr>
<td></td>
<td>3=Other</td>
</tr>
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</table>

**Allowable Values:**

**Data Storage Type:** Numeric; Character

**Suggested Data Source:** Op record and discharge summary

**Abstraction Notes:**

**Exclusions:** None
K7.1) Colon/rectal: Other indications - Operation type

**Location:** Pediatric Form, K. Colon Operation, Question 7.1

**Definition:** For all other indications, check the type of operation performed. For the different types of colectomy, indicate the sections of colon involved in the resection.

**Illeocecectomy** The removal of a very limited portion of the GI tract to include the terminal ileum and cecum, with an anastomosis between the remaining terminal ileum and the ascending colon.

**Colectomy:**

- **Right hemicolecotomy** – This term can be associated with resection of the terminal ileum, including the cecum, to approximately the mid transverse colon. Other terms used in association with it are: Ascending colon, cecectomy, hepatic flexure. Transverse colons are also included in this category.

- **Left hemicolecotomy** includes the removal of the left side of the transverse colon all the way to the sigmoid colon. This also includes a “sigmoid colon resection”. Other terms used: splenic flexure, Descending colon.

- **Total Abdominal Colectomy** – is associated with the removal of the left, right, and sigmoid. The rectal stump remains in place. An ileostomy or ileoanal anastomosis can be done. Anastomoses are frequently done with the creation of pouches. Included under this heading is a Panproctocolectomy and an Ileoanal Pullthrough.

- **Perineal proctotectomy** – perineal incision with the partial removal of the rectum/sigmoid with a perineal anastomosis for a prolapse or mass removal from the rectum.

- **Colostomy Takedown** – is referring to the rejoining of a temporary or protective stoma and may include a partial colon resection.

**Other Operations:** Specify the type of operation, not included above

Also see Appendix B-colon diagram

**SORCE Alias:**

- oth_ileoce
- oth_colec
- col_right
- col_trans
- col_left
- col_sigmoid
- col_rectum
- oth_other
- oth_othertxt *(other specified)*
ARMUS Variable Name(s):

Field Format: Yes/No; Text

Value Codes:  
1=Yes  
2=No

Allowable Values:

Data Storage Type: Numeric; Character

Suggested Data Source: Op record and discharge summary

Abstraction Notes: If there is a case of 2 different types of colon surgery in one operation use the original intention.
Another word for ischemic bowel is necrotic bowel.

Exclusions: None
K7.2) Colon/rectal: Other indications – Protective Ostomy

**Location:** Pediatric Form, K. Colon Operation, Question 7.2

**Definition:** A protective stoma/ostomy – is a temporary ostomy or one that is used so that a section of the bowel may heal. This can be a colostomy or an ileostomy and is done at the same time as the anastomosis to “protect” it from leaking. It is often used with the creation of ileoanal or “J” pouches.

  - **Colostomy** – the colon is brought out through the abdominal wall to the skin for evacuation of bowel contents.
  - **Ileostomy** – a portion of the small intestine is brought out through the skin for evacuation of bowel contents. It can be brought out as a “loop” (both ends are brought out) or an “end ileostomy” (one end only)

**SORCE Alias:**
- oth_ostomy
- oth_ostomyloc
- oth_colostype

**ARMUS Variable Name(s):**

**Field Format:** Yes/No; Multiple choice

**Value Codes:**

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</tr>
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<td>2=ileostomy</td>
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**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** Op record and discharge summary

**Abstraction Notes:**

**Exclusions:** None
K7.3) Colon/rectal: Other indications - Anastomosis

Location: Pediatric Form, K. Colon Operation, Question 7.3

Definition: Was anastomosis done? If yes, specify what type of anastomosis:
- **Colocolon** – colon to colon (includes colon to rectum)
- **Ileocolon** – ileum to colon
- **Ileoanal** – ileum to anal
- **Coloanal** – colon to anus

If the anastomosis was ileoanal or coloanal, indicate if a pouch was created. Indicate the type of pouch.

