M·ACS

2019 Data Dictionary

Contents

Tab 1 – Identifier 6
1) Record Number 6
2) Last Name 6
3) First Name 6
4) Date of Birth (mm/dd/yyyy) 7
5) Medical Record Number (MRN) 7
6) Visit Number (CSN) 7
7) MSQC Case Number 8
8) MSQC Case Type 8
105) SCOAP Case Number 8
9) Sex 9
10) Race 9
11) Ethnicity 10
Tab 2 - Arrival 12
12) ED Arrival Date 12
13) ED Arrival Time (Military Time 00:00) 12
14) Admit Date 13
15) Admit Time (Military Time 00:00) 13
16) Point of Entry 13
17) Surgery Consult Date (mm/dd/yyyy) 14
18) Consult Surgeon 15
19) ACS Service 15
20) Type of Service 16
Tab 3 - Diagnosis 17
21) ICD-10 Code 17
22) Operation 17
23) Operation Date (mm/dd/yyyy) 17
24) Operation Incision Time (Military Time 00:00) 18
25) Operative Surgeon 18
26) Operative Type 18

27) Conversion 19
28) AAST Grade 19
29) Procedure CPT Code 20
Tab 4 - Hernia Repair 21
30) Associated Hernia Requiring Repair 21
31) Hernia Location 21
32) Mesh Placement Location 21
33) Mesh Type 22
34) Hernia Size Width (cm) – Aggregate if Multiple Defects 22
35) Hernia Size Length (cm)-Aggregate if Multiple Defects 23
Tab 5 - Wound Disruption 24
36) Wound Disruption 24
Tab 6 - Interventional Radiology 25
37) Interventional Radiology 25
38) IR Procedure 25
39) IR Procedure Date (mm/dd/yyyy) 26
40) IR Procedure Time (Military Time 00:00) 26
Tab 7 - Disease 27
41) Organ System 27
Tab 8 - Appendix 28
42) Diagnosis CT Scan 28
43) CT Results 28
44) Diagnosis Ultrasound 28
45) Ultrasound Results 29
46) Diagnosis MRI 29
47) MRI Results 30
48) Pathology Result 30
49) Appendicitis Type 31
50) Medical Management 31
51) IV Antibiotic #1 Class 32
52) Duration of IV Antibiotic #1 (calendar days) 32
53) IV Antibiotic #2 Class 33
54) Duration of IV Antibiotic #2 (calendar days) 33
55) IV Antibiotic #3 Class 34

56) Duration of IV Antibiotic #3 (calendar days) ... 35
57) Duration of Home Antibiotic (calendar days) ... 35
58) Home Oral Antibiotic #1 Class ... 35
59) Home Oral Antibiotic #2 Class ... 36
60) Home IV Antibiotic Class ... 37
61) Appendectomy Within 12 Months ... 38
Tab 9 - Gall Bladder ... 39
63) Diagnosis Ultrasound ... 39
64) Diagnosis CT Scan ... 39
65) Diagnosis HIDA ... 39
66) Diagnosis EUS ... 40
67) Diagnosis ERCP ... 40
68) Diagnosis MRI/MRCP ... 41
69) Intra-Op Cholangiogram ... 41
70) Secondary Ultrasound ... 41
71) Secondary CT Scan ... 42
72) Secondary HIDA ... 42
73) Secondary EUS ... 43
74) Secondary ERCP ... 43
75) Secondary MRI/MRCP ... 43
76) Non-Operative Management ... 44
Tab 10 - Small Bowel Obstruction ... 45
77) Prior Small Bowel Obstruction ... 45
78) Number Prior Admits for Small Bowel Obstruction ... 45
79) Prior Abdominal Procedures ... 46
80) Prior Open Laparotomy ... 46
81) Prior Laparoscopy ... 47
82) Prior Mesh ... 47
83) Prior Radiation ... 47
84) Metastatic Malignancy ... 48
85) CT Scan ... 48
86) CT Scan Date (mm/dd/yyyy) ... 49
87) CT Scan Time (Military Time 00:00) ... 49
88) CT Findings ... 49

104) Obstruction Related to Adhesions 50
103) Other CT Findings 51
89) Gastrografin Challenge 51
90) Gastrografin Challenge Date (mm/dd/yy) 51
91) Gastrografin Challenge Time (Military Time 00:00) 52
92) Gastrografin Result 52
93) Operatio 52
94) Operative Findings 53
95) Other Operative Findings 54
Tab 11 - Discharge 55
96) Hospital Discharge Date (mm/dd/yyyy) 55
97) Hospital Discharge Time (Military Time 00:00) 55
98) Discharge Status 55
99) Discharge Disposition 56
100) Readmission Within 30 days 56
101) Comments 57
Appendix A 58
CPT Codes Included in Both Qualtrics and MSQC 58
Appendix B 61
ICD 10 for Small Bowel Obstruction 61

Tab 1 – Identifier

1) Record Number

Intent: To provide a means to identify a specific patient touch (entry) by the Acute Care Surgery General Surgery physicians for entry into the MACS Qualtrics Emergent General Surgery database.

Definition: A unique number assigned by the abstractor at the time of entry into Qualtrics.

Variable Options: Any number

Include: All

Exclude: N/A

Notes: Should not be the medical record number or visit number.

2) Last Name

Intent: To provide a means to identify a patient for internal tracking purposes.

Definition: Last name of patient

Variable Options: Name

Include: All

Exclude: N/A

Notes: If name is hyphenated, remove the hyphen and leave a space.

3) First Name

Intent: To provide a means to identify a patient for internal tracking purposes.

Definition: First name of patient

Variable Options: Name

Include: All

Exclude: N/A

Notes:

4) Date of Birth (mm/dd/yyyy)

Intent: To provide the means to calculate the patient's age at the time of the admit/principle operative procedure to ensure that the patient meets program inclusion criteria ($\geq$ 18 years). May also be used in analysis to predict risk.

Definition: The day, month and year that the patient was born.

Variable Options: Date in mm/dd/yyyy format

Include: All

Exclude: N/A

Notes:

5) Medical Record Number (MRN)

Intent: To provide a means to identify a specific patient in the Qualtrics Emergent General Surgery Quality Improvement Program database.

Definition: The Medical Record Number (MRN) is a unique number assigned by the hospital that permanently identifies the patient in the database.

Variable Options: The MRN assigned by the hospital

Include: All

Exclude: N/A

Notes:

- All cases for an individual patient will track to a single MRN.
- Ensure the MRN is entered the same way every time (including or excluding leading zero's as appropriate for the hospital).

6) Visit Number (CSN)

Intent: To provide a means to identify a specific visit (case) for internal tracking purposes.

Definition: A number assigned by the hospital for a specific visit (case).

Variable Options: Any number

Include: All

Exclude: N/A

Notes:

7) MSQC Case Number

Intent: To provide a means to identify a specific surgery case in the MSQC database for internal tracking purposes.

Definition: The number assigned by the MSQC workstation for a specific surgery case.

Variable Options: Any number assigned by the workstation.

Include: All surgery cases entered into the MSQC database.

Exclude: Patients not entered into the MSQC database.

Notes:

8) MSQC Case Type

Intent: To capture how a surgery case was selected for inclusion in the MSQC system and allow retrieval of surgical service specific cases from the MSQC database.

Definition:

Variable Options:

a. Standard
b. Oversample
c. Oversample Not Marked
d. Not Included

Include: All patients who have surgery.

Exclude: Patients who do not have surgery.

Notes: Oversample Not Marked is selected for patients who were never included in the standard sampling process therefore are not able to be marked as oversample in the MSQC workstation.

105) SCOAP Case Number

Intent: To provide a means to identify a specific case in the SCOAP database for internal tracking purposes.

Definition: The number assigned by the SCOAP workstation for a specific case.

Variable Options: Any number assigned by the workstation

Include: All cases entered into the SCOAP database.

Exclude: Patients not entered into the SCOAP database.

Notes:

9) Sex

Intent: To capture the genetic sex of the patient. May also be used in analysis to predict risk.

Definition: Differentiation between males and females.

Variable Options:

a) Female
b) Male
c) Unknown

Include: All

Exclude: N/A

Notes: The genetic sex of the patient at the time of their birth is to be used for this question.

10) Race

Intent: To capture the race of the patient. May also be used when investigating disparities in care and/or outcomes.

