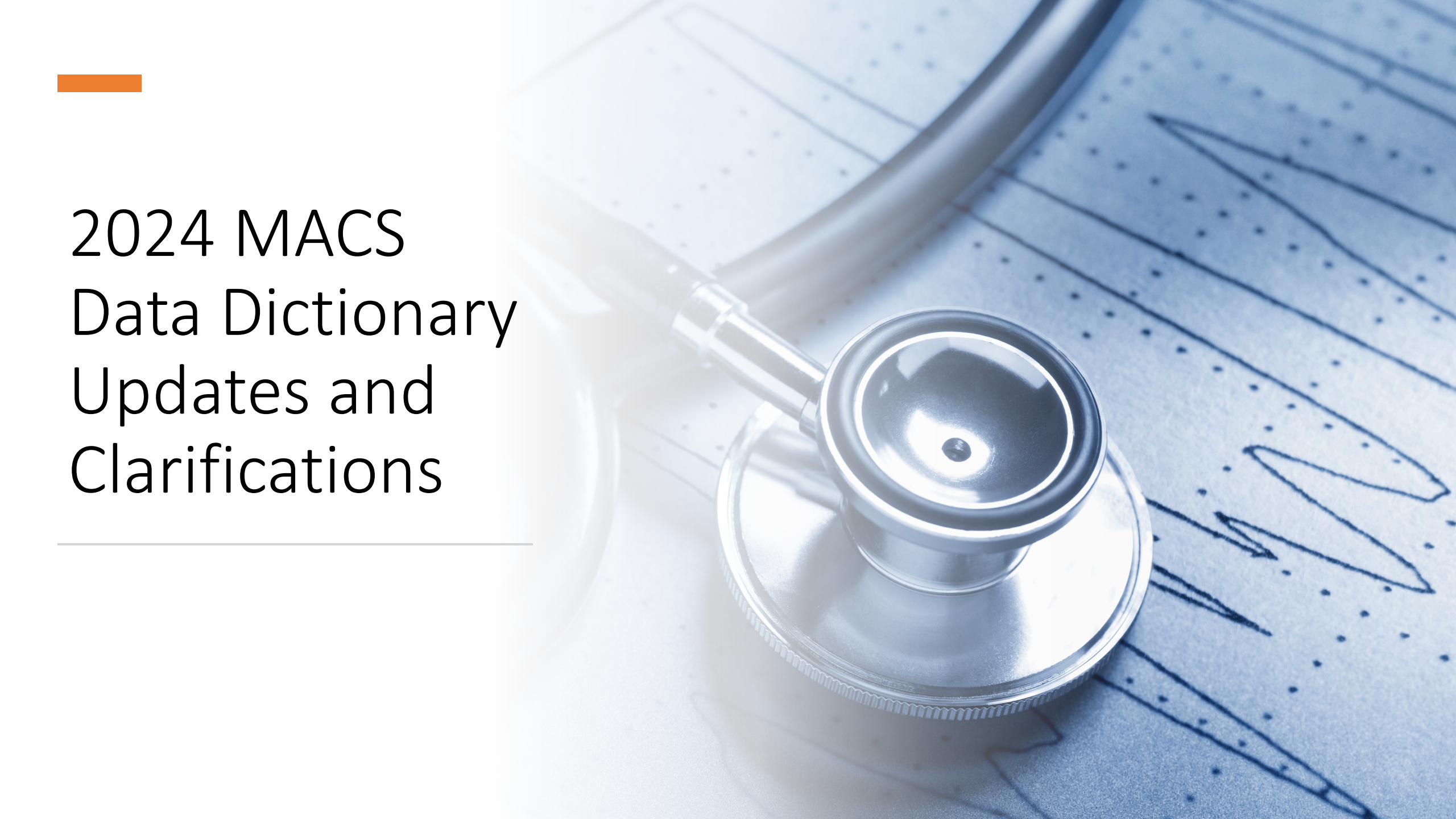
2024 MACS Data Dictionary Updates and Clarifications



ICD-10 CODING UPDATES

No longer valid ICD-10 codes - Please do not enter the following into the survey

Code	Total Index_all=1 (7/2019-4/2023)	2022	2023 (Through 4/2023)
K35	41	4	2
K35.8	0	0	0
K80.0	0	0	0
K80.1	0	0	0
K80.3	1	0	0
K80.4	0	0	0
K80.5	0	0	0
K80.6	0	0	0
K80.7	0	0	0
K81	0	0	0
K35.89	524	154	21
K56.60	500	167	31
K35.2	0	0	0
K35.3	0	0	0
K83.0	14	5	0
K85.1	0	0	0

Demographics: Ethnicity

2023

11) **Ethnicity**

Intent: To capture the ethnicity of the patient. It may also be used when investigating disparitie in care or outcomes.

Definition: Hispanic or Latino is 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
c. Unknown

Include: All

Exclude: N/A

Notes:

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

2024

11) **Ethnicity**

Intent: To capture the ethnicity of the patient. It may also be used when investigating disparities in care or outcomes.

Definition: Hispanic or Latino is 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
c. Unknown

Include: All

Exclude: N/A

Notes:

- "Race" is required in addition to the variable.

We have an "Unknown" option that can be used. This note did not get deleted when the variable options were updated.

Arrival: Admit Date

2023

21) **Admit Date**

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

Definition: The date the patient physically leaves the ED for transport to the inpatient uni

Variable Options: Date in mm/dd/yyyy format

Include: N/A

Exclude: Patients treated only in the ED.

Notes:

- Leave blank if the patient was managed only in the ED and did not have surgery.
- For direct admits to your hospital, report the date that the patient arrives to the inpatient unit. Include women admitted from OB triage or Women's triage as a di admit.
- For patients going from the ED to an inpatient unit, report the date that they leav ED.
- Admit date for patients not admitted before going to the OR (e.g., ED to OR) will **in-room** date from the anesthesia record.
- This is not the date that the admission order was placed, it is the date that the pa physically leaves the ED.

2024

21) **Admit Date**

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

Definition: The date the patient physically leaves the ED for transport to the inpatient unit.

Variable Options: Date in mm/dd/yyyy format

Include: N/A

Exclude: Patients treated only in the ED.

Notes:

- Leave blank if the patient was managed only in the ED and did not have surgery.
- For direct admits to your hospital, report the date that the patient arrives to the inpatient unit. Include women admitted from OB triage or Women's triage as a direct admit.
- For patients going from the ED to an inpatient unit, report the date that they leave the ED.
- 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.
- Admit date for patients presenting from home for interval elective surgery will be the **OR in-room** date from the anesthesia record.
- This is not the date that the admission order was placed, it is the date that the patient physically leaves the ED.

Arrival: Admit Time

2023

22) **Admit Time (Military Time 00:00)**

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

Definition: The time the patient physically leaves the ED for transport to the inpatient unit.

Variable Options: military time in hh:mm format

Include: N/A

Exclude: Patients treated only in the ED.

Notes:

- Leave 00:99 if the patient was managed only in the ED and did not have surgery.
- For direct admits to your hospital, report the time that the patient arrives to the inpatient unit. Include women admitted from OB triage or Women's triage as a direct admit.
- For patients going from the ED to an inpatient unit, report the time that they leave the ED.
- Admit time for patients not admitted before going to the OR (e.g., ED to OR) will be the **in-room** time from the anesthesia record.
- This is not the time that the admission order was placed, it is the time that the patient physically leaves the ED.

2024

22) **Admit Time (Military Time 00:00)**

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

Definition: The time the patient physically leaves the ED for transport to the inpatient unit.

Variable Options: military time in hh:mm format

Include: N/A

Exclude: Patients treated only in the ED.

Notes:

- Leave 00:99 if the patient was managed only in the ED and did not have surgery.
- For direct admits to your hospital, report the time that the patient arrives to the inpatient unit. Include women admitted from OB triage or Women's triage as a direct admit.
- For patients going from the ED to an inpatient unit, report the time that they leave the ED.
- Admit time for patients not admitted before going to the OR (e.g., ED to OR) will be the **in-room** time from the anesthesia record.
- Admit time for patients presenting from home for interval elective surgery will be the **OR in-room** time from the anesthesia record.
- This is not the time that the admission order was placed, it is the time that the patient physically leaves the ED.

Arrival: Point of Entry 2023

23) **Point of Entry**

Intent: To capture the patient's location before being admitted to your hospital if needed for case-mix adjustment.

Definition: To capture the patient's location before being admitted to your hospital.

Variable Options:

a. Home/Direct Admit (e.g., home, assisted living facility, group home, jail/prison).
   - Include patients 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
   - Patient presents from home to your ED.
   - If the patient presents to an outside ED and then presents to your ED by private car **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 car **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., a 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:

- If the patient transfers from a "free-standing ED" and is directly admitted to your OR or inpatient unit, select "Home/Direct Admit".

2024

23) **Point of Entry**

Intent: To capture the patient's location before being admitted to your hospital if needed for case-mix adjustment.

Definition: To capture the patient's location before being admitted to your hospital.

Variable Options:

a. Direct Admit
   - Include admissions from home, assisted living facility, group home, jail/prison, skilled care facility, nursing home, long term acute care.
   - Include patients directly admitted from a physician's office or urgent care.
b. ED
   - Patient presents from home to your ED.
   - If the patient presents to an outside ED and then presents to your ED by private car **without** transfer paperwork/orders.
   - Patients who present from a skilled nursing facility to the ED.
c. Transfer from Outside Hospital ED
   - Patient is transferred ED to ED.
   - ED to ED by ambulance or private car **with** transfer paperwork/orders.
   - Include patient transferred from "free standing ED" to your ED.
d. Transfer from Outside Hospital Inpatient
   - Patient is transferred inpatient to inpatient.
e. Transfer from Outside Hospital ED to Inpatient Unit
   - Patient is transferred from outside hospital ED to inpatient unit.
   - Include patient transferred from "free standing ED" to inpatient unit.
f. Emergency Department Only/Not Admitted
   - A patient who is never admitted and never has surgery.
g. Other
   - Admit via OB/women's triage, admit from inpatient rehab
   - Transfer from psychiatric unit, hospice unit, ambulatory surgery center directly to an inpatient bed.