**SORCE Alias:**
- anastmss
- anastype
- oth_pouch
- oth_pouchtype
- oth_pouchtxt (other specified)

**ARMUS Variable Name(s):**

**Field Format:** Yes/No; Multiple Choice

**Value Codes**

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<td>1=J pouch</td>
</tr>
<tr>
<td>2=No</td>
<td>1=Ileocolon</td>
<td>2=S pouch</td>
</tr>
<tr>
<td></td>
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<td>3=Other</td>
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<tr>
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<td>3=Coloanal</td>
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**Allowable Values:**

**Data Storage Type:** Numeric

**Suggested Data Source:** Operative record

**Abstraction Notes:** A pouch is an internal reservoir. Usually a protective stoma is created after the colon and the rectum have been removed. The anus and the surrounding muscle are left in place. In the case of an ileoanal or J pouch, a portion of the ileum is shaped and attached to the anus to work like the rectum, storing waste until a bowel movement. This is frequently done in a 2 or 3 stage procedure to insure healing of the pouch. After a period of time, a piece of colon or ileum is joined to the new pouch and bowel contents will then be excreted “normally”. It is frequently done for patients with Ulcerative Colitis or Familial Adenomatous Polyposis.
Exclusions: None
K7.4) Colon/rectal: Other indications - Anastomosis tested

**Location:** Pediatric Form, K. Colon Operation, Question 7.4

**Definition:** Was the anastomosis tested? If yes, indicate the type of test: Check all that apply:

- **Scope** – sigmoidoscope/protocscope or flexible endoscope inserted into the rectum during surgery to insure the anastomosis is intact and patent.
- **Methylene Blue** – the instillation of dye to assess for leaks.
- **Air injection** – via a tube or syringe into the intestine which is then immersed in saline to check for air bubbles.
- **Palpation/inspection.**
- **Other** – free text any other type of inspection

**SORCE alias:**
- c_anastest
- c_scope
- c_methblue
- c_airinjct
- c_palp
- c_other
- c_testtxt *(other specified)*

**ARMUS Variable Name(s):**

**Field Format:** Yes/No; Text

**Value Codes:** 1=Yes 2=No

**Allowable Values:**

**Data Storage Type:** Numeric; Character

**Suggested Data Source:** Op note

**Abstraction Notes:** This question is only applicable to an anastomosis of the lower resections due to the inability to test the others. This would include L Hemi, LAR, TAC.

**Exclusions:** Right hemicolecctomies
K8) Colon/rectal: VCUG

Location: Pediatric Form, K. Colon Operation, Question 8

Definition: Did the patient have a voiding cystourethrogram done  no/yes

SORCE alias: vcug

ARMUS Variable Name(s):

Field Format: Yes/No

Value Codes: 1=Yes
  2=No

Allowable Values:

Data Storage Type: Numeric


Abstraction Notes:
Approximately 60% of patients with high or intermediate forms of imperforate anus have some form of associated genitourinary (GU) malformation or vesicoureteral reflux, a condition where urine goes back upstream from the bladder to the kidneys. The incidence of GU malformation with low anomalies is only 15% to 20%; however, associated anomalies of the GU tract are particularly important to recognize early if problems with the kidneys are to be avoided.
A voiding cystourethrogram (VCUG) should be performed before initial discharge home to rule out vesicoureteral reflux (flow of urine backward from the bladder to the kidney) so that appropriate therapy can be started.

Exclusions: None
K9) Colon/rectal: Pathology results

Location: Pediatric Form, K. Colon Operation, Question 9

Definition: Did pathology results confirm postoperative the diagnosis?

SORCE Alias: confirm

ARMUS Variable Name(s):

Field Format: Yes/No

Value Codes: 1=Yes
2= No

Allowable Values:

Data Storage Type: Numeric

Suggested Data Source: Path report

Abstraction Notes: If the preoperative diagnosis is for something other than for cancer, but cancer if found during the surgery, answer this and the following questions that have to do with a finding of cancer.