Definition: "The racial categories…generally reflect a social definition of race recognized…and not an attempt to define race biologically, anthropologically, or genetically. In addition, it is recognized that the categories of the race item include racial and national origin or sociocultural groups…People who identify their origin as Hispanic, Latino, or Spanish may be of any race" (US Census Bureau). Race may be assigned per hospital internal policy or self-identified by the patient.

Variable Options:

a. White: A person having origins in any of the original peoples of Europe, North Africa or the Middle East
b. Black or African American: A person having origins in any of the black racial groups of Africa. Terms such as "Haitian" or "Negro" can be used in addition to "Black or African American"
c. 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
d. Native Hawaiian or Pacific Islander: A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
e. American Indian: 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
f. Other

Include: All

Exclude: N/A

Notes:

- If the patient's race is documented only as Hispanic/Latino, choose "White" **and** choose "Hispanic or Latino" for ethnicity.
- If the patient's race is documented as mixed Hispanic/Latino with another race, choose whatever race is listed – for example, if "Black/Hispanic" is noted, choose "Black or African American" **and** "Hispanic or Latino" for the ethnicity.
- If race is unknown or the patient declined to answer, include in other.

Resources: Us Office of Management and Budget Classification of Federal Data on Race and Ethnicity. US Census Bureau

11) Ethnicity

Intent: To capture the ethnicity of the patient. May also be used when investigating disparities in care and/or outcomes.

Definition: 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.

Variable Options:

a. Hispanic or Latino
b. Not Hispanic or Latino

Include: All

Exclude: N/A

Notes:

- "Race" is required in addition to the variable.
- If the ethnicity is unknown, select "Not Hispanic or Latino".

Tab 2 - Arrival

12) ED Arrival Date

Intent: To capture the first date that the patient is available to be seen by a physician provider in the ED to allow the tracking of timeframes.

Definition: The date the patient first reaches a healthcare provider.

Variable Options: Date in mm/dd/yyyy format

Include: All patients seen in the ED.

Exclude: N/A

Notes:

- Use ED arrival date from the ED record. Do not use the arrival date listed on an EMS run sheet for this variable.
- Leave blank if patient was not treated in the ED.
- Patients being admitted from OB triage or Women's triage leave the ED Arrival date and time blank.

13) ED Arrival Time (Military Time 00:00)

Intent: To capture the first time that the patient is available to be seen by a physician provider in the ED to allow the tracking of timeframes.

Definition: The time the patient first reaches a healthcare provider.

Variable Options: military time in hh:mm format

Include: All patients seen in the ED.

Exclude: N/A

Notes:

- Use ED arrival time from the ED records. Do not use the arrival time listed on an EMS run sheet for this variable.
- Leave 00:99 if patient was not treated in the ED.
- Patients being admitted from OB triage or Women's triage leave the ED Arrival date and time blank.

14) Admit Date

Intent: To capture the date that the patient started treatment outside of an ED stay.

Definition: The date the patient was admitted or placed in observation.

Variable Options: Date in mm/dd/yyyy format

Include: N/A

Exclude: Patients treated only in the ED.

Notes:

- Leave blank if patient was managed only in the ED and did not have surgery.
- Admit date for patients directly admitted from the outside to an inpatient unit or going from the ED to a unit (inpatient/observation) will be the ADT unit admit date.
- Admit date for patients not admitted before going to the OR (e.g. ED to OR) will be the in room date from the anesthesia record.
- Patients being admitted from OB triage or Women's triage leave the ED Arrival date and time blank but complete the Admit date and time.

15) Admit Time (Military Time 00:00)

Intent: To capture the time that the patient started treatment outside of an ED stay.

Definition: The date the patient was admitted or placed in observation.

Variable Options: military time in hh:mm format

Include: N/A

Exclude: Patients treated only in the ED.

Notes:

- Leave 00:99 if patient was managed only in the ED and did not have surgery.
- Admit time for patients directly admitted from the outside to an inpatient unit or going from the ED to a unit (inpatient/observation) will be the ADT unit admit time.
- Admit time for pts going from the ED to the OR will be the in room time from the anesthesia record.

16) Point of Entry

Intent: To capture the location of the patient prior to being admitted to your hospital if needed for case mix adjustment.

Definition: To capture the location of the patient prior to being admitted to your hospital.

Variable Options:

a. Home/Direct Admit (e.g. home, assisted living facility, group home, jail/prison).
   - Include patients who are directly admitted from a physician's office or urgent care.
b. Direct from Skilled Care (e.g. skilled nursing home, transitional care unit, sub-acute hospital, ventilator bed, long-term acute care facility)
   - Patients directly admitted from a skilled nursing facility.
c. ED
   - If the patient presents to an outside ED and then presents to your ED by private care **without** transfer paperwork/orders.
   - Patients who present from a skilled nursing facility to the ED.
d. Transfer from Outside Hospital ED
   - If the patient presents to an outside ED and then presents to your ED or hospital by private care **with** transfer paperwork/orders.
e. Transfer from Outside Hospital (e.g. inpatient at transferring hospital to inpatient at your hospital)
f. Transfer Other (e.g. psychiatric unit, hospice unit, ambulatory surgery center directly to an inpatient bed)
g. Emergency Department Only/Not Admitted
   - A patient who is never admitted and never has surgery.
h. Other (e.g. Admit via OB/women's triage, admit from inpatient rehab)

Include: All

Exclude: N/A

Notes:

17) Surgery Consult Date (mm/dd/yyyy)

Intent: To allow the hospital/service to track timeframes from visit start to the date the patient is seen by the general surgery service.

Definition: Indicate the date the first general surgeon seen the patient

Variable Options: Date in mm/dd/yyyy format

Include: All

Exclude: N/A

Notes:

- Consult Inpatient New, Consult in ED or Admit H & P are all acceptable sources.

- The date of the first note should be used if there is more than one general surgeon who sees the patient (e.g. an ED consult and then an inpatient H & P, use the ED consult date).
- If there is a general surgery consult and a surgical critical care consult use the date the genera surgery consult.
- If the patient is a home/direct admit to the operating room **or** a consult in the operating room, put the date of surgery from the Anesthesia record.

18) Consult Surgeon

Intent: To allow the hospital/service to track each surgeon's consults/admits to allow for surgeon-specific data reporting.

Definition: Identify the name of the first general surgery physician to see the patient for consult/admit.

Variable Options: Select the appropriate surgeons' name.

Include: All

Exclude: N/A

Notes:

- Consult Inpatient New, Consult in ED or Admit H & P are all acceptable sources.
- The general surgery attending physician listed on the first note should be used if there is more than one (e.g. an ED consult and then an inpatient H & P, use the ED consult date).
- If there is a general surgery consult and a surgical critical care consult use the name of the surgeon from the general surgery consult.
- If the patient is a home/direct admit to the operating room **or** a consult in the operating room, put the primary attending general surgeon who performed the surgery from the operative note.

19) ACS Service

Intent: To allow the hospital to provide service specific data reporting when multiple general surgery teams are available.

Definition: Document the name of the general surgery service that provides the first consult/admit.

Variable Options:

a. SA1 – General Surgery Group 1
b. SA2 – General Surgery Group 2
c. SCC – Surgical Critical Care

d. Burn – Burn Service
e. Other

Include: N/A

Exclude: N/A

Notes:

- Within an institution there may be multiple services that cover emergency general surgery/surgical critical care. In a community setting there may be multiple physician practices that share call for emergency general surgery/surgical critical care. The service or practice group assigned to each variable option will be identified by each hospital to best meet their reporting needs.
- If the Burn service sees general surgery patients, ensure that only general surgery (non-burn registry) cases are included.

20) Type of Service

Intent: To allow the hospital to provide service specific information on the number of patients seen who are consults only and those who are admitted to the general surgery service.

Definition: Indicate if the service was seeing the patient as an outpatient, a consultant or if the patient was admitted to the general surgery service.

Variable Options:

a. Admit – primary responsibility for this patient's care lies with general surgery
b. Consult – general surgery is consulted to see the patient but the primary responsibility for the care of this patient is with another service (e.g. medicine, neurosurgery)
c. Outpatient – patients who present for outpatient surgery and are not admitted post-op

Include: N/A

Exclude: N/A

Notes:

- Select consult for all patients that the service sees in the ED who are discharged from the ED (not admitted to the hospital).
- If SA1, SA2 or SCC is primary service then mark as "Admit".