Include: All

Exclude: N/A

Notes:

Arrival: Surgery Consult Order Time

NEW 2024

We will pilot this variable for a couple of months. If the abstractors cannot find it, we can get rid of it.

26) **Surgery Consult Order Time (Military Time 00:00)**

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

Definition: Indicate the time that the first general surgery consult order was placed.

Variable Options: Time in hh:mm format

Include: All

Exclude: N/A

Notes:

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

Arrival: Type of Service

2023

28) **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 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: All

Exclude: N/A

Notes:

- Select "Consult" for all patients the service sees in the ED who are discharged from the ED (not admitted to the hospital).

2024

29) **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 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 on hospital arrival.

Variable Options:

a. Admit – the patient is initially admitted to general surgery on hospital arrival
b. Consult – general surgery is consulted to see the patient, but the patient is admitted to another service
c. Outpatient – patients who present for outpatient surgery and are not admitted post-op

Include: All

Exclude: N/A

Notes:

- Select "Consult" for all patients the service sees in the ED who are discharged from the ED (not admitted to the hospital).
- If the patient is admitted to another service initially (e.g., medicine/GI), but transfers to general surgery later during the admission, select "Consult".

Risk Factor: Weight

2023

30) **Weight (kg)**

Intent: To capture the weight of the patient for risk stratification.

Definition: The patient's first weight as documented in the medical record.

Variable Options: Weight in kilograms (kg)

Include: All patients with a recorded weight between 27-635 kg.

Exclude: Patients with a recorded weight outside the range above or who do not have a weight recorded in the medical record.

Notes:

- Report the first actual or stated weight for the admission in the chart.

2024

31) **Weight (kg)**

Intent: To capture the weight of the patient for risk stratification.

Definition: The patient's first weight as documented in the medical record.

Variable Options: Weight in kilograms (kg)

Include: All patients with a recorded weight between 27-635 kg.

Exclude: Patients with a recorded weight outside the range above or who do not have a weight recorded in the medical record.

Notes:

- Report the first actual or stated weight for the admission in the chart.
- If there is not a weight recorded for the current admission, leave this blank.

Risk Factor: Personal H/o DVT/PE

2023

41) **Personal History of DVT/PE**

Intent: To identify patients with a history of venous thromboembolism (VTE) for risk stratification purposes.

Definition: The patient has a personal history of VTE (deep vein thrombosis or pulmonary embolism).

Variable Options:

a. Yes
b. No

Include: All

Exclude: N/A

Notes:

- Select "No" for patients with a history of "thrombophlebitis" (inflammation of the vein), superficial vein thrombosis, and arterial thrombosis.
- Select "Yes" if the patient has a history of deep vein thrombosis of the extremities or pulmonary embolism.
- Resources
  - Veins of the Lower Extremity
  - Veins of the Upper Extremity
- Select "Yes" if the patient was diagnosed with a DVT or PE during this admission before their general surgery operation.
  - Example: A patient with no prior history of DVT is admitted for cardiac surgery. After the cardiac surgery, the patient develops a DVT. The patient then develops ischemic bowel, and acute care surgery is consulted. The patient undergoes emergent ex-lap with ACS for bowel ischemia. Select "Yes" for Personal History of DVT/PE.

2024

42) **Personal History of DVT/PE**

Intent: To identify patients with a history of venous thromboembolism (VTE) for risk stratification purposes.

Definition: The patient has a personal history of VTE (deep vein thrombosis or pulmonary embolism).

Variable Options:

a. Yes
b. No

Include: All

Exclude: N/A

Notes:

- Select "No" for patients with a history of "thrombophlebitis" (inflammation of the vein), superficial vein thrombosis, and arterial thrombosis.
- Select "Yes" if the patient has a history of deep vein thrombosis of the extremities or pulmonary embolism.
- Patients with a history of clots/thrombi found in any of the following veins: axillary, brachial, deep femoral, femoral (which may be referred to as "superficial femoral" but is a deep vein), fibular, gastrocnemius, iliac, internal jugular, peroneal, popliteal, portal, radial, soleal, subclavian, tibial, ulnar, and vena cava.
- Include patients with documentation of past medical history of "DVT" not otherwise specified.
- Select "Yes" if the patient was diagnosed with a DVT or PE during this admission before their general surgery operation.
  - Example: A patient with no prior history of DVT is admitted for cardiac surgery. After the cardiac surgery, the patient develops a DVT. The patient then develops ischemic bowel, and acute care surgery is consulted. The patient undergoes emergent ex-lap with ACS for bowel ischemia. Select "Yes" for Personal History of DVT/PE.

Risk Factor: Prior Opioid Use

2023

44) **Prior Opioid Use**

Intent: To determine if a patient has been taking opioids before admission.

Definition: Descriptors documented in the patient's medical record consistent with prescribed or recreational opioid use within a 5-day timeframe before admission.

Variable Options:

i. Yes
ii. No

Include: All

Exclude: N/A

Notes:

- Drug Search
- All routes of administration are included

2024

45) **Prior Opioid Use**

Intent: To determine if a patient has been taking opioids before admission.

Definition: Descriptors documented in the patient's medical record noting current use of recreational or prescribed opioids *or* opioid medication listed in the patient's current outpatient medication list on admission.

Variable Options:

i. Yes
ii. No

Include: All

Exclude: N/A

Notes:

- Drug Search
- All routes of administration are included

Risk Factor: Pre-op Sepsis/Severe Sepsis

2023

43) **Preoperative or Admission Sepsis**

Intent: To identify patients with pre-existing sepsis for risk stratification purposes.

Definition: The patient has Sepsis or Severe Sepsis/Septic Shock meeting the criteria in the table below before surgery or on admission for non-surgical cases.

Sepsis	***Infection Source***: Surgical patients: Documentation of a new confirmed or suspected infection source within 72 hours before the surgery start time. Non-surgical patients: Sepsis criteria must be met on hospital day 1 or hospital day 2.	**And**	At least **TWO** of the following ***Systemic Signs/Symptoms***: • Heart Rate (HR) > 90 beats per minute • Respiratory Rate (RR) > 20 breaths per minute • Temperature > 38° C or < 36° C • White blood cell count > 12,000/cu mm or < 4,000/cu mm or immature (band) forms > 10% Note: • A **maximum of one calendar day** allowed between new ***Infection Source*** documentation and ***Systemic Signs/Symptoms***. • A **maximum of 6 hours** is allowed between any two of the ***Systemic Signs/Symptoms***. • ***Systemic Signs/Symptoms*** must be new and not related to a chronic condition
Severe Sepsis/Septic Shock	Must meet the above criteria for Sepsis. Note: A **maximum of 6 hours** is allowed between ***System Signs/Symptoms*** of (Sepsis criteria above) and signs of ***Organ Dysfunction***.	**And**	At least **ONE** of the following signs of ***Organ Dysfunction***: • Systolic Blood Pressure (SBP) < 90 mmHg • Mean Arterial Pressure (MAP) < 65 mmHg • Systolic Blood Pressure (SBP) decrease > 40 mmHg from baseline • Lactate > 2 mmol/L • INR > 1.5 or aPTT > 60 seconds • Platelet count < 100,000 µL • Bilirubin > 2mg/dL • Creatinine > 2 mg/dL • Urine output < 0.5 mL/kg/hour x 2 • Hypotension requiring vasopressor therapy to maintain or elevate MAP > 65 mmHg Note: • Organ dysfunction criteria cannot be related to a chronic condition (e.g., low urine output with chronic renal failure). • Organ dysfunction criteria must be remote from the infection source. • Only documented blood pressures are to be used regardless of vasopressor administration.

Variable Options:

a. Severe Sepsis/Septic Shock
b. Sepsis
c. No

Include: All

Exclude: N/A

Notes:

- *New suspected or confirmed infection sources may include*: acute appendicitis, acute cholecystitis, acute abdominal infection, acute diverticulitis, organ perforation/perforated viscus, abscess, positive cultures, anastomotic leak, gangrene/necrosis, "suspected/possible infection from xx", physician diagnosis of infection or meets MACS definition of infection (SSI, UTI, PNA), empyema, meningitis, skin/soft tissue infection, bone/joint infection, wound infection, bloodstream catheter infection, endocarditis, implantable device infection, acute sinus infection.
- Acute pancreatitis is NOT an infection source.
- "Suspected Sepsis" is NOT a documented source of infection.
- "Suspected infection from ____" is an acceptable source of infection.
- Nursing documentation referencing an infection source or treatment of a new infection is acceptable.
- Select the highest level of sepsis that the patient meets the criteria for.
- For patients transferred from an outside ED or outside hospital, all vital sign and lab data to capture sepsis must be data obtained at your hospital upon or after arrival.

Risk Factor: Pre-op Sepsis/Severe Sepsis

2024

44) **Preoperative or Admission Sepsis**

Intent: To identify patients with pre-operative sepsis or sepsis on admission for non-operative patients for risk stratification purposes.

Definition: The patient has sepsis defined by having a new suspected/confirmed infection in criteria A **AND** one or more acute organ dysfunction listed among criteria B within the appropriate time frames below.

- *Operative patients this admission*: Documentation of a new suspected/confirmed infection source prior to surgery (or found intraoperatively) AND acute organ dysfunction criteria met within the window period which includes calendar day of surgery (prior to surgery start time) and the two prior calendar days.
- *Non-operative patients this admission*: All sepsis criteria must be met on hospital day #1 and hospital day #2.

A. <u>New Suspected/Confirmed Infection</u>

Infection sources may include but not limited to: acute appendicitis, acute cholecystitis, acute abdominal infection, acute diverticulitis, organ perforation/perforated viscus, abscess, positive cultures, anastomotic leak, gangrene/necrosis, "suspected/possible infection from xx", physician diagnosis of infection or meets MACS definition of infection (SSI, UTI, PNA), empyema, meningitis, skin/soft tissue infection, bone/joint infection, wound infection, bloodstream catheter infection, endocarditis, implantable device infection, acute sinus infection.