In the event that the pre-op diagnosis of Cancer was based on a prior colonoscopy and the surgery is a follow up procedure to remove additional suspicious tissue, and no additional cancer was found, this finding does not revoke the pre-op diagnosis. In this event, the answer to this data element is “yes” unless there is a statement in the medical record to the contrary.

Exclusions: Cases without cancer as the postoperative diagnosis.
## Appendix A: Medications

Note: lists are not all-inclusive, and trade names may change.

<table>
<thead>
<tr>
<th>Drug Class</th>
<th>Names</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACE Inhibitors</td>
<td>Benazepril hydrochloride</td>
<td>These may be used for the treatment of hypertension. If the patient is on one of these medications, and the medical record does not specify another reason for being on this medication, assume that it is being used to treat hypertension.</td>
</tr>
<tr>
<td></td>
<td>Captopril</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Anapril Maleate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fosinopril Sodium</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lisinopril</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moexipril hydrochloride</td>
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</tr>
<tr>
<td></td>
<td>Perindopril erbumine</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quianpril hydrochloride</td>
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</tr>
<tr>
<td></td>
<td>Ramipril</td>
<td></td>
</tr>
<tr>
<td></td>
<td>trandolapril</td>
<td></td>
</tr>
<tr>
<td>ARBs</td>
<td>Candesartan Cilexitil</td>
<td>These may be used for the treatment of hypertension. If the patient is on one of these medications, and the medical record does not specify another reason for being on this medication, assume that it is being used to treat hypertension.</td>
</tr>
<tr>
<td></td>
<td>Eprosartan Mesylate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Irbesartan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Losartan Potassium</td>
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</tr>
<tr>
<td></td>
<td>Olmesartan Medoxomil</td>
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<tr>
<td></td>
<td>Telmisartan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Valsartan</td>
<td></td>
</tr>
<tr>
<td>Anticoagulants</td>
<td>Heparin</td>
<td></td>
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<tr>
<td></td>
<td>Coumadin</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Warfarin</td>
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<tr>
<td></td>
<td>Low molecular weight heparin</td>
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</tr>
<tr>
<td></td>
<td>Fragmin (dalteparin)</td>
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</tr>
<tr>
<td></td>
<td>Lovenox (enoxaparin)</td>
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<tr>
<td></td>
<td>Aristra (fondaparinux)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Innohep (tinzaparin)</td>
<td></td>
</tr>
<tr>
<td>Anticonvulsants</td>
<td>Gabitrel (tiagabine)</td>
<td>YES Ok for peds</td>
</tr>
<tr>
<td></td>
<td>Lyrica (pregablin)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neurontin (gabapentin)</td>
<td></td>
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<tr>
<td></td>
<td>Depakote/Depekene</td>
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</tr>
<tr>
<td></td>
<td>Keppra (levetiracetam)</td>
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<tr>
<td></td>
<td>Tegretol (carbamazepine)</td>
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</tr>
<tr>
<td></td>
<td>Topomax (topiramate)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trileptal (oxcarbazine)</td>
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<tr>
<td></td>
<td>Zonegran (zonisamide)</td>
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</tr>
<tr>
<td></td>
<td>Lamictal (lamotrigene)</td>
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</tr>
<tr>
<td></td>
<td>Klonopin (clonazepam)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Valium (diazepam)</td>
<td></td>
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<tr>
<td></td>
<td>Tranxene (chlorazepate)</td>
<td></td>
</tr>
<tr>
<td>Drug Class</td>
<td>Names</td>
<td>Comments</td>
</tr>
<tr>
<td>-----------------</td>
<td>----------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Antidiabetic agents</td>
<td>Insulin, Acarbose, Byetta, Glimepiride, Glipizide, Glyburide, Metformin hydrochloride, Miglitol, Pioglitazone hydrochloride, Rosiglitazone maleate, Tolazamide, Tolbutamide (with or without sodium)</td>
<td></td>
</tr>
<tr>
<td>Antiplatelet agents</td>
<td>Aggrenox (combo of ASA and extended release dipyridamole), Aspirin (ASA), Plavis (Clopidogral), Pletal (cilostrazol), Persantine (Dipyridamole), Ticlid (ticloidine)</td>
<td></td>
</tr>
<tr>