Tab 3 - Diagnosis

21) ICD-10 Code

Intent: To identify the primary reason the patient was admitted and/or was seen by general surgery.

Definition: The post discharge diagnosis that corresponds to the primary reason that patient was seen by general surgery.

Variable Options: Enter the appropriate ICD-10 diagnosis code.

Include: All patients with an ICD-10 code available.

Exclude: Patients that a ICD-10 code cannot be identified.

Notes:

- If the patient has surgery, use the ICD-10 code associated with the primary surgical procedure (CPT).
- If no surgery use primary billing code (Patient Inquiry) for admission (final after discharge) if appropriate to the surgery service (reason for consult). If primary billing code is not available or not appropriate, use billing code for the consult then other sources if coded discharge billing data is not available.

22) Operation

Intent: To identify patients who have surgery as part of management.

Definition: Indicate if the patient had surgery in the operating room.

Variable Options:

a. Yes
b. No

Include: All patients who have a surgical procedure in the operating room.

Exclude: Patients who have surgical procedures in areas other than the operating room.

Notes: Exclude surgery procedures performed in a critical care unit.

23) Operation Date (mm/dd/yyyy)

Intent: To identify the date the surgical procedure was performed.

Definition: Indicate the date the surgical incision occurred.

Variable Options: Date in mm/dd/yyyy format

Include: All patients who have a surgical procedure in the operating room.

Exclude: Patients who have surgical procedures in areas other than the operating room.

Notes: Exclude surgery procedures performed in a critical care unit.

24) Operation Incision Time (Military Time 00:00)

Intent: To identify the time the surgical procedure was performed.

Definition: Indicate the time of the surgical incision occurred.

Variable Options: military time in hh:mm format

Include: All patients who have a surgical procedure in the operating room.

Exclude: Patients who have surgical procedures in areas other than the operating room.

Notes: Exclude surgery procedures performed in a critical care unit.

25) Operative Surgeon

Intent: To identify the primary attending general surgeon for the operative procedure.

Definition: Indicate the name of the primary attending general surgeon for the procedure.

Variable Options: Select the appropriate surgeons' name

Include: All patients who have a surgical procedure in the operating room.

Exclude: N/A

Notes: If more than one attending general surgeon is listed on the operative note without indicating the primary surgeon, use the surgeon who billed for the primary procedure as the primary surgeon.

26) Operative Type

Intent: To identify the potential for pre-operative preparation of the patient.

Definition: Indicate how the patient presented for surgery.

Variable Options:

a. Non-Elective – Patient presents to the hospital and then the decision to take the patient to surgery occurs.
b. Elective – Surgery is scheduled in advance with an outpatient interval between the decision to operate and the actual operation.

Include: All patients who have a surgical procedure in the operating room.

Exclude: N/A

Notes:

27) Conversion

Intent: To track the use of minimally invasive surgery and cases where a minimally invasive option had to be aborted during the procedure.

Definition: The approach used by the surgeon to perform the principle procedure.

Variable Options:

a. Open – One or more incisions made to expose the underlying tissue/cavity and provide direct access for completion of the procedure.
b. Laparoscopic – Procedure done through several small incisions and performed through the vision of the laparoscope.
c. Laparoscopic to Open – A procedure that is started laparoscopic but due to operative findings (e.g. preexisting condition, iatrogenic injury, safety) must be converted to an open procedure.

Include: All patients who have a surgical procedure in the operating room.

Exclude: N/A

Notes:

28) AAST Grade

Intent: To capture the additional measure of anatomical severity of disease that has an impact on patient outcome.

Definition: Indicate the AAST grade for appendectomy and cholecystectomy patients.

Variable Options:

a. 1
b. 2
c. 3
d. 4
e. 5

Include: Patients with an Appendectomy or Cholecystectomy CPT code as defined in the" MSQC CPT Code Inclusion List".

Exclude: Patients having an interval appendectomy.

Notes:

- See hyperlink above for definitions of grades.
- Only complete for appendix and gall bladder removal.

29) Procedure CPT Code

Intent: To identify the principal (primary) surgical procedure performed by general surgery.

Definition: The CPT for the principal operative procedure (see notes below).

Variable Options: The Current Procedural Terminology (CPT)

Include: All patients who have a surgical procedure in the operating room.

Exclude: N/A

Notes: The principal operative procedure is usually the one that is related to the disease or diagnosis that led to the surgery and/or the more acute indication for the surgery as described in the operative report.

Tab 4 - Hernia Repair

30) Associated Hernia Requiring Repair

Intent: To track hernia repairs that occur as the primary or secondary procedure during surgery.

Definition: Identify patients who have a hernia repair during their surgery.

Variable Options:

a. Yes
b. No

Include: All patients who have a surgical procedure in the operating room.

Exclude: N/A

Notes:

- Answer Yes for all cases with a hernia repair including both primary surgical procedure (e.g. inguinal hernia repair only) or secondary procedure (e.g. duodenal ulcer repair is primary procedure but the patient also had an incisional hernia that was repaired).
- For internal hernia (e.g. mesenteric) answer "No".

31) Hernia Location

Intent: To track the type of hernias being repaired.

Definition: Identify the type of hernia that is being repaired.

Variable Options:

a. Femoral
b. Inguinal
c. Umbilical
d. Ventral/Incisional
e. Other

Include: All patients who have a hernia repair.

Exclude: N/A

Notes:

32) Mesh Placement Location

Intent: To track mesh use in hernia repair to better understand the complexity of the repair.

Definition: Identify the location of mesh placement.

Variable Options:

a. Primary (No Mesh)
b. Onlay
c. Underlay
d. Retromuscular
e. Other

Include: All patients who have a hernia repair.

Exclude: N/A

Notes: Leave blank if pt is having an inguinal or femoral hernia repair.

33) Mesh Type

Intent: To track mesh use in hernia repair.

Definition: Identify the mesh product used in the hernia repair.

Variable Options:

a. Absorbable synthetic (Vicryl)
b. Biologic (Strattice, Alloderm)
c. Biosynthetic (Bio A)
d. Permanent Synthetic (Parietex, Polyester, Polypropylene, Gore-Tex)

Include: All patients who have a hernia repair with mesh.

Exclude: N/A

Notes:

- Bard 3D light mesh, Bard soft mesh and Prolene mesh are polypropylene.
- Leave blank if pt is having an inguinal or femoral hernia repair.

34) Hernia Size Width (cm) – Aggregate if Multiple Defects

Intent: To track the size of the hernia defect to better understand the complexity of the repair.

Definition: To determine the centimeter measurement of the hernia defect from side to side.

Variable Options: An Number

Include: All patients who have a hernia repair.

Exclude: N/A

Notes:

- Use the actual size of the hernia if available. If the actual hernia size is not available, use the mesh size if available. Leave as 0 if neither are available.
- Fill in both the width and length with the same number if only one number is given for the size.

35) Hernia Size Length (cm)-Aggregate if Multiple Defects

Intent: To track the size of the hernia defect to better understand the complexity of the repair.

Definition: To determine the centimeter measurement of the hernia defect from end to end (top to bottom).

Variable Options: An Number

Include: All patients who have a hernia repair.

Exclude: N/A

Notes:

- Use the actual size of the hernia if available. If the actual hernia size is not available, use the mesh size if available. Leave as 0 if neither are available.
- Fill in both the width and length with the same number if only one number is given for the size.

Tab 5 - Wound Disruption

36) Wound Disruption

Intent: To track the prevalence of post-operative patients who develop would dehiscence requiring return to surgery while still admitted to the hospital.

Definition: Indicate if a post-operative patient develop would dehiscence requiring return to surgery while still admitted to the hospital.

Variable Options:

a. Yes
b. No

Include: All surgical patients.

Exclude: Patients who did not have surgery.

Notes:

Tab 6 - Interventional Radiology

37) Interventional Radiology

Intent: To evaluate the use of select interventional radiology procedures in general surgery and surgical critical care patients.

Definition: Identify if the patient had any of the IR procedures listed in the Variable Options for question 38 below.

Variable Options:

a. Yes
b. No

Include: All

Exclude: N/A

Notes:

38) IR Procedure

Intent: To evaluate the use of select interventional radiology procedures in general surgery and surgical critical care patients.

Definition: Identify the IR procedure performed.