AND

B. <u>Acute Organ Dysfunction</u> (at least 1 of the following criteria met within the window period which includes calendar day of surgery (prior to surgery start time) and the two prior calendar days for surgical patients; criteria met on hospital day #1 or hospital day #2 for non-operative patients):

1. Increased respiratory support greater than 4L (35%) oxygen for >2 hours
   - Note: This does not need to be consecutive hours
   - **AND** no ICD10 for chronic respiratory failure with hypoxemia (J96.11 or J96.21) coded on admission and no history of home oxygen use
2. Serum Creatinine ≥ 1.2 **AND** 50% increase from baseline (lowest value during hospitalization) **AND** no ICD10 for end-stage renal dysfunction (N18.6) coded on admission
3. Platelet count < 100 cells/µL **AND** > 50% decline in platelets from baseline (highest value during hospitalization)
4. Total bilirubin ≥ 2.0 mg/dL **AND** doubling of total bilirubin from baseline (lowest value during hospitalization)
   - Note: Total bilirubin criteria cannot be used for patients with acute gallbladder disease.
5. Lactate ≥ 2.0 mmol/L
6. Treatment with any of the following intravenous vasopressors (at any dose): Angiotensin II, Dopamine, Norepinephrine, Epinephrine, Phenylephrine, or Vasopressin ***outside*** of the operating room.
7. Documentation of mental status alteration, defined as deviation from the patient's baseline cognitive status.
   - Include: confusion, lethargy, reports that the patient is acting out of usual character, unresponsiveness, somnolence, comatose state, encephalopathy
   - Please also include Nursing documentation of altered mental status.

Risk Factor: Pre-op Sepsis/Severe Sepsis

2024

Variable Options:

a) Sepsis
b) No

Include: All

Exclude: N/A

Notes:

- Acute pancreatitis is NOT an infection source.
- "Suspected Sepsis" is NOT a documented source of infection.
- "Suspected infection from ____" is an acceptable source of infection.
- Nursing documentation referencing an infection source or treatment of a new infection is acceptable.
- For patients transferred from an outside ED or outside hospital, all vital sign and lab data to capture sepsis must be data obtained at your hospital upon or after arrival.

Risk Factor: Pre-op Sepsis/Severe Sepsis

2024

Window Period for Surgical Patients

Table 1: Window period for pre-op sepsis. Both new suspected/confirmed infection (criteria A) and organ dysfunction (criteria B) need to be met within a 3-day calendar window prior to the surgery start time. This window includes the calendar day of surgery (before surgery start time) and the two calendar days prior.

Hospital Day No.	1	2	3	4 ACS Index Surgery (includes before surgery start time)
New Suspected or Confirmed Infection Window		**A** ***May include intra-operative infection source if not documented pre-op**		
Window Period for Acute Organ Dysfunction		**B** ***Cannot include intra-operative period for capture of organ dysfunction**		

- For surgical patients, if an infection source was not suspected or confirmed pre-op but it is identified intra-operatively (during the index ACS case) and the patient has acute organ dysfunction criteria met within the **3-calendar day window before surgery** (on day of ACS index surgery before surgery start time or within the 2 calendar days prior), then preoperative sepsis can be assigned.
    - Example: A patient presents to your ED with altered mental status and a lactate > 2.0, but CT findings only demonstrate bowel obstruction. There is no mention of bowel necrosis or other new infection source in the documentation prior to surgery. The patient is taken emergently from the ED to OR that day and is found to have bowel necrosis with peritonitis intra-operatively. Preoperative sepsis can be assigned since the patient met sepsis criteria B within the appropriate window period pre-op.
- For surgical patients, acute organ dysfunction (criteria B) for pre-op sepsis cannot be met intra-operatively.

Risk Factor: Pre-op Sepsis/Severe Sepsis

2024

Window Period for Non-surgical Patients

Table 2: For non-surgical patients, both sepsis criteria A and criteria B must be met on hospital day #1 or hospital day #2 to be considered sepsis on admission.

Hospital Day No.	*1*	*2*	*3*	*4*
New Suspected or Confirmed Infection	A			
Acute Organ Dysfunction	B			

Disease: Organ System

2023

56) **Organ System**

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

Definition: Indicate if the patient meets MACS criteria for the appendix (acute appendicitis), gallbladder (acute gallbladder disease), small bowel obstruction, or emergent/urgent exploratory laparotomy. An emergent exploratory laparotomy case is defined by the surgeon or anesthesia using an "E" in the ASA score. An urgent exploratory laparotomy case is one that goes to the operating room within 48 hours of the decision to operate.

Variable Options:

a. Appendix
b. Gallbladder
c. Small Bowel
d. Exploratory Laparotomy
e. None

Include: All

Exclude: N/A

2024

57) **Organ System**

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

Definition: Indicate the first MACS qualifying disease for the patient during this hospitalization: appendix (acute appendicitis), gallbladder (acute gallbladder disease), small bowel obstruction, or emergent/urgent exploratory laparotomy. An emergent exploratory laparotomy case is defined by the surgeon or anesthesia using an "E" in the ASA score. An urgent exploratory laparotomy case is one that goes to the operating room within 48 hours of the decision to operate.

Variable Options:

a. Appendix
b. Gallbladder
c. Small Bowel
d. Exploratory Laparotomy
e. None

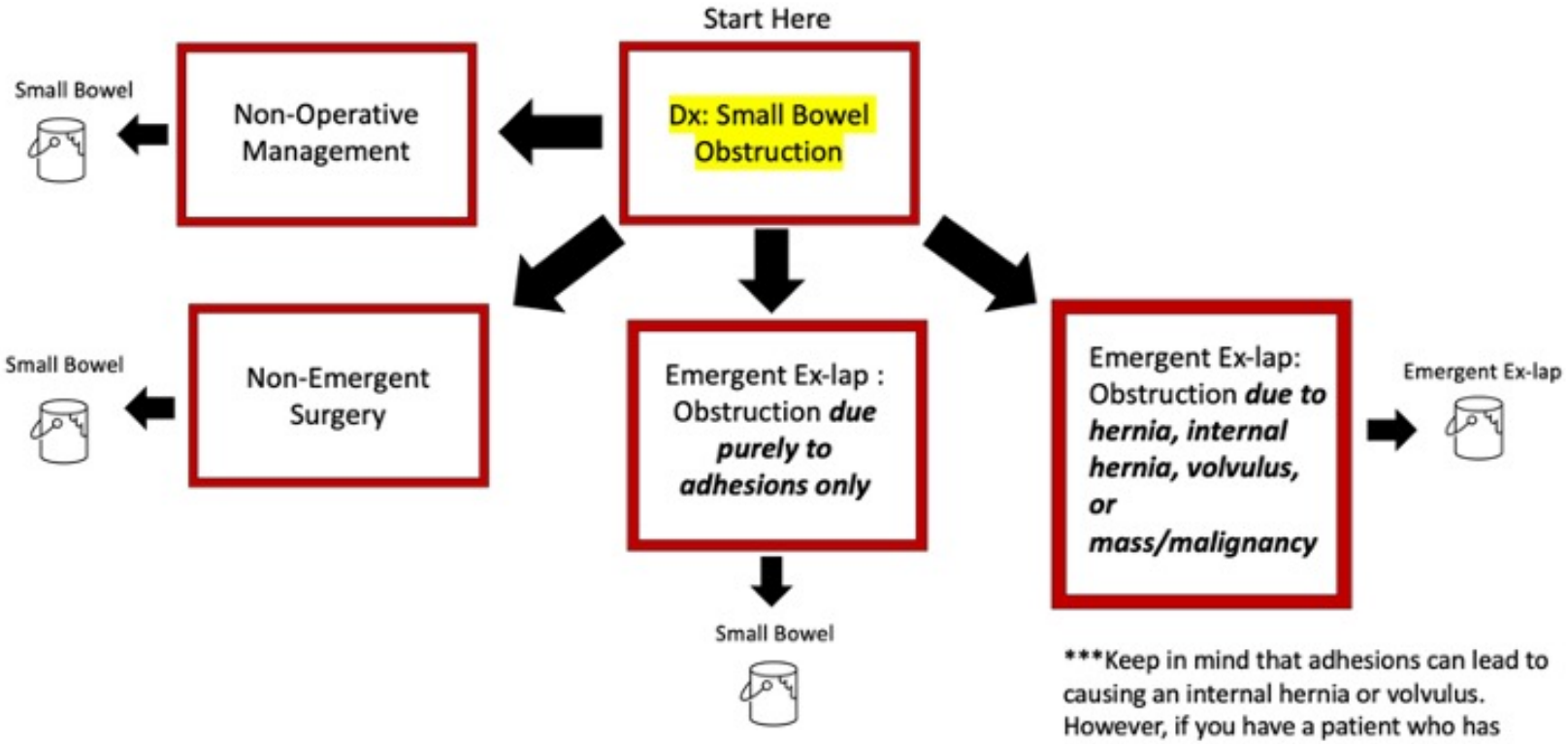
Include: All

Exclude: N/A

Disease: Organ System 2024

If the patient qualifies for two different MACS qualifying disease categories during this admission, select the first MACS qualifying disease that the patient experiences during this hospitalization. For small bowel obstruction with ex-lap, please see below.

SBO versus Ex-lap Organ System Flowchart:



***Keep in mind that adhesions can lead to causing an internal hernia or volvulus. However, if you have a patient who has adhesions and also has a volvulus, the obstruction is not caused "**purely**" due to adhesions only, so you would select the ex-lap bucket.