<td>Beta Blockers</td>
<td>Acebutolol, Atenolol, Betapace (sotalol), Betaxolol, Bisoprolol, Blocadren (timolol), Brevibloc (esmolol), Cartrol (carteolol), Carteolol, Carvedilol, Coreg (carvedilol), Esmolol, Inderal (propranolol), Innopran (&quot;), Kerlone (betaxolol), Labetalol, Levatol (penbutolol), Lopressor (metoprolol), Metoprolol, Nadolol, Normodyne (labetolol), Penbutolol, Pindolol</td>
<td>Alone or in combination. * indicates combination drug. These may be used for the treatment of hypertension. If the patient is on one of these medications, and the medical record does not specify another reason for being on this medication, assume that it is being used to treat hypertension.</td>
</tr>
<tr>
<td>Drug Class</td>
<td>Names</td>
<td>Comments</td>
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<tr>
<td>--------------------------</td>
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</tr>
<tr>
<td></td>
<td>Proranolol</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sectral (acebutolol)</td>
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<tr>
<td></td>
<td>Sotalol</td>
<td></td>
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<tr>
<td></td>
<td>Tenormin (atenolol)</td>
<td></td>
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<tr>
<td></td>
<td>Timolol</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Toprol (metoprolol)</td>
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<tr>
<td></td>
<td>Trandate (labetalol)</td>
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</tr>
<tr>
<td></td>
<td>Visken (pindolol)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zebeta (bisoprolol)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*atenolol/chlorthalidone</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*bisoprolol/HCTZ</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Corzide (bendroflumethiazide/nadolol)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*HCTZ/propranolol</td>
<td></td>
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<tr>
<td></td>
<td>*Inderide (&quot;&quot;)</td>
<td></td>
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<tr>
<td></td>
<td>*Lopressor HCT (&quot;)</td>
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<tr>
<td></td>
<td>*Tenoretic (atenolol/chlorthalidone)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Timolide (HCTZ/timolol)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Ziac (bisoprolol/HCTZ)</td>
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</tr>
<tr>
<td>Diuretics</td>
<td>Dyazide (hydrochloorthiazide/triamterene)</td>
<td>These may be used for the treatment of hypertension. If the patient is on one of these medications, and the medical record does not specify another reason for being on this medication, assume that it is being used to treat hypertension.</td>
</tr>
<tr>
<td></td>
<td>Maxzide (triamterene/hydrochloorthiazide)</td>
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<tr>
<td></td>
<td>Edecrin (ethacrynic acid)</td>
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<tr>
<td></td>
<td>Lasix (furosemide)</td>
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</tr>
<tr>
<td></td>
<td>Dyrenium (triamterene)</td>
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</tr>
<tr>
<td></td>
<td>Diuril</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Midamor (amiloride HCL)</td>
<td></td>
</tr>
<tr>
<td>Imunosuppressives/steroids</td>
<td>Prednisone</td>
<td>Do not include inhaled medications, e.g., for asthma.</td>
</tr>
<tr>
<td></td>
<td>Cortisone</td>
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</tr>
<tr>
<td></td>
<td>Methotrexate</td>
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<tr>
<td></td>
<td>Cyclosporine</td>
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<tr>
<td></td>
<td>Azasan (azathioprine)</td>
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<tr>
<td></td>
<td>CellCept (mycophenoiate mofetil)</td>
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</tr>
<tr>
<td></td>
<td>Myfortic (mycophenolic acide)</td>
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<tr>
<td></td>
<td>Neoral (cyclosporine)</td>
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</tr>
<tr>
<td></td>
<td>Prograf (tacrolimus)</td>
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<tr>
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<td>Rapamune (sirolimus)</td>
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</tr>
<tr>
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<td>Sandimmune (cyclosporine)</td>
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</tr>
<tr>
<td>Narcotics</td>
<td>Actiq</td>
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</tr>
<tr>
<td></td>
<td>Avinza</td>
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<tr>
<td></td>
<td>Combunox</td>
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</table>
## Drug Class: Names