Variable Options:

a. Aspiration
b. Angiogram
c. Biopsy
d. Cholecystostomy tube
e. Drain
f. Angiogram with Embolization
g. IVC Filter
h. Paracentesis
i. Percutaneous Transhepatic Cholangiogram (PTC) tube
j. Thoracentesis
k. Transjugular Intrahepatic Portosystemic Shunt (TIPS)

Include: All patients who had an IR procedure listed in the Variable Options above.

Exclude: N/A

Notes: If more than one IR procedure from the above list was performed, select the first one performed that relates to the reason for the general surgery or surgical critical care consult.

39) IR Procedure Date (mm/dd/yyyy)

Intent: To identify the date the IR procedure was performed.

Definition: Indicate the date the IR procedure occurred.

Variable Options: Date in mm/dd/yyyy format.

Include: All patients who have a IR procedure.

Exclude: N/A

Notes: Use the exam end date if available.

40) IR Procedure Time (Military Time 00:00)

Intent: To identify the time the IR procedure was performed.

Definition: Indicate the time the IR procedure occurred.

Variable Options: military time in hh:mm format.

Include: All patients who have a IR procedure.

Exclude: N/A

Notes:

- Multiple times are often listed on Radiology reports and notes for the same procedure. Use the exam end time if available.

Tab 7 - Disease

41) Organ System

Intent: To identify patients with select disease processes for in depth review.

Definition: Indicate if the patient is being managed for appendicitis, gall bladder issues or small bowel obstruction.

Variable Options:

a. Appendix
b. Gall Bladder
c. Small Bowel
d. None

Include: All

Exclude: N/A

Notes:

- Select "None" if an appendectomy was a part of a bowel resection for a non-appendicitis diagnosis.
- Select "Appendix" if patient is having surgery for an interval appendectomy.
- Select "None" if there is a large bowel obstruction only (no small bowel obstruction).

Tab 8 - Appendix

***Note:** if **interval appendectomy** then skip all other appendix questions and go to "Appendectomy within 12 months" (question #61 in the data dictionary).*

42) Diagnosis CT Scan

Intent: To capture the types of testing that were utilized to determine management options.

Definition: Identify if a CT scan was performed as a part of initial workup (e.g. before surgery if surgical management or near the time of admission for medically managed).

Variable Options:

a. Yes
b. No

Include: All acute appendicitis patients.

Exclude: Patients treated for a diagnosis other than acute appendicitis.

Notes: May include any CT that leads to information helpful to determining management (e.g. CT from an outside hospital with an internal read).

43) CT Results

Intent: To capture the results of tests that were utilized to determine management options.

Definition: Identify the results of CT testing related to appendicitis management.

Variable Options:

a. Positive (for appendicitis)
b. Negative (for appendicitis)
c. Equivocal (does not definitively point to appendicitis)

Include: All appendicitis patients who had a diagnosis CT.

Exclude: Patients who did not have a diagnosis CT.

Notes: If not appendicitis but other CT findings (e.g. mass, carcinomatosis, cyst) that could be related to the final diagnosis, select Equivocal.

44) Diagnosis Ultrasound

Intent: To capture the types of testing that were utilized to determine management options.

Definition: Identify if an ultrasound was performed as a part of initial workup (e.g. before surgery if surgical management or near the time of admission for medically managed).

Variable Options:

a. Yes
b. No

Include: All acute appendicitis patients.

Exclude: Patients treated for a diagnosis other than acute appendicitis.

Notes: May include any ultrasound that leads to information helpful to determining management (e.g. ultrasound from an outside hospital with an internal read).

45) Ultrasound Results

Intent: To capture the results of tests that were utilized to determine management options.

Definition: Identify the results of ultrasound testing related to appendicitis management.

Variable Options:

a. Positive (for appendicitis)
b. Negative (for appendicitis)
c. Equivocal (does not definitively point to appendicitis)

Include: All appendicitis patients who had a diagnosis ultrasound.

Exclude: Patients who did not have a diagnosis ultrasound.

Notes:

- If ultrasound does not visualize the appendix, select Equivocal.
- If not an appendicitis but other ultrasound findings (e.g. mass, carcinomatosis, cyst) that could be related to the final diagnosis, select Equivocal.

46) Diagnosis MRI

Intent: To capture the types of testing that were utilized to determine management options.

Definition: Identify if an MRI was performed as a part of initial workup (e.g. before surgery if surgical management or near the time of admission for medically managed).

Variable Options:

a. Yes

b. No

Include: All acute appendicitis patients.

Exclude: Patients treated for a diagnosis other than acute appendicitis.

Notes: May include any MRI that leads to information helpful to determining management (e.g. MRI from an outside hospital with an internal read).

47) MRI Results

Intent: To capture the results of tests that were utilized to determine management options.

Definition: Identify the results of MRI testing related to appendicitis management.

Variable Options:

a. Positive (for appendicitis)
b. Negative (for appendicitis)
c. Equivocal (does not definitively point to appendicitis)

Include: All appendicitis patients who had a diagnosis MRI.

Exclude: Patients who did not have a diagnosis MRI.

Notes: If not an appendicitis but other MRI findings (e.g. mass, carcinomatosis, cyst) that could be related to the final diagnosis, select Equivocal.

48) Pathology Result

Intent: To allow the hospital/service to track negative pathology in appendectomy patients and allow for service/surgeon-specific data reporting.

Definition: Document the anatomical pathology results.

Variable Options:

a. Positive (e.g. acute appendicitis, gangrenous appendicitis, acute appendicitis and serositis, acute appendicitis limited to diverticula, perforated acute appendicitis)
b. Negative (e.g. no significant abnormality, appendix without diagnostic abnormality)
c. Equivocal (e.g. other significant findings such as carcinoma, inflammatory mass)

Include: All appendectomies performed for acute appendicitis.

Exclude: Appendectomy performed for non-appendicitis purposes.

Notes: Do not complete pathology results if appendectomy was a part of bowel resection for a non-appendicitis diagnosis.

49) Appendicitis Type

Intent: To collect information that helps determine the health status of the patient prior to appendicitis management.

Definition: Identify the most appropriate health status of the patient prior to appendicitis management.

Variable Options:

a. Uncomplicated (e.g. non-perforated appendicitis)
    - CT and/or physicians' notes indicate uncomplicated appendicitis
b. Complicated-Comorbidity (e.g. patient with a non-perforated appendicitis but who cannot be operated on due to other pre-existing conditions)
c. Complicated (e.g. perforated appendicitis, appendiceal carcinoma)

Include: All acute appendicitis patients.

Exclude: Patients treated for a diagnosis other than acute appendicitis.

Notes:

50) Medical Management

Intent: To determine volume of patients who have an acute appendicitis and are managed without surgery.

Definition: Identify all patients who receive medical management for their acute appendicitis.

Variable Options:

a. Yes
b. No

Include: All acute appendicitis patients.

Exclude: Patients treated for a diagnosis other than acute appendicitis.

Notes:

If the appendicitis patient is being ***treated surgically****, do not answer the antibiotic questions (#51-60 in the data dictionary). Go directly to "Appendectomy within 12 months" (question #61 in the data dictionary).*

51) IV Antibiotic #1 Class

Intent: To determine the type of IV antibiotics used in the medical management of acute appendicitis.

Definition: Identify the class of IV antibiotic administered for medical management of acute appendicitis.

Variable Options:

a. Aminoglycoside (e.g. Gentamicin, Tobramycin, Neomycin)
b. Carbapenem (e.g. Imipenem, Meropenem)
c. Cephalosporin – Generation 1 (e.g. cefazolin, cephalexin)
d. Cephalosporin – Generation 2 (e.g. cefotetan, cefoxitin, cefuroxime)
e. Cephalosporin – Generation 3 (e.g. cefixime, cefotaxime, ceftriaxone)
f. Cephalosporin – Generation 4 (e.g. cefepime)
g. Lincosamide
h. Macrolide
i. Monobactam
j. Penicillin (e.g. Zosyn, Augmentin)
k. Quinolone (e.g. ciprofloxacin, levofloxacin)
l. Sulfonamide
m. Tetracycline
n. Other (e.g. Vancomycin, Vancocin, metronidazole(Flagyl), Bactrim)

Include: All medically managed appendicitis patients.

Exclude: N/A

Notes: If more than three classes of IV antibiotics are administered enter the three that were administered the greatest number of days.