Appendix: CT findings

2023

60) **CT Findings**

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

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

Variable Options:

a. Abscess
   - Yes
   - No
b. Fecalith (aka appendicolith)
   - Yes
   - No
c. Free Air
   - Yes
   - No
d. Free Fluid
   - Yes
   - No
e. Phlegmon
   - Yes
   - No

2024

60) **CT Findings**

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

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

Variable Options:

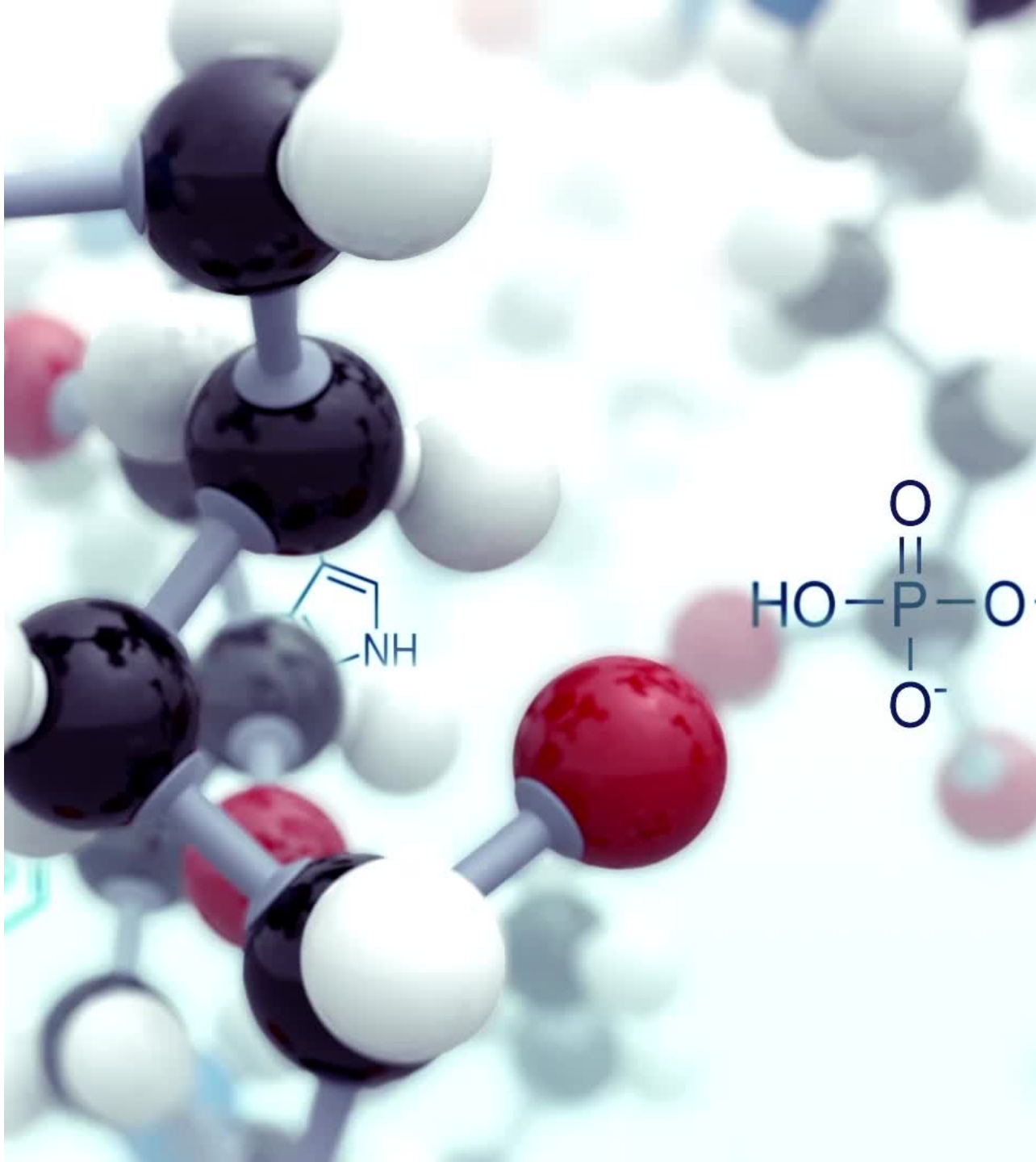
a. Abscess
   - Yes
   - No
b. Cecum and/or Terminal Ileum Inflammation
   - Yes
   - No
c. Fecalith (aka appendicolith)
   - Yes
   - No
d. Free Air
   - Yes
   - No
e. Free Fluid
   - Yes
   - No
f. Phlegmon
   - Yes
   - No

Improving Appendicitis Antibiotic Capture

Add following classes-

- Glycopeptide: vancomycin (Vancocin)
- Nitroimidazoles: metronidazole (Flagyl)
- Oxazolidinones: linezolid (Zyvox)

Antibiotic reference to be linked to dictionary

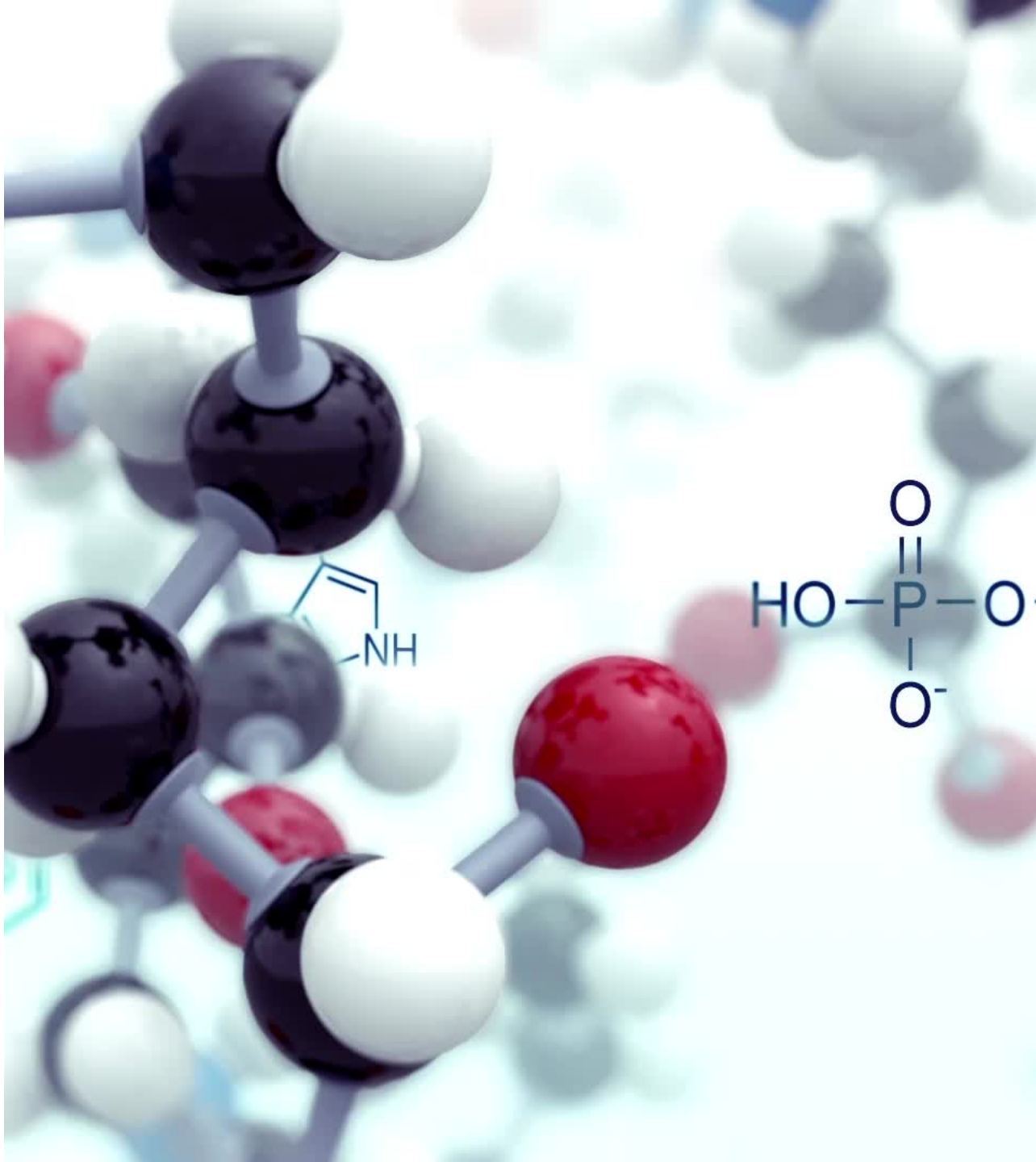


Improving Appendicitis Antibiotic Capture

Separate penicillin into subclasses-

- Natural Penicillin: Pen G, Pen V
- Aminopenicillin: ampicillin, Unasyn, amoxicillin, Augmentin
- Antistaphylococcal Penicillin: nafcillin, oxacillin, dicloxacillin, cloxacillin
- Extended-Spectrum Penicillin: piperacillin, Zosyn, ticarcillin

Antibiotic reference to be linked to dictionary



Appendix: IV Antibiotics

2023

67) **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)

2024

68) **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
b. Aminopenicillin
c. Antistaphylococcal Penicillin
d. Carbapenem
e. Cephalosporin – Generation 1
f. Cephalosporin – Generation 2
g. Cephalosporin – Generation 3
h. Cephalosporin – Generation 4
i. Extended-Spectrum Penicillin
j. Glycopeptide
k. Lincosamide
l. Macrolide
m. Monobactam
n. Natural Penicillin
o. Nitroimidazoles
p. Oxazolidinones
q. Quinolone
r. Sulfonamide
s. Tetracycline
t. Other

Antibiotic reference to be linked to dictionary

Appendix: Outpatient Medical Management Pathway

2024 NEW Variable Added

68) **Outpatient Appendicitis Management Pathway**

Intent: To determine the volume of patients who start on an outpatient medical management pathway for appendicitis in the ED.

Definition: The patient was initiated on an outpatient medical management pathway for appendicitis during this encounter (regardless of whether the patient was discharged from the ED or admitted).

Variable Options:

a. Yes
b. No

Include: All acute appendicitis patients.

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

Notes:

Gallbladder: **Diagnosis** Ultrasound, CT, HIDA, EUS, MRI/MRCP

2023

78) **Diagnosis Ultrasound**

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

Definition: Identify if an ultrasound was performed as a part of initial gallbladder 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 gallbladder patients.

Exclude: N/A

Notes:

- Exclude transvaginal ultrasound.
- Include OSH imaging.

2024

80) **Diagnosis Ultrasound**

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

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

Variable Options:

a. Yes
b. No

Include: All gallbladder patients.

Exclude: N/A

Notes:

- Exclude transvaginal ultrasound.
- Include OSH imaging prior to transfer.