<table>
<thead>
<tr>
<th>Drug Class</th>
<th>Names</th>
<th>Comments</th>
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<tbody>
<tr>
<td></td>
<td>Demerol</td>
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<tr>
<td></td>
<td>DepoDur</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Darvocet</td>
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</tr>
<tr>
<td></td>
<td>Dilaudid (hydromorphone)</td>
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</tr>
<tr>
<td></td>
<td>Duragesic</td>
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</tr>
<tr>
<td></td>
<td>Duramorph</td>
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<td>Fentanyl</td>
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<tr>
<td></td>
<td>Lortab</td>
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</tr>
<tr>
<td></td>
<td>MS Contin (morphine sulfate)</td>
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</tr>
<tr>
<td></td>
<td>Nubain</td>
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</tr>
<tr>
<td></td>
<td>Numorphan</td>
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<tr>
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<td>Morphine Sulfate</td>
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<tr>
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<td>OxyContin (oxycodone)</td>
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</tr>
<tr>
<td></td>
<td>Perocet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Percodan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tylenol with Codeine</td>
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</tr>
<tr>
<td></td>
<td>Vicodin (hydrocodone)</td>
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</tr>
<tr>
<td></td>
<td>Zydone</td>
<td></td>
</tr>
<tr>
<td>NSAIDs</td>
<td>Celecoxib</td>
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<tr>
<td></td>
<td>Diclofenac (potassium or sodium)</td>
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</tr>
<tr>
<td></td>
<td>Diflunisal</td>
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</tr>
<tr>
<td></td>
<td>Etodolac</td>
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</tr>
<tr>
<td></td>
<td>Fenoprofen calcium</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Flurbiprofen (with/without sodium)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ibuprofen</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indomethacin (with/without sodium trihydrate)</td>
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</tr>
<tr>
<td></td>
<td>Ketoprofen</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ketorolac tromethamine</td>
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<tr>
<td></td>
<td>Eclofenamate sodium</td>
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<tr>
<td></td>
<td>Mefanemic acid</td>
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<td></td>
<td>Meloxicam</td>
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</tr>
<tr>
<td></td>
<td>Nabumetone</td>
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</tr>
<tr>
<td></td>
<td>Naproxen (with/without sodium)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oxaprozin</td>
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</tr>
<tr>
<td></td>
<td>Piroxicam</td>
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<tr>
<td></td>
<td>Rofecoxib</td>
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<td>Sulindac</td>
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<td></td>
<td>Tolmetin sodium</td>
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<tr>
<td></td>
<td>Valdecoxib</td>
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</tr>
<tr>
<td>Statins/Lipid</td>
<td>Atorvastatin calcium (Lipitor)</td>
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</tr>
<tr>
<td>Lowering Agents</td>
<td>Fluvastatin sodium (Lescol)</td>
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</tr>
<tr>
<td></td>
<td>Lovastatin (Mevacor)</td>
<td></td>
</tr>
</tbody>
</table>
### Vasodilators
- Cardene (nicardipine)
- Esmolol (beta blocker but used to lower BP at times)
- Labetalol (beta blocker but used to lower BP at times)
- Nipride (nitroprusside)
- Tridil (nitroglycerin)

### Vasopressors
- Dopamine
- Levophed (norepinephrine)
- Neosynephrine (phenylephrine)
- Vasopressin

Add:
- Drug Class: H2 Blockers
  - Cimetidine
  - Rinitidine
- Nizatidine

Proton_pumpInhibitors:
- Lansoprazole
- Omeprazole
- pantoprazole
Appendix B: Colon/rectal procedure diagram