52) Duration of IV Antibiotic #1 (calendar days)

Intent: To determine the duration of IV antibiotics used in the medical management of acute appendicitis.

Definition: Identify the number of calendar days that the patient received at least one dose of the antibiotic class # 1.

Variable Options: A whole number

Include: All medically managed appendicitis patients.

Exclude: N/A

Notes:

53) IV Antibiotic #2 Class

Intent: To determine the type of IV antibiotics used in the medical management of acute appendicitis.

Definition: Identify the class of IV antibiotic administered for medical management of acute appendicitis.

Variable Options:

a. Aminoglycoside (e.g. Gentamicin, Tobramycin, Neomycin)
b. Carbapenem (e.g. Imipenem, Meropenem)
c. Cephalosporin – Generation 1 (e.g. cefazolin, cephalexin)
d. Cephalosporin – Generation 2 (e.g. cefotetan, cefoxitin, cefuroxime)
e. Cephalosporin – Generation 3 (e.g. cefixime, cefotaxime, ceftriaxone)
f. Cephalosporin – Generation 4 (e.g. cefepime)
g. Lincosamide
h. Macrolide
i. Monobactam
j. Penicillin (e.g. Zosyn, Augmentin)
k. Quinolone (e.g. ciprofloxacin, levofloxacin)
l. Sulfonamide
m. Tetracycline
n. Other (e.g. Vancomycin, Vancocin, metronidazole(Flagyl), Bactrim)

Include: All medically managed appendicitis patients.

Exclude: N/A

Notes: If more than three classes of IV antibiotics are administered enter the three that were administered the greatest number of days.

54) Duration of IV Antibiotic #2 (calendar days)

Intent: To determine the duration of IV antibiotics used in the medical management of acute appendicitis.

Definition: Identify the number of calendar days that the patient received at least one dose of the antibiotic class # 2.

Variable Options: A whole number

Include: All medically managed appendicitis patients.

Exclude: N/A

Notes:

55) IV Antibiotic #3 Class

Intent: To determine the type of IV antibiotics used in the medical management of acute appendicitis.

Definition: Identify the class of IV antibiotic administered for medical management of acute appendicitis.

Variable Options:

a. Aminoglycoside (e.g. Gentamicin, Tobramycin, Neomycin)
b. Carbapenem (e.g. Imipenem, Meropenem)
c. Cephalosporin – Generation 1 (e.g. cefazolin, cephalexin)
d. Cephalosporin – Generation 2 (e.g. cefotetan, cefoxitin, cefuroxime)
e. Cephalosporin – Generation 3 (e.g. cefixime, cefotaxime, ceftriaxone)
f. Cephalosporin – Generation 4 (e.g. cefepime)
g. Lincosamide
h. Macrolide
i. Monobactam
j. Penicillin (e.g. Zosyn, Augmentin)
k. Quinolone (e.g. ciprofloxacin, levofloxacin)
l. Sulfonamide
m. Tetracycline
n. Other (e.g. Vancomycin, Vancocin, metronidazole(Flagyl), Bactrim)

Include: All medically managed appendicitis patients.

Exclude: N/A

Notes: If more than three classes of IV antibiotics are administered enter the three that were administered the greatest number of days.

56) Duration of IV Antibiotic #3 (calendar days)

Intent: To determine the duration of IV antibiotics used in the medical management of acute appendicitis.

Definition: Identify the number of calendar days that the patient received at least one dose of the antibiotic class # 3.

Variable Options: A whole number

Include: All medically managed appendicitis patients.

Exclude: N/A

Notes:

57) Duration of Home Antibiotic (calendar days)

Intent: To determine the duration of antibiotics prescribed at discharge for patients who had a medical managed acute appendicitis.

Definition: Identify the number of calendar days that the patient was prescribed antibiotics for use after discharge.

Variable Options: A whole number

Include: All medically managed appendicitis patients.

Exclude: N/A

Notes:

- Possible sources include but are not limited to: progress note, discharge record or orders.
- If there are different durations for home antibiotics, enter the longer duration.
-

58) Home Oral Antibiotic #1 Class

Intent: To determine the type of oral antibiotics prescribed at discharge for patients who had a medical managed acute appendicitis.

Definition: Identify the class of oral antibiotic prescribed at discharge for the patient who had a medical managed acute appendicitis.

Variable Options:

a. Aminoglycoside (e.g. Gentamicin, Tobramycin, Neomycin)
b. Carbapenem (e.g. Imipenem, Meropenem)
c. Cephalosporin – Generation 1 (e.g. cefazolin, cephalexin)
d. Cephalosporin – Generation 2 (e.g. cefotetan, cefoxitin, cefuroxime)
e. Cephalosporin – Generation 3 (e.g. cefixime, cefotaxime, ceftriaxone)
f. Cephalosporin – Generation 4 (e.g. cefepime)
g. Lincosamide
h. Macrolide
i. Monobactam
j. Penicillin (e.g. Zosyn, Augmentin))
k. Quinolone (e.g. ciprofloxacin, levofloxacin)
l. Sulfonamide
m. Tetracycline
n. Other (e.g. Vancomycin, Vancocin, metronidazole(Flagyl), Bactrim)

Include: All medically managed appendicitis patients who were prescribed an oral antibiotic at discharge.

Exclude: N/A

Notes: If there are more than 2 oral antibiotics prescribed at discharge, enter the 2 with the longest duration.

59) Home Oral Antibiotic #2 Class

Intent: To determine the type of oral antibiotics prescribed at discharge for patients who had a medical managed acute appendicitis.

Definition: Identify the class of oral antibiotic prescribed at discharge for the patient who had a medical managed acute appendicitis.

Variable Options:

a. Aminoglycoside (e.g. Gentamicin, Tobramycin, Neomycin)
b. Carbapenem (e.g. Imipenem, Meropenem)
c. Cephalosporin – Generation 1 (e.g. cefazolin, cephalexin)
d. Cephalosporin – Generation 2 (e.g. cefotetan, cefoxitin, cefuroxime)
e. Cephalosporin – Generation 3 (e.g. cefixime, cefotaxime, ceftriaxone)
f. Cephalosporin – Generation 4 (e.g. cefepime)

g. Lincosamide
h. Macrolide
i. Monobactam
j. Penicillin (e.g. Zosyn, Augmentin))
k. Quinolone (e.g. ciprofloxacin, levofloxacin)
l. Sulfonamide
m. Tetracycline
n. Other (e.g. Vancomycin, Vancocin, metronidazole(Flagyl), Bactrim)

Include: All medically managed appendicitis patients who were prescribed an oral antibiotic at discharge.

Exclude: N/A

Notes: If there are more than 2 oral antibiotics prescribed at discharge, enter the 2 with the longest duration.

60) Home IV Antibiotic Class

Intent: To determine the type of IV antibiotics prescribed at discharge for patients who had a medical managed acute appendicitis.

Definition: Identify the class of IV antibiotic prescribed at discharge for the patient who had a medical managed acute appendicitis.

Variable Options:

a. Aminoglycoside (e.g. Gentamicin, Tobramycin, Neomycin)
b. Carbapenem (e.g. Imipenem, Meropenem)
c. Cephalosporin – Generation 1 (e.g. cefazolin, cephalexin)
d. Cephalosporin – Generation 2 (e.g. cefotetan, cefoxitin, cefuroxime)
e. Cephalosporin – Generation 3 (e.g. cefixime, cefotaxime, ceftriaxone)
f. Cephalosporin – Generation 4 (e.g. cefepime)
g. Lincosamide
h. Macrolide
i. Monobactam
j. Penicillin (e.g. Zosyn, Augmentin))
k. Quinolone (e.g. ciprofloxacin, levofloxacin)
l. Sulfonamide
m. Tetracycline
n. Other (e.g. Vancomycin, Vancocin, metronidazole(Flagyl), Bactrim)

Include: All medically managed appendicitis patients who were prescribed an IV antibiotic at discharge.

Exclude: N/A

Notes: If there are more than 1 IV antibiotics prescribed at discharge, enter the 1 with the longest duration.

61) Appendectomy Within 12 Months

Intent: To determine the prevalence of patients who have an appendectomy within 12 months of being medically managed for an acute appendicitis.

Definition: Identify if the patient had a medically managed appendicitis in the 12 months prior to the appendectomy.