Verbiage changed to "Identify if a gallbladder study was performed during this admission as a part of initial gallbladder workup (e.g., before surgery if surgical management or at any time during the admission for medically managed). May include imaging coming over from the OSH. ***We want to exclude outpatient follow up imaging performed prior to interval elective cholecystectomy cases.

Small Bowel: Prior Abdominal Procedures

2023

105) **Prior Abdominal Procedures**

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

Definition: Determine if the 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 this question.

2024

107) **Prior Abdominal Procedures**

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

Definition: Determine if the patient has had prior abdominal or pelvic 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 this question.
- Include surgery into the intrapelvic space. Example: total abdominal hysterectomy.

Small Bowel: Open Laparotomy

2023

106) **Prior Open Laparotomy**

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

Definition: Determine if the 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 exar notes to answer this question.

2024

108) **Prior Open Laparotomy**

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

Definition: Determine if the 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 this question.
- If there is no documentation that states that the prior abdominal surgery was an open abdominal surgery, leave this question defaulted to "No".

Small Bowel: Open Laparoscopy

2023

107) **Prior Laparoscopy**

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

Definition: Determine if the 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 exa notes to answer this question.

2024

109) **Prior Laparoscopy**

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

Definition: Determine if the 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 this question.
- If there is no documentation that states that the prior abdominal surgery was a laparoscopic abdominal surgery, leave this question defaulted to "No".

Small Bowel: Gastrografin Challenge

2023

118) **Gastrografin Challenge**

Intent: To capture the testing results utilized to determine the 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:

- A small bowel follow-through (Gastrografin administration followed by fluoroscopy) should be captured as a Gastrografin challenge.

2024

120) **Gastrografin Challenge**

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

Definition: Identify if a Gastrografin challenge was performed as part of small bowel obstruction evaluation during current admission.

Variable Options:

a. Yes
b. No

Include: All patients with a small bowel obstruction.

Exclude: Patients without a small bowel obstruction.

Notes:

- A small bowel follow-through (Gastrografin administration followed by fluoroscopy) should be captured as a Gastrografin challenge.
- The contrast media must be Gastrografin (diatrizoate) and cannot be any other contrast material such as barium.
- After the Gastrografin contrast is given an abdominal X-ray is performed or the patient resolves the small bowel obstruction.

Small Bowel: Gastrografin Challenge Date

2023

119) **Gastrografin Challenge Date (mm/dd/yyyy)**

Intent: Identify the date the abdominal X-ray demonstrating results from the Gastrografin challenge was performed to decide ongoing surgical or non-surgical management.

Definition: Start 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:

- If more than one Gastrografin challenge is performed during the admission, then selec the first Gastrografin challenge performed demonstrating contrast in the colon.
- If Gastrografin never makes it to the colon, then select the last abdominal X-ray image showing contrast has not made it to the colon.
- If Gastrografin challenge is given, but an abdominal X-ray is not performed because the patient starts passing stool, enter the date that the gastrografin was given in the MAR for this variable.

2024

121) **Gastrografin Challenge Date (mm/dd/yyyy)**

Intent: Identify the date the abdominal X-ray demonstrating results from the Gastrografin challenge was performed to decide ongoing surgical or non-surgical management.

Definition: Start 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:

- If more than one Gastrografin challenge X-ray is performed during the admission, then select the first Gastrografin challenge X-ray performed demonstrating contrast in the colon.
- If Gastrografin never makes it to the colon, then select the last abdominal X-ray image showing contrast has not made it to the colon.
- If Gastrografin challenge is given, but an abdominal X-ray is not performed, leave this date blank.

Small Bowel: Gastrografin Challenge Time

2023

120) **Gastrografin Challenge Time (Military Time 00:00)**

Intent: Identify the time the abdominal X-ray demonstrating results from the Gastrografin challenge was performed to decide ongoing surgical or non-surgical management.

Definition: Start 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:

- If more than one Gastrografin challenge is performed during the admission, then select the first Gastrografin challenge performed demonstrating contrast in the colon.
- If Gastrografin never makes it to the colon, then select the last abdominal X-ray image showing contrast has not made it to the colon.
- If Gastrografin contrast for a challenge is given, but an abdominal X-ray is not performed because the patient starts passing stool, enter the time that the Gastrografin was given in the MAR for this variable.

2024

122) **Gastrografin Challenge Time (Military Time 00:00)**

Intent: Identify the time the abdominal X-ray demonstrating results from the Gastrografin challenge was performed to decide ongoing surgical or non-surgical management.

Definition: Start 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:

- If more than one Gastrografin challenge X-ray is performed during the admission, then select the first Gastrografin challenge X-ray performed demonstrating contrast in the colon.
- If Gastrografin never makes it to the colon, then select the last abdominal X-ray image showing contrast has not made it to the colon.
- If Gastrografin challenge is given, but an abdominal X-ray is not performed, leave this time blank.

Ex-lap: Consciousness

2023

138) **NEWS 2 Score – Consciousness**

Intent: To use the National Early Warning Score (NEWS) 2 to determine the degree of illness within 12 hours before emergent exploratory laparotomy.

Definition: The patient's level of consciousness.

Variable Options:

a. Altered Consciousness
   - Confusion – New (presumed new) or worsening confusion, disorientation (includes a new reduction in Glasgow Coma Scale or delirium) or altered mentation.
   - Voice – A patient who is not fully awake, response in some way when you talk to them
   - Pain – A patient who is not alert and not responding to voice makes a response to painful stimuli.
   - Unresponsive (no eye, voice, or motor response to voice or pain stimulation)

b. Alert – A fully awake patient with spontaneous eye-opening, responding to voice and motor function.

Include: All patients who have an emergent exploratory laparotomy.

Exclude: Patients who do not have an emergent exploratory laparotomy.

2024

140) **NEWS 2 Score – Consciousness**

Intent: To use the National Early Warning Score (NEWS) 2 to determine the degree of illness within 12 hours before emergent exploratory laparotomy.

Definition: The patient's level of consciousness.

Variable Options:

a. Altered Consciousness
   - Documentation of mental status alteration, defined as deviation from the patient's baseline cognitive status
   - Examples: confusion, reports that the patient is acting out of usual character, unresponsiveness, somnolence, comatose state, encephalopathy,
   - Please also include Nursing documentation of altered mental status.

b. Alert – A fully awake patient with spontaneous eye-opening, responding to voice and motor function.

Include: All patients who have an emergent exploratory laparotomy.

Exclude: Patients who do not have an emergent exploratory laparotomy.

Ex-lap: Total Ventilator Calendar Days

2023

144) **Total Ventilator Calendar Days**

Intent: To determine the duration of days the patient remained on a ventilator following the exploratory laparotomy for the length of stay/complication purposes.

Definition: Identify the number of calendar days the patient received ventilator-assisted breaths during any portion of the day following exploratory laparotomy.

Variable Options: A whole number

Include: All patients who have an emergent exploratory laparotomy.

Exclude: Patients who do not have an emergent exploratory laparotomy.

Notes:

- Include POD #0 as a calendar day.
- Example: A patient has an operation, remains intubated post-op, and is transported to the ICU. The ICU staff then extubate the patient 8 hours later, within the same calendar day as surgery. Enter "1" for total ventilator calendar days.

2024

146) **Total Ventilator Calendar Days**

Intent: To determine the duration of days the patient remained on a ventilator following the exploratory laparotomy for the length of stay/complication purposes.

Definition: Identify the number of calendar days the patient received ventilator-assisted breaths during any portion of the day following exploratory laparotomy.

Variable Options: A whole number

Include: All patients who have an emergent exploratory laparotomy.

Exclude: Patients who do not have an emergent exploratory laparotomy.

Notes:

- Include POD #0 as a calendar day.
  - Example: A patient has an operation, remains intubated post-op, and is transported to the ICU. The ICU staff then extubate the patient 8 hours later, within the same calendar day as surgery. Enter "1" for total ventilator calendar days.
- Exclude mechanical ventilation time associated with OR procedures or PACU (post-anesthesia care unit) with extubation occurring prior to transfer to the inpatient unit.

Operation

2023

160) **Operation**

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

Definition: Indicate if the patient had surgery in the operating room or critical care unit.

Variable Options:

a. Yes
b. No

Include: All patients who have a surgical procedure in the operating room or critical care ur

Exclude: Patients who have surgical procedures in areas other than the operating room or critical care unit.

Notes:

- Select "Yes" for surgical procedures performed at the bedside in a critical care unit.

2024

162) **Operation**

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

Definition: Indicate if the patient had surgery in the operating room or critical care unit.

Variable Options:

a. Yes
b. No

Include: All patients who have a surgical procedure in the operating room or critical care unit.

Exclude: Patients who have surgical procedures in areas other than the operating room or critical care unit.

Notes:

- Select "Yes" for surgical procedures performed at the bedside in a critical care unit.
- If a surgery was performed by a non-ACS surgeon for the condition that ACS is following, include this surgical procedure.
  - Example: ACS is consulted for a small bowel obstruction due to hiatal hernia. Thoracic surgery takes the patient to the OR to repair the hiatal hernia. Include the hiatal hernia repair performed by thoracic surgery.
  - Example: A patient previously admitted to ACS returns for elective cholecystectomy with a non-ACS subspecialty group. Include this elective cholecystectomy on the readmission case.

Operation 1-8: Procedure CPT Code

2023

171) **Procedure CPT Code 1**

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 or critical care unit.

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 or the more acute indication for the surgery as described in the operative report.
- For patients with bowel left in discontinuity at the end of the first surgery, note the CPT code in Qualtrics indicating which anatomical part was removed or fixed.
- Do not add lysis of adhesions coding to your hospital's coding unless this was all that the surgeon performed, or the surgeon asked to use Modifier 22 in the operative note due to significant lysis of adhesions, or if the surgeon indicated in the operative note that lysis of adhesions was a significant part of the case.

2024

173) **Procedure CPT Code 1**

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 or critical care unit.