Variable Options:

a. Emergent (Recurrence) – a patient who was medically managed for an acute appendicitis in the prior 12 months and presents to the hospital with symptoms of acute appendicitis leading to appendectomy.
b. Interval – a patient who returns within 12 months for an elective appendectomy as follow-up to the prior medically managed acute appendicitis.
c. No – no medically managed acute appendicitis within 12 months prior to the appendectomy.

Include: All acute appendicitis patients.

Exclude: N/A

Note: If the patient receives medical management for acute appendicitis during this admission, leave as “No”.

Tab 9 - Gall Bladder

63) Diagnosis Ultrasound

Intent: To capture the types of testing that were utilized to determine management options.

Definition: Identify if an ultrasound was performed as a part of initial gall bladder workup (e.g. before surgery if surgical management or near the time of admission for medically managed).

Variable Options:

a. Yes
b. No

Include: All gall bladder patients.

Exclude: N/A

Notes:

64) Diagnosis CT Scan

Intent: To capture the types of testing that were utilized to determine management options.

Definition: Identify if a CT scan was performed as a part of initial gall bladder workup (e.g. before surgery if surgical management or near the time of admission for medically managed).

Variable Options:

a. Yes
b. No

Include: All gall bladder patients.

Exclude: N/A

Notes:

65) Diagnosis HIDA

Intent: To capture the types of testing that were utilized to determine management options.

Definition: Identify if a HIDA was performed as a part of initial gall bladder workup (e.g. before surgery if surgical management or near the time of admission for medically managed).

Variable Options:

a. Yes
b. No

Include: All gall bladder patients.

Exclude: N/A

Notes:

66) Diagnosis EUS

Intent: To capture the types of testing that were utilized to determine management options.

Definition: Identify if an EUS was performed as a part of initial gall bladder workup (e.g. before surgery if surgical management or near the time of admission for medically managed).

Variable Options:

a. Yes
b. No

Include: All gall bladder patients.

Exclude: N/A

Notes:

67) Diagnosis ERCP

Intent: To capture the types of testing that were utilized to determine management options.

Definition: Identify if an ERCP was performed as a part of initial gall bladder workup (e.g. before surgery if surgical management or near the time of admission for medically managed).

Variable Options:

a. Yes
b. No

Include: All gall bladder patients.

Exclude: N/A

Notes:

68) Diagnosis MRI/MRCP

Intent: To capture the types of testing that were utilized to determine management options.

Definition: Identify if a MRI was performed as a part of initial gall bladder workup (e.g. before surgery if surgical management or near the time of admission for medically managed).

Variable Options:

a. Yes
b. No

Include: All gall bladder patients.

Exclude: N/A

Notes:

***Note:** For **medically managed gall bladder patients**, go to # 76 and leave number 69 through 75 as "No".*

69) Intra-Op Cholangiogram

Intent: To capture the testing utilized with surgical management of gall bladder disease.

Definition: Identify if an intra-operative cholangiogram was performed with surgical management of gall bladder disease.

Variable Options:

a. Yes
b. No

Include: All cholecystectomy patients.

Exclude: N/A

Notes:

- If patient was medically managed, leave as "No".

70) Secondary Ultrasound

Intent: To capture the types of testing that were utilized for further evaluation post-surgery.

Definition: Identify if a post-operative ultrasound was performed.

Variable Options:

a. Yes
b. No

Include: All cholecystectomy patients.

Exclude: N/A

Notes:

71) Secondary CT Scan

Intent: To capture the types of testing that were utilized for further evaluation post-surgery.

Definition: Identify if a post-operative CT scan was performed.

Variable Options:

a. Yes
b. No

Include: All cholecystectomy patients.

Exclude: N/A

Notes:

72) Secondary HIDA

Intent: To capture the types of testing that were utilized for further evaluation post-surgery.

Definition: Identify if a post-operative HIDA was performed.

Variable Options:

a. Yes
b. No

Include: All cholecystectomy patients.

Exclude: N/A

Notes:

73) Secondary EUS

Intent: To capture the types of testing that were utilized for further evaluation post-surgery.

Definition: Identify if a post-operative EUS was performed.

Variable Options:

a. Yes
b. No

Include: All cholecystectomy patients.

Exclude: N/A

Notes:

74) Secondary ERCP

Intent: To capture the types of testing that were utilized for further evaluation post-surgery.

Definition: Identify if a post-operative ERCP was performed.

Variable Options:

a. Yes
b. No

Include: All cholecystectomy patients.

Exclude: N/A

Notes:

75) Secondary MRI/MRCP

Intent: To capture the types of testing that were utilized for further evaluation post-surgery.

Definition: Identify if a post-operative MRI was performed.

Variable Options:

a. Yes
b. No

Include: All cholecystectomy patients.

Exclude: N/A

Notes:

76) Non-Operative Management

Intent: To determine volume of patients who have gall bladder disease that are managed without surgery.

Definition: Identify all patients who receive medical management for their gall bladder disease.

Variable Options:

a. Yes
b. No

Include: All patients with gall bladder disease.

Exclude: Patients treated for a diagnosis other than gall bladder.

Notes:

Tab 10 - Small Bowel Obstruction

77) Prior Small Bowel Obstruction

Intent: To track the incidence of recurring small bowel obstruction.

Definition: Identify if the patient has had any prior admission(s)/observation with management of a small bowel obstruction.

Variable Options:

a. Yes
b. No

Include: All patients with a small bowel obstruction.

Exclude: Patients without a small bowel obstruction.

Notes:

- Do not include the current admission/observation.
- If a patient was managed at an outside hospital for small bowel obstruction and then is transferred to your hospital for continued management of the same small bowel obstruction, do not include this as a prior small bowel obstruction.
- Include admission/observation for small bowel obstruction at outside hospital(s).
- Include self-reported (patient/family/guardian/care giver) incidence of small bowel obstruction managed at outside hospitals.

78) Number Prior Admits for Small Bowel Obstruction

Intent: To track the incidence of recurring small bowel obstruction.

Definition: Identify the number of times the patient has had a prior admission(s)/observation with management of a small bowel obstruction.

Variable Options:

a. 1
b. 2
c. 3-10
d. > 10
e. Multiple (exact number unknown)
f. Unknown

Include: All patients with a small bowel obstruction.

Exclude: Patients without a small bowel obstruction.

Notes:

- Do not include the current admission/observation
- If a patient was managed at an outside hospital for small bowel obstruction and then is transferred to your hospital for continued management of the same small bowel obstruction, do not include this as a prior small bowel obstruction.
- Include admission/observation for small bowel obstruction at outside hospital(s).
- Include self-reported (patient/family/guardian/care giver) incidence of small bowel obstruction managed at outside hospitals.

79) Prior Abdominal Procedures

Intent: To identify factors related to the development of small bowel obstruction.

Definition: Determine if patient has had prior abdominal surgery.

Variable Options:

a. Yes
b. No

Include: All patients with a small bowel obstruction.

Exclude: Patients without a small bowel obstruction.

Notes:

- Answer “Yes” for surgery with entry into the peritoneum including ventral/incisional hernia repair.
- It is acceptable to use descriptions of prior incisions in the physician’s physical exam notes to answer questions 79, 80 and 81.

80) Prior Open Laparotomy

Intent: To identify factors related to the development of small bowel obstruction.

Definition: Determine if patient has had prior open abdominal surgery.

Variable Options:

a. Yes

b. No

Include: All patients with a small bowel obstruction.

Exclude: Patients without a small bowel obstruction.

Notes: It is acceptable to use descriptions of prior incisions in the physician's physical exam notes to answer questions 79, 80 and 81.

81) Prior Laparoscopy

Intent: To identify factors related to the development of small bowel obstruction.

Definition: Determine if patient has had prior laparoscopic abdominal surgery.

Variable Options:

a. Yes
b. No

Include: All patients with a small bowel obstruction.

Exclude: Patients without a small bowel obstruction.

Notes: It is acceptable to use descriptions of prior incisions in the physician's physical exam notes to answer questions 79, 80 and 81.

82) Prior Mesh

Intent: To identify factors related to the development of small bowel obstruction.

Definition: Determine if patient has had prior abdominal surgery with mesh placement.

Variable Options:

a. Yes
b. No

Include: All patients with a small bowel obstruction.

Exclude: Patients without a small bowel obstruction.

Notes:

83) Prior Radiation

Intent: To identify factors related to the development of small bowel obstruction.

Definition: Determine if the patient has had prior radiation treatment to intra-abdominal structures.

Variable Options:

a. Yes
b. No

Include: All patients with a small bowel obstruction.

Exclude: Patients without a small bowel obstruction.

Notes:

84) Metastatic Malignancy

Intent: To identify factors related to the development of small bowel obstruction.

Definition: Determine if the patient has metastatic malignancy in intra-abdominal structures.

Variable Options:

a. Yes
b. No

Include: All patients with a small bowel obstruction.

Exclude: Patients without a small bowel obstruction.

Notes:

85) CT Scan

Intent: To capture testing utilized to determine management.

Definition: Identify if a CT was performed as part of small bowel obstruction evaluation.

Variable Options:

a. Yes
b. No

Include: All patients with a small bowel obstruction.

Exclude: Patients without a small bowel obstruction.

Notes:

86) CT Scan Date (mm/dd/yyyy)

Intent: To identify the date the CT procedure was performed.

Definition: Indicate the date the CT procedure occurred.

Variable Options: Date in mm/dd/yyyy format.

Include: Patients with a small bowel obstruction who have a CT.

Exclude: Small bowel obstruction who did not have a CT.

Notes:

87) CT Scan Time (Military Time 00:00)

Intent: To identify the time the CT procedure was performed.

Definition: Indicate the time the CT procedure occurred.

Variable Options: military time in hh:mm format.

Include: Patients with a small bowel obstruction who have a CT.

Exclude: Small bowel obstruction who did not have a CT.

Notes:

88) CT Findings

Intent: To capture the results of testing utilized to determine management of small bowel obstruction.

Definition: Determine if the following variable options were identified in the CT report or the surgeons note(s) regarding CT results.

Variable Options:

a. Free Fluid
    i. Yes
    ii. No
b. Fecalization

i. Yes
ii. No

c. Pneumatosis
   i. Yes
   ii. No
d. Swirl Sign (e.g. swirl, twisted)
   i. Yes
   ii. No
e. Ischemic/Dead Bowel
   i. Yes
   ii. No
f. Obstruction
   i. Yes
   ii. No
g. Other (e.g. volvulus of the small bowel)
   i. Yes
   ii. No

Include: Patients with a small bowel obstruction who have a CT.

Exclude: Small bowel obstruction who did not have a CT.

Notes:

- If the answer to Obstruction is “Yes” answer question #104 “Obstruction Related to Adhesions”.
- If the answer to Other is “Yes” answer question #103 “Other CT Findings”.

104) Obstruction Related to Adhesions

Intent: To track patients with a small bowel obstruction that is likely related to adhesions.

Definition: Determine if the small bowel obstruction is likely related to adhesions.

Variable Options:

a. Yes
b. No

Include: Patients with a small bowel obstruction.

Exclude: N/A

Notes:

103) Other CT Findings

Intent: To identify other CT findings that may relate to the patient's symptoms and/or management for potential future inclusion in data collection.

Definition: Determine if there are other CT findings related to the patient's symptoms and/or management.

Variable Options: Free Text

Include: Patients with a small bowel obstruction who have a CT result of "Other".

Exclude: N/A

Notes:

- Include potential causes of the patient's symptoms such as volvulus, mass, hernia ect.

89) Gastrografin Challenge

Intent: To capture the results of testing utilized to determine management of small bowel obstruction.

Definition: Identify if a gastrografin challenge was performed as part of small bowel obstruction evaluation.

Variable Options:

a. Yes
b. No

Include: All patients with a small bowel obstruction.

Exclude: Patients without a small bowel obstruction.

Notes:

90) Gastrografin Challenge Date (mm/dd/yy)

Intent: Identify the date that results were available from a gastrografin challenge performed with the purpose of deciding ongoing surgical or non-surgical management.

Definition: Date of gastrografin x-ray to confirm.

Variable Options: Date in mm/dd/yyyy format

Include: Patients who had a gastrografin challenge.

Exclude: N/A

Notes:

91) Gastrografin Challenge Time (Military Time 00:00)

Intent: Identify the time that results were available from a gastrografin challenge performed with the purpose of deciding ongoing surgical or non-surgical management.

Definition: Time of gastrografin x-ray to confirm.

Variable Options: military time in hh:mm format

Include: Patients who had a gastrografin challenge.

Exclude: N/A

Notes:

92) Gastrografin Result

Intent: To capture the results of testing utilized to determine management of small bowel obstruction.

Definition: Determine the final results of the gastrografin challenge.

Variable Options:

a. Positive Colon – contrast found in the colon (part or all)
b. Negative Colon – contrast not found in the colon
c. Other

Include: Patients who had a gastrografin challenge.

Exclude: N/A

Notes: Gastrografin Result should be marked “Positive Colon” if the contrast makes it to the colon, even if the x-ray had to be repeated multiple times.

93) Operation

Intent: To track select procedures performed during surgical management for small bowel obstruction.

Definition: Identify which of the variable options below occurred during surgery for small bowel obstruction.

Variable Options:

a. Lysis of Adhesions
    i. Yes
    ii. No
b. Bypass
    i. Yes
    ii. No
c. Resection with Anastomosis
    i. Yes
    ii. No
d. Resection with Stoma
    i. Yes
    ii. No
e. Anti-Adhesion Barrier Use
    i. Yes
    ii. No
f. Hernia Repair Primary
    i. Yes
    ii. No
g. Hernia Repair Mesh
    i. Yes
    ii. No

Include: Patients who had surgical management of small bowel obstruction.

Exclude: N/A

Notes: Leave all fields checked “No” if surgery was not performed (medical management).

94) Operative Findings

Intent: To track select surgeon findings during surgical management of small bowel obstruction.

Definition: Identify which of the variable options below were found during surgery for small bowel obstruction.

Variable Options:

a. Negative Exploration
    i. Yes
    ii. No
b. Single Band Adhesion
    i. Yes
    ii. No
c. Multiple Band/Dense Adhesion
    i. Yes
    ii. No
d. Obstruction
    i. Yes
    ii. No
e. Ischemic/Dead Bowel
    i. Yes
    ii. No
f. Inadvertent Enterotomy
    i. Yes
    ii. No
g. Other
    i. Yes
    ii. No

Include: Patients who had surgical management of small bowel obstruction.

Exclude: N/A

Notes: Leave all fields checked “No” if surgery was not performed (medical management).

95) Other Operative Findings

Intent: To identify other operative findings that may relate to the patient’s symptoms and/or surgical management for potential future inclusion in data collection.

Definition: Determine if there are other operative findings related to the patient’s symptoms and/or surgical management.

Variable Options: Free text

Include: Patients with a small bowel obstruction who have an operative finding of “Other”.

Exclude: N/A

Notes:

Tab 11 - Discharge

96) Hospital Discharge Date (mm/dd/yyyy)

Intent: To capture date that the patient leaves the current acute care hospital to allow the tracking of timeframes.

Definition: The date the patient left the current acute care hospital setting.

Variable Options: Date in mm/dd/yyyy format

Include: All

Exclude: N/A

Note:

- Use the ADT discharge date unless the patient expires.
- If the patient expires in the hospital, use the date of death as the discharge date.
- If the patient is discharged to sub-acute care within your hospital (e.g rehab unit, hospice, psychiatric unit) record the date of the transfer if a discharge date is not available.

97) Hospital Discharge Time (Military Time 00:00)

Intent: To capture time that the patient leaves the current acute care hospital to allow the tracking of timeframes.

Definition: The time the patient left the current acute care hospital setting.

Variable Options: military time in hh:mm format

Include: All

Exclude: N/A

Note:

- Use the ADT discharge time unless the patient expires.
- If the patient expires in the hospital, use the time of death as the discharge time.
- If the patient is discharged to sub-acute care within your hospital (e.g rehab unit, hospice, psychiatric unit) record the time of the transfer if a discharge time is not available.

98) Discharge Status

Intent: To capture survival to discharge.

Definition: Indicate if the patient was alive or dead at the time they left the hospital.

Variable Options:

a. Alive
b. Dead

Include: All

Exclude: N/A

99) Discharge Disposition

Intent: To capture information about disposition at discharge from the current acute care hospital.

Definition: The patient's destination at discharge from the current acute care hospital.