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 or the more acute indication for the surgery as described in the operative report.
- For patients with bowel left in discontinuity at the end of the first surgery, note the CPT code in Qualtrics indicating which anatomical part was removed or fixed.
- Do not add lysis of adhesions coding to your hospital's coding unless this was all that the surgeon performed, or the surgeon asked to use Modifier 22 in the operative note due to significant lysis of adhesions, or if the surgeon indicated in the operative note that lysis of adhesions was a significant part of the case.
- If the patient had an ERCP performed intra-operatively, include the ERCP CPT code here. List the ACS surgeon as performing the procedure.

Operation 1-8: Operative Findings (pertaining to SBO)

2023

175) **Operative Findings**

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

Definition: Identify which 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 Bowel
   i. Yes
   ii. No
f. Dead Bowel
   i. Yes
   ii. No
g. Inadvertent Enterotomy
   i. Yes
   ii. No
h. Other
   i. Yes
   ii. No

2024

Notes:

- If the bowel obstruction is being caused by a single adhesive band, select “Single Band Adhesion”, even if other adhesions not causing the bowel obstruction are found during surgery.

- If the surgeon causes a “serosal tear” and not a “transmural” enterotomy, leave “Inadvertent Enterotomy” defaulted to “No”.

Hernia Repair: Previous hernia repair

2023

187) **Previous Hernia Repair**

Intent: To capture instances where the patient has a history of prior hernia repair to assess the complexity of the current repair and complications.

Definition: The patient had a prior hernia repair surgery involving the ventral or abdominal region.

Variable Options:

a. Yes
b. No

Include: All patients who have a hernia repair.

Exclude: Patients who did not have a hernia repair.

Notes:

2024

189) **Previous Hernia Repair**

Intent: To capture instances where the patient has a history of prior hernia repair to assess the complexity of the current repair and complications.

Definition: The patient had a prior hernia repair surgery involving the ventral or abdominal region at the same site of the current repair.

Variable Options:

a. Yes
b. No

Include: All patients who have a hernia repair.

Exclude: Patients who did not have a hernia repair.

Notes:

Matches MSQC verbiage

Hernia Repair: Mesh Location

2023

192) **Mesh 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. Onlay – The mesh is above the abdominal wall muscles/fascia and behind the subcutaneous fat.
b. Inlay – The mesh is between the edges of the fascia or in the hernia defect and fixated to the margins of the defect.
c. Sublay – The mesh is positioned below the rectus (abdominal wall) muscle.
d. Inguinal/Femoral (Mesh) – Mesh was used during the inguinal or femoral hernia repair.
e. Primary (No Mesh)

Include: All patients who have a hernia repair.

Exclude: Patients who did not have a hernia repair.

Notes: See figure below for mesh locations.

2024

194) **Mesh Location**

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

Definition: Identify the location of mesh placement.

Variable Options:

a. Onlay – The mesh is above the abdominal wall muscles/fascia and behind the subcutaneous fat.
b. Inlay – The mesh is between the edges of the fascia or in the hernia defect and fixated to the margins of the defect.
c. Sublay – The mesh is positioned below the rectus (abdominal wall) muscle.
d. Inguinal/Femoral (Mesh) – Mesh was used during the inguinal or femoral hernia repair.
e. Primary (No Mesh)

Include: All patients who have a hernia repair.

Exclude: Patients who did not have a hernia repair and patients with a hiatal or obturator hernia repair.

Notes:

- See figure below for mesh locations.

Hernia Repair: Mesh Location

2023

199) **Myofascial Release**

Intent: To track the use of myofascial release during hernia repair.

Definition: During this hernia repair, a myofascial release (component separation) was performed. Myofascial release is CPT 15734.

Variable Options:

a. Yes
b. No

Include: All patients who have a ventral/incisional or umbilical hernia repair.

Exclude: Patients who did not have a ventral/incisional or umbilical hernia repair.

Notes:

- For these cases, the "Procedure CPT Code 1" on the Operation 1 tab will be the hernia repair CPT. Answer "Yes" to the "Additional Operations" variable and complete "Operation 2" with the same date, time, surgeon, and operation type as Operation 1 but with the myofascial release CPT as "Procedure CPT Code 2".

2024

201) **Myofascial Release**

Intent: To track the use of myofascial release during hernia repair.

Definition: During this hernia repair, a myofascial release (component separation) was performed. Myofascial release is CPT 15734.

Variable Options:

a. Yes
b. No

Include: All patients who have a ventral/incisional or umbilical hernia repair.

Exclude: Patients who did not have a ventral/incisional or umbilical hernia repair.

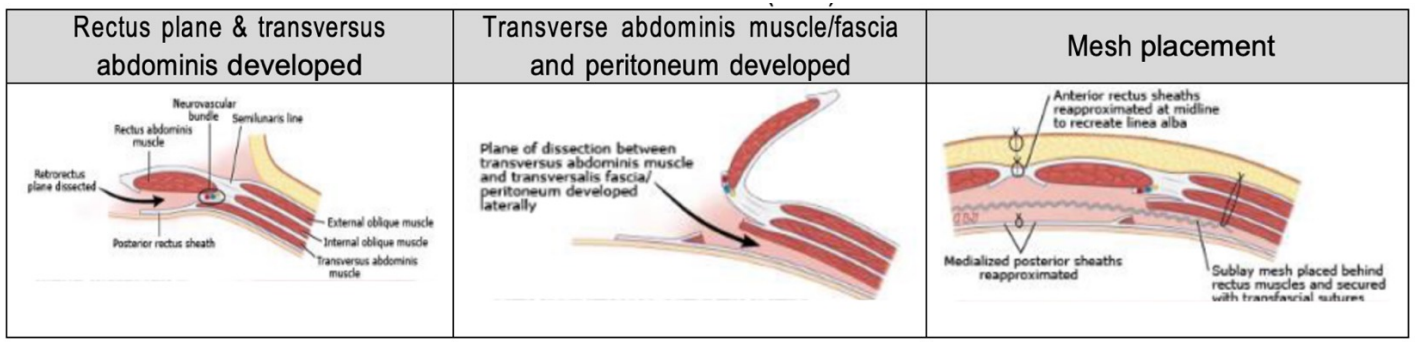
Notes:

- For these cases, the "Procedure CPT Code 1" on the Operation 1 tab will be the hernia repair CPT. Answer "Yes" to the "Additional Operations" variable and complete "Operation 2" with the same date, time, surgeon, and operation type as Operation 1 but with the myofascial release CPT as "Procedure CPT Code 2".
- Subcutaneous flaps and diastasis recti repair are not considered types of myofascial release. Diastasis recti is not a true hernia, it is a gap between the left and right rectus abdominal muscle.

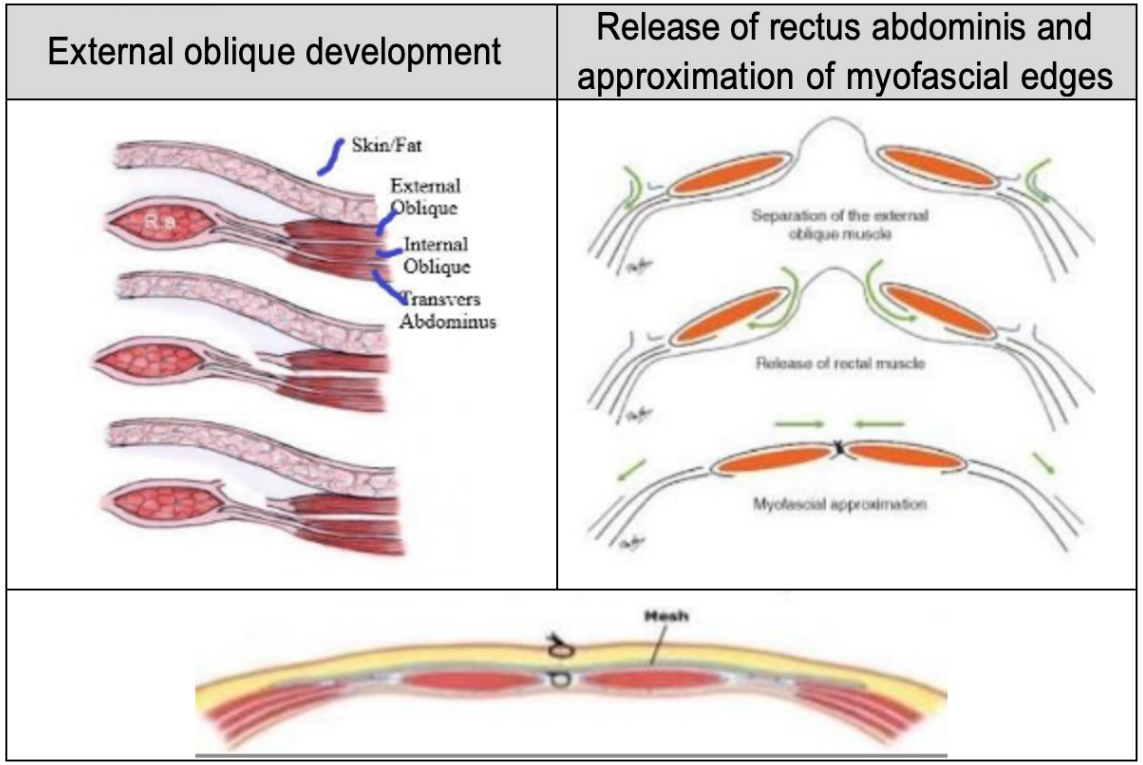
Hernia Repair: Types of Myofascial Release

Diagrams from MSQC added 2024

Posterior Component:



Anterior Component:



Occurrences

Note:

For post-operative occurrences, only capture the complications that occurred following surgery performed at your hospital. Do not capture complications from surgery that was performed at another hospital as your center’s complication.

Occurrence: DVT Date

2023

209) **DVT Requiring Therapy Date (mm/dd/yyyy)**

Intent: To track the prevalence of patients who develop a deep vein thrombosis (DVT) requiring therapy.

Definition: The first date the patient has a test confirming DVT and treatment in place (e.g., anticoagulation therapy, vena cava filter, or clipping of the vena cava) within 30 days following the principal operative procedure or during current admission and within 30 days of discharge if medically managed.