Variable Options:

a. Short-Term General Hospital
b. Intermediate Care Facility
c. Home Health Service – discharged to home care with a plan of care tailored to the patient's medical needs for home services
d. Left Against Medical Advice
e. Deceased/Expired
f. Home without Service (e.g. home, group home, foster care) – no home care services needed
g. Skilled Nursing Facility (includes sub-acute rehab at a SNF)
h. Hospice Care (e.g. home hospice, hospice facility, distinct hospice unit of the hospital)
i. Court/Law Enforcement (e.g. jail, prison)
j. Inpatient Rehab (Acute)
k. Long-Term Care Hospital
l. Psychiatric Hospital (or distinct psychiatric unit of the hospital)
m. Institution Not Defined Elsewhere (e.g. inpatient drug/alcohol rehab, residential chemical dependency program, inpatient detox facility)

Include: All

Exclude: N/A

Note: Use discharge summary and case management notes to determine most accurate discharge disposition.

100) Readmission Within 30 days

Intent: To allow tracking of patients who had surgery by the general surgery service during the 30 days prior to admission.

Definition: Identify if the patient has surgery, by the general surgery service in the 30 days prior to the admit date.

Variable Options:

a. Yes
b. No

Include: All

Exclude: N/A

Note: Answer “Yes” only if the surgery was performed by a surgeon from one of the general surgery services that your hospital is tracking.

101) Comments

Intent: Provide a free text space for collection of additional information based on the needs of individual centers.

Definition: As determined by the center.

Variable Options: Free text

Include: N/A

Exclude: N/A

Notes:

Appendix A

CPT Codes Included in Both Qualtrics and MSQC

Appendectomy

- 44950 – Appendectomy
- 44960 – Appendectomy; for ruptured appendix with abscess or generalized peritonitis
- 44970 – Laparoscopy, surgical, appendectomy

Cholecystectomy

- 47562 – Laparoscopy, surgical; cholecystectomy
- 47563 – Laparoscopy, surgical; cholecystectomy with cholangiography
- 47564 – Laparoscopy, surgical; cholecystectomy with exploration of common duct
- 47600 – Cholecystectomy
- 47605 – Cholecystectomy; with cholangiography
- 47610 – Cholecystectomy with exploration of common duct
- 47612 – Cholecystectomy with exploration of common duct, with Choledochoenterostomy
- 47620 – Cholecystectomy with exploration of common duct, with Transduodenal Sphincterotomy or Sphincteroplasty, w/ or w/out Cholangiography

Bowel (Small Bowel Obstruction)

- 44005 - Enterolysis (freeing of intestinal adhesion) (separate procedure)
- 44020 - Enterotomy, small intestine, other than duodenum; for exploration, biopsy(s), or foreign body removal
- 44021 - Enterotomy, small intestine, other than duodenum; for decompression (e.g., Baker tube)
- 44050 - Reduction of volvulus, intussusception, internal hernia, by laparotomy
- 44055 - Correction of malrotation by lysis of duodenal bands and/or reduction of midgut volvulus (eg, Ladd procedure)
- 44120 - Enterectomy, resection of small intestine; single resection and anastomosis
- 44125 - Enterectomy, resection of small intestine; with enterostomy
- 44130 - Enteroenterostomy, anastomosis of intestine, with or without cutaneous enterostomy (separate procedure)
- 44140 - Colectomy, partial; with anastomosis
- 44141 - Colectomy, partial; with skin level cecostomy or colostomy
- 44143 - Colectomy, partial; with end colostomy and closure of distal segment (Hartmann type procedure)
- 44144 - Colectomy, partial; with resection, with colostomy or ileostomy and creation of mucofistula
- 44145 - Colectomy, partial; with coloproctostomy (low pelvic anastomosis)
- 44146 - Colectomy, partial; with coloproctostomy (low pelvic anastomosis), with colostomy
- 44147 - Colectomy, partial; abdominal and transanal approach

- 44150 - Colectomy, total, abdominal, without proctectomy; with ileostomy or ileoproctostomy
- 44151 - Colectomy, total, abdominal, without proctectomy; with continent ileostomy
- 44155 - Colectomy, total, abdominal, with proctectomy; with ileostomy
- 44156 - Colectomy, total, abdominal, with proctectomy; with continent ileostomy
- 44157 - Colectomy, total, abdominal, with proctectomy; with ileoanal anastomosis, includes loop ileostomy, and rectal mucosectomy, when performed
- 44158 - Colectomy, total, abdominal, with proctectomy; with ileoanal anastomosis, creation of ileal reservoir (S or J), includes loop ileostomy, and rectal mucosectomy, when performed
- 44160 - Colectomy, partial, with removal of terminal ileum with ileocolostomy
- 44180 - Laparoscopy, surgical, enterolysis (freeing of intestinal adhesion) (separate procedure)
- 44187 - Laparoscopy, surgical; ileostomy or jejunostomy, non-tube
- 44188 - Laparoscopy, surgical, colostomy or skin level cecostomy
- 44202 - Laparoscopy, surgical; enterectomy, resection of small intestine, single resection and anastomosis
- 44204 - Laparoscopy, surgical; colectomy, partial, with anastomosis
- 44205 - Laparoscopy, surgical; colectomy, partial, with removal of terminal ileum with ileocolostomy
- 44206 - Laparoscopy, surgical; colectomy, partial, with end colostomy and closure of distal segment (Hartmann type procedure)
- 44207 - Laparoscopy, surgical; colectomy, partial, with anastomosis, with coloproctostomy (low pelvic anastomosis)
- 44208 - Laparoscopy, surgical; colectomy, partial, with anastomosis, with coloproctostomy (low pelvic anastomosis) with colostomy
- 44210 - Laparoscopy, surgical; colectomy, total, abdominal, without proctectomy, with ileostomy or ileoproctostomy
- 44211 - Laparoscopy, surgical; colectomy, total, abdominal, with proctectomy, with ileoanal anastomosis, creation of ileal reservoir (S or J), with loop ileostomy, includes rectal mucosectomy, when performed
- 44212 - Laparoscopy, surgical; colectomy, total, abdominal, with proctectomy, with ileostomy
- 44227 - Laparoscopy, surgical, closure of enterostomy, large or small intestine, with resection and anastomosis
- 44238 – Unlisted laparoscopy procedure, large or small intestine (except rectum)
- 44310 - Ileostomy or jejunostomy, non-tube
- 44312 - Revision of ileostomy; simple (release of superficial scar) (separate procedure)
- 44314 - Revision of ileostomy, complicated (reconstruction in-depth) (separate procedure)
- 44320 - Colostomy or skin level cecostomy
- 44322 - Colostomy or skin level cecostomy; with multiple biopsies (e.g. for congenital megacolon) (separate procedure)
- 44340 - Revision of colostomy; simple (release of superficial scar) (separate procedure)
- 44345 - Revision of colostomy; complicated (reconstruction in-depth) (separate procedure)
- 44346 - Revision of colostomy; with repair of paracolostomy hernia (separate procedure)

- 44615 - Intestinal stricturoplasty (enterotomy and enterorrhaphy) with or without dilation, for intestinal obstruction
- 44620 - Closure of enterostomy, large or small intestine;
- 44625 - Closure of enterostomy, large or small intestine; with resection and anastomosis other than colorectal
- 44626 - Closure of enterostomy, large or small intestine; with resection and colorectal anastomosis (eg, closure of Hartmann type procedure)
- 44799 – Unlisted procedure, small intestine

Appendix B

ICD 10 for Small Bowel Obstruction

K 56.5 – Obstruction, adhesions (intestinal, peritoneal)

- K56.50 – Intestinal adhesions(bands), unspecified as to partial versus complete obstruction
- K56.51 – Intestinal adhesions (bands), with partial obstruction
- K56.52 – Intestinal adhesions (bands) with complete obstruction

K56.6 – Other and unspecified intestinal obstruction

- K56.60 – Unspecified intestinal obstruction
    - K56.600 – Partial intestinal obstruction, unspecified as to cause
    - K56.604 – Complete intestinal obstruction, unspecified as to cause
    - K56.609 – unspecified intestinal obstruction, unspecified as to partial vs complete obstruction

K56.69 – Obstruction, specified, not elsewhere classified

- K56.690 – Other parietal intestinal obstruction
- K56.691 – Other complete intestinal obstruction
- K56.699 – Other intestinal obstruction unspecified as to partial versus complete obstruction