Variable Options: Date in mm/dd/yyyy format

Include: All

Exclude: N/A

Notes:

- Deep veins include axillary, brachial, deep femoral, femoral/ "superficial femoral," fibular, gastrocnemius, iliac, internal jugular, peroneal, popliteal, portal, radial, soleal, subclavian, tibial, ulnar, or vena cava.
- Clots in basilica, cephalic, hepatic, renal, mesenteric vein, greater or lesser saphenous, or arteries should **not** be included.
- Exclude clots that occur in superficial veins and arteries.
- Resource
  - Veins in the Lower Extremity
  - Veins in the Upper Extremity
- If DVT is test confirmed and the patient refused therapy, enter the date of the DVT scan.
- If DVT is test confirmed, but the patient has a contraindication to anticoagulation due to bleeding risk documented, enter the date of the DVT scan.
- Enter the appropriate date if there is a clot **in the vein** at the site of an internal jugular (IJ) line or PICC line.
- Examples of tests to confirm include duplex/Doppler/ultrasound, venogram, or CT scan.
- Do not enter a date if the patient had a DVT on admission or developed it before

2024

211) **DVT Requiring Therapy Date (mm/dd/yyyy)**

Intent: To track the prevalence of patients who develop a deep vein thrombosis (DVT) requiring therapy.

Definition: The first date the patient has a test confirming DVT and treatment in place (e.g., anticoagulation therapy, vena cava filter, or clipping of the vena cava) within 30 days following the principal operative procedure or during current admission and within 30 days of discharge if medically managed.

Variable Options: Date in mm/dd/yyyy format

Include: All

Exclude: Patients with DVT present on arrival.

Notes:

- Deep veins include axillary, brachial, deep femoral, femoral/ "superficial femoral," fibular, gastrocnemius, iliac, internal jugular, peroneal, popliteal, portal, radial, soleal, subclavian, tibial, ulnar, or vena cava.
- Clots in basilica, cephalic, hepatic, renal, mesenteric vein, greater or lesser saphenous, or arteries should **not** be included.
- Exclude clots that occur in superficial veins and arteries.
- If DVT is test confirmed and the patient refused therapy, enter the date of the DVT scan.
- If DVT is test confirmed, but the patient has a contraindication to anticoagulation due to bleeding risk documented, enter the date of the DVT scan.
- Enter the appropriate date if there is a clot **in the vein** at the site of an internal jugular (IJ) line or PICC line.
- Examples of tests to confirm include duplex/Doppler/ultrasound, venogram, or CT scan.

Also deleted resource link since per feedback, this was confusing rather than helpful.

Occurrence: EC Fistula Date

2023

210) **Enterocutaneous Fistula Date (mm/dd/yyyy)**

Intent: To track the prevalence of patients who develop a new enterocutaneous fistula.

Definition: The first date that a new enterocutaneous fistula was documented within 30 days following the principal operative procedure or during current admission and within 30 days of discharge for medically managed patients.

Variable Options: Date in mm/dd/yyyy format

Include: All

Exclude: N/A

Notes:

- Do not enter a date if the enterocutaneous fistula was present on admission.

2024

212) **Enterocutaneous Fistula Date (mm/dd/yyyy)**

Intent: To track the prevalence of patients who develop a new enterocutaneous fistula.

Definition: The first date that a new enterocutaneous fistula was documented.

Variable Options: Date in mm/dd/yyyy format

Include: All

Exclude: Patients presenting to your hospital with an EC fistula that was a complication of surgery performed at an outside hospital.

Notes:

EC fistulas that occur > 30 days post-op are still life altering. We want to capture all of them in the data, even if they occur after 30 days. However, if the EC fistula was a complication of surgery performed at an OSH prior to transfer to your center, we do not want to capture this as an occurrence at your hospital.

Occurrence: Infected Pancreas Date

2023

212) **Infected Pancreas Date (mm/dd/yyyy)**

Intent: To track the prevalence of patients who develop an infected pancreas.

Definition: The first date the patient has a documented infected pancreas during the current admission and within 30 days following discharge.

Variable Options: Date in mm/dd/yyyy format

Include: All

Exclude: N/A

Notes:

2024

214) **Infected Pancreas Date (mm/dd/yyyy)**

Intent: To track the prevalence of patients who develop an infected pancreas.

Definition: The first date the patient has a documented infected pancreas during the current admission and within 30 days following discharge.

Variable Options: Date in mm/dd/yyyy format

Include: All

Exclude: Infected pancreas present on hospital arrival.

Notes:

We only want to capture this as a hospital occurrence, and not if it is present on arrival.

Occurrence: Necrotic Pancreas Date

2023

214) **Necrotic Pancreas Date (mm/dd/yyyy)**

Intent: To track the prevalence of patients who develop a necrotic pancreas.

Definition: The first date the patient has a documented necrotic pancreas identified during the current admission and within 30 days following discharge.

Variable Options: Date in mm/dd/yyyy format

Include: All

Exclude: N/A

Notes:

2024

216) **Necrotic Pancreas Date (mm/dd/yyyy)**

Intent: To track the prevalence of patients who develop a necrotic pancreas.

Definition: The first date the patient has a documented necrotic pancreas identified during the current admission and within 30 days following discharge.

Variable Options: Date in mm/dd/yyyy format

Include: All

Exclude: Necrotic pancreas present on hospital arrival.

Notes:

We only want to capture this as a hospital occurrence, and not if it is present on arrival.

Occurrence: Myocardial Infarction Date

2023

214) **Myocardial Infarction Date (mm/dd/yyyy)**

Intent: To track the prevalence of patients who develop an acute myocardial infarction (MI/AMI).

Definition: The first date the patient has documentation of at least **one** sign/symptom of myocardial ischemia **and** at least **one** cardiac biomarker result indicative of MI within 30 days following the principal operative procedure or during the current admission and within 30 days of discharge for medically managed patients. See "Notes" for examples of signs/symptoms and biomarkers for MI.

Variable Options: Date in mm/dd/yyyy format

Include: All

Exclude: Patients with myocardial infarction present on arrival.

Notes:

- Enter the date of death if the patient had symptoms associated with myocardial ischemia but suffered a cardiac arrest before testing.
- Point of Care testing values are acceptable.

Examples of Signs and Symptoms of Myocardial Ischemia

- Symptoms - Angina, chest pain/pressure, neck or jaw pain, shoulder or arm pain, dyspnea, nausea/vomiting, and clammy skin
- New or presumed new ECG Changes – ST-segment elevation MI (STEMI), non-STEMI (NSTEMI) ischemia without ST-segment changes, T-wave inversion, ST-T wave abnormalities, left bundle branch block (LBBB), Pathological Q waves
- Imaging evidence (Doppler, ultrasound, or ECHO) showing new loss of viable myocardium or new regional wall motion abnormality consistent with ischemia
- Angiography, cardiac computed tomography angiography (CCTA), or autopsy showing new coronary thrombus

Examples of Cardiac Biomarkers

- Cardiac Troponin I (cTnI), T (cTnT) or C (cTnC)
- Creatinine Kinase (CK-MB)
- Myoglobin

Occurrence: Myocardial Infarction Date

2024

215) **Myocardial Infarction Date (mm/dd/yyyy)**

Intent: To track the prevalence of patients who develop an acute myocardial infarction (MI/AMI).

Definition:

An acute myocardial infarction (including NSTEMI type II) must be noted with documentation ECG changes indicative of an acute MI

AND

New elevation in troponin greater than three times the upper level of the reference range in the setting of suspected myocardial ischemia

AND

Physician diagnosis of an acute myocardial infarction that occurred subsequent to arrival at your center

Variable Options: Date in mm/dd/yyyy format

Include: All

Exclude: Patients with myocardial infarction present on arrival.

Notes:

- Onset of symptoms began after arrival to your ED/hospital.

Occurrence: Pulmonary Embolism Date

2023

216) **Pulmonary Embolism Date (mm/dd/yyyy)**

Intent: To track the prevalence of patients who develop new pulmonary embolism (PE).

Definition: The first date the patient has a **new** PE confirmed by an appropriate diagnostic study (e.g., CT Pulmonary Angiogram (CTPA), Ventilation-Perfusion (V-Q) scan, CT Spiral/Helical scan, Pulmonary Arteriogram, Trans-esophageal echocardiogram (TEE), 2D Echocardiogram, heart catheterization) within 30 days following the principal operative procedure or during the current admission and within 30 days of discharge for medically managed patients.

Variable Options: Date in mm/dd/yyyy format

Include: All

Exclude: N/A

Notes:

2024

218) **Pulmonary Embolism Date (mm/dd/yyyy)**

Intent: To track the prevalence of patients who develop new pulmonary embolism (PE).

Definition: The first date the patient has a **new** PE confirmed by an appropriate diagnostic study (e.g., CT Pulmonary Angiogram (CTPA), Ventilation-Perfusion (V-Q) scan, CT Spiral/Helical scan, Pulmonary Arteriogram, Trans-esophageal echocardiogram (TEE), 2D Echocardiogram, heart catheterization) within 30 days following the principal operative procedure or during the current admission and within 30 days of discharge for medically managed patients.

Variable Options: Date in mm/dd/yyyy format

Include: All

Exclude: Patients with pulmonary embolism present on arrival.

Notes:

Occurrence: Sepsis

2024

219) **Sepsis Date (mm/dd/yyyy)**

Intent: To track the prevalence of patients who develop sepsis after surgery.

Definition: The patient has sepsis defined by having a new suspected/confirmed infection in criteria A **AND** one or more acute organ dysfunction listed among criteria B within the appropriate time frame.

- *Operative patients this admission*: Documentation of acute organ dysfunction criteria within the appropriate 5-day window period surrounding a new infection source within 30 days post-op.
- *Non-operative patients this admission*: Documentation of acute organ dysfunction must be met on hospital day #3 or after within the appropriate 5-day window period surrounding the new infection source.

A. <u>New Suspected/Confirmed Infection</u>

Infection sources may include but not limited to: acute appendicitis, acute cholecystitis, acute abdominal infection, acute diverticulitis, organ perforation/perforated viscus, abscess, positive cultures, anastomotic leak, gangrene/necrosis, "suspected/possible infection from xx", physician diagnosis of infection or meets MACS definition of infectio (SSI, UTI, PNA), empyema, meningitis, skin/soft tissue infection, bone/joint infection, wound infection, bloodstream catheter infection, endocarditis, implantable device infection, acute sinus infection.

AND

B. <u>Acute Organ Dysfunction</u> (at least 1 of the following criteria met within the window period which includes calendar day of surgery (prior to surgery start time) and the two prior calendar days for surgical patients; criteria met on hospital day #1 or hospital day #2 for non-operative patients):

1. Increased respiratory support greater than 4L (35%) oxygen for >2 hours
   - Note: This does not need to be consecutive hours
   - **AND** no ICD10 for chronic respiratory failure with hypoxemia (J96.11 or J96.21) coded on admission and no history of home oxygen use
2. Serum Creatinine ≥ 1.2 **AND** 50% increase from baseline (lowest value during hospitalization) **AND** no ICD10 for end-stage renal dysfunction (N18.6) coded on admission
3. Platelet count < 100 cells/µL **AND** > 50% decline in platelets from baseline (highest value during hospitalization)
4. Total bilirubin ≥ 2.0 mg/dL **AND** doubling of total bilirubin from baseline (lowest value during hospitalization)
   - Note: Total bilirubin criteria cannot be used for patients with acute gallbladder disease.
5. Lactate ≥ 2.0 mmol/L
6. Treatment with any of the following intravenous vasopressors (at any dose): Angiotensin II, Dopamine, Norepinephrine, Epinephrine, Phenylephrine, or Vasopressin ***outside*** of the operating room.
7. Documentation of mental status alteration, defined as deviation from the patient's baseline cognitive status.
   - Include: confusion, lethargy, reports that the patient is acting out of usual character, unresponsiveness, somnolence, comatose state, encephalopathy
   - Please also include Nursing documentation of altered mental status.

Occurrence: Sepsis

2024

Variable Options:

a. Sepsis
b. No

Include: All

Exclude: N/A

Notes:

- Acute pancreatitis is NOT an infection source.
- Infection can be bacterial, fungal, viral, or parasitic.
- "Suspected Sepsis" is NOT a documented source of infection.
- "Suspected infection due to ___" is an acceptable infection source (e.g., suspected infection from an anastomotic leak).
- Nursing documentation referencing an infection source or treatment of a new infection is acceptable.
- New infection source (not present pre-op/intra-op), sepsis can be assigned again any time even if sepsis was assigned pre-op.
- Same infection source and assigned sepsis pre-op, can't assign sepsis again until at least post-op day 7.
- For surgical patients, acute organ dysfunction (criteria B) for sepsis cannot be met intra-operatively.
- If an infection source is identified intra-op, but the patient did not have acute organ dysfunction pre-op, then sepsis can be assigned as an occurrence if acute organ dysfunction occurs on post-op day 0, post-op day 1, or post-op day 2 (3-day calendar window).

Occurrence: Sepsis

2024

Window Periods for Surgical Patients

The date the new infection source is suspected or confirmed is the center of a window period extending both 2 days before and 2 days after for capture of acute organ dysfunction criteria.

Table 1: Window period example for new suspected/confirmed infection and post-op and organ dysfunction

Hospital Day No.	1 ACS Index Surgery	2	3	4	5	6	7	8	9
New Suspected or Confirmed Infection				X					
Window Period for Organ Dysfunction		Window Period							

- For surgical patients, if both sepsis criteria are met within a 3-day calendar window post-op, then you can assign sepsis as an occurrence.
- The occurrence date for sepsis would be the date the patient met the criteria for acute organ dysfunction within the 3-day calendar window before or after the new infection source was identified.

Occurrence: Sepsis

2024

Table 2: Window period for infection source identified intra-operatively, but not meeting criteria for acute organ dysfunction until post-operatively

Hospital Day No.	1 ACS Index Surgery	2 POD #1	3 POD #2	4
New Infection Source	**X (Intra-op)**			
Window Period for Organ Dysfunction	**Window Period (Post-op Day 0 through Post-op Day #2)**			

- For surgical patients, when the infection source is identified intra-operatively, and the patient does not meet acute organ dysfunction criteria pre-op, then you can assign sepsis as an occurrence if the patient meets criteria B on post-op day #0 or the two calendar days after surgery.

Occurrence: Sepsis

2024

Window Period for Non-surgical Patients

The date the new infection source is suspected or confirmed is the center of a window period extending both 2 days before and 2 days after for capture of acute organ dysfunction criteria. The new infection source (criteria A) and organ dysfunction (criteria B) must be met on or after hospital day #3.

Table 3 Example: For non-surgical patients, both criteria for sepsis must be met within a five-day calendar window surrounding the new infection source on hospital day #3 or after to be considered sepsis as an occurrence.

Hospital Day No.	1	2	3	4	5	6	7	8
New Infection Source						X		
Window Period for Organ Dysfunction				Window Period				

Occurrence: Stroke/CVA Date

2023

223) **Stroke/CVA Date (mm/dd/yyyy)**

Intent: To track the prevalence of patients who develop a stroke/cerebral vascular accident (CVA).

Definition: The first date the patient develops a CVA (embolic, thrombotic, or hemorrhagic) with deficits (e.g., hemiplegia, aphasia, sensory deficits, memory loss) that persist for 24 hours or more within 30 days following the principal operative procedure or during the current admission and within 30 days of discharge for medically managed patients.

Variable Options: Date in mm/dd/yyyy format

Include: All

Exclude: N/A

Notes:

2024

224) **Stroke/CVA Date (mm/dd/yyyy)**

Intent: To track the prevalence of patients who develop a stroke/cerebral vascular accident (CVA).

Definition: The first date the patient develops a CVA (embolic, thrombotic, or hemorrhagic) with deficits (e.g., hemiplegia, aphasia, sensory deficits, memory loss) that persist for 24 hours or more within 30 days following the principal operative procedure or during the current admission and within 30 days of discharge for medically managed patients.

Variable Options: Date in mm/dd/yyyy format

Include: All

Exclude: Exclude patients with stroke/CVA present on arrival.

Notes:

Opioids: Rounding Example for Calculations

2024

234) **Solution 1 Milliliters (mL)**

Intent: To determine the opioid solution dose prescribed at discharge.

Definition: The milliliters of solution (mL) of opioid prescribed at discharge.

Variable Options: Relevant value for data element

Include: All

Exclude: N/A

Notes:

- Drug Search
- Example 1: acetaminophen/codeine solution 120 mg/12 mg per 5 mL is prescribed.
  - Report the numeric value 5.
  - Round to the tenth decimal place where applicable (e.g., mL = 8.25, report 8.3)

Discharge: Discharge Disposition

2023

242) **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. Expired
b. Home Care for Skilled Care
c. Home or Self-Care – e.g., home, group home, foster care, jail/prison
d. Hospice-Home
e. Hospice Medical Facility (Certified) – e.g., inpatient hospice care facility, discharged fror acute care hospital but remains at the same hospital under hospice care.
f. Inpatient Rehab (Acute)
g. Left AMA
h. Long Term Care Hospital
i. Other Type of Healthcare Institution – e.g., inpatient drug/alcohol rehab, residential chemical dependency program, inpatient detox facility
j. Psychiatric Hospital – or distinct psychiatric unit of the hospital
k. Short-Term Hospital for Inpatient Care
l. Skilled Nursing Facility (SNF) – includes sub-acute rehab at a SNF

2024

243) **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. Expired
b. Home Care for Skilled Care - e.g., visiting nurse (wound care, home infusion), PT/OT arranged
c. Home or Self-Care – e.g., home, group home, foster care, jail/prison
d. Hospice-Home
e. Hospice Medical Facility (Certified) – e.g., inpatient hospice care facility, discharged from acute care hospital but remains at the same hospital under hospice care.
f. Inpatient Rehab (Acute)
g. Left AMA
h. Long Term Care Hospital
i. Other Type of Healthcare Institution – e.g., inpatient drug/alcohol rehab, residential chemical dependency program, inpatient detox facility
j. Psychiatric Hospital – or distinct psychiatric unit of the hospital
k. Short-Term Hospital for Inpatient Care
l. Skilled Nursing Facility (SNF) – includes sub-acute rehab at a SNF

Discharge: Death Date Within 30 Days

2023

244) **Death Date Within 30 days Post Operation (mm/dd/yyyy)**

Intent: To identify patients who died intraoperatively or within 30 days after the principal operative procedure.

Definition: Note the date of death if a patient dies intraoperative or within 30 days after the principal operative procedure. Also include non-operative patient deaths within 30 days of first acute care general surgery consultation.

Variable Options: Date in mm/dd/yyyy format

Include: All patients who die within 30 days after the principal operative procedure. Also include non-operative patient deaths within 30 days of first acute care general surgery consultation.

Exclude: Patients who do not die within 30 days.

Notes:

2024

245) **Death Date Within 30 days Post Discharge (mm/dd/yyyy)**

Intent: To identify patients who died intraoperatively or within 30 days after hospital discharge.

Definition: Note the date of death if a patient dies intraoperative or within 30 days after hospital discharge.

Variable Options: Date in mm/dd/yyyy format

Include: All patients who die within 30 days after hospital discharge.

Exclude: Patients who do not die within 30 days of hospital discharge.

Notes:

Discharge: PCP Clinic Follow Up Date

2024 NEW Variable

246) **PCP Clinic Follow Up Date (mm/dd/yyyy)**

Intent: To identify if a PCP saw the patient for follow up in clinic within 30 days following hospital discharge.

Definition: Capture the date of PCP clinic follow up within 30 days of hospital discharge.

Variable Options: Date in mm/dd/yyyy format

Include: All

Exclude: N/A

Notes:

- If the patient does not have a PCP clinic follow-up within 30 days of discharge, then leave this blank.
- PCP clinic visits conducted virtually or by telephone may count as a clinic visit.
- PCP clinic visits with a resident or advanced practice provider (NP/PA) may count as a clinic visit.
- Telephone calls to the PCP clinic nurse that are not scheduled clinic visits do not count.