

2025 NHSN COLO Procedure/SSI Medical Record Abstraction Tool (MRAT) Instructions

V1.0 Updated January 2026 – for
validating 2025 data



CDC VI | 3/5/26

Section 1. Patient and Medical Record Identifiers

Complete patient identifiers and demographics. Select all NHSN operative procedure categories performed during index COLO procedure. Document ICD-10-PCS and/or CPT Codes for index COLO procedure.

Section 2. NHSN Operative Procedure Criteria

COLO procedure is included in the ICD-10-PCS and/or CPT NHSN operative procedure code mapping and is performed in an OR/equivalent where at least one (1) incision was made through skin/mucous membrane (including laparoscopic approach), or entry is through an existing incision (such as an incision that was left open during a prior operative procedure).

- NHSN Inpatient Operative Procedure: An NHSN operative procedure performed on a patient whose date of admission to the healthcare facility and the date of discharge are different calendar days
- “OR equivalent” may include C-section room, interventional radiology room, or cardiac catheterization lab meeting FGI or AIA criteria. (See NHSN PSC Manual SSI Chapter 9 for details.)

Section 3. Document COLO Procedure Risk-Adjustment Variables in Medical Record at Time of Procedure for Comparison to NHSN

- ASA Physical Status (ASA Score):
 - » Assessment by the anesthesiologist of the patient’s preoperative physical condition using the American Society of Anesthesiologists’ (ASA) Physical Status Classification System. Patients are assigned an ASA score of 1-6 at time of surgery. Patients with an ASA score of 1-5 are eligible for NHSN SSI surveillance. Patients that are assigned an ASA score of 6 (a declared brain-dead patient whose organs are being removed for donor purposes) are **not** eligible for NHSN SSI surveillance.
- General Anesthesia:
 - » The administration of drugs or gases that enter the general circulation and affect the central nervous system to render the patient pain free, amnesic, unconscious, and often paralyzed with relaxed muscles. This does not include conscious sedation.
- Scope:
 - » An instrument used to reach and visualize the site of the operative procedure. In the context of an NHSN operative procedure, use of a scope involves creation of several small incisions to perform or assist in the performance of an operation rather than use of a traditional larger incision (specifically, open approach).
 - » If a procedure is coded as **open** and **scope**, then the procedure should be reported to NHSN as **Scope = NO**. The open designation is considered a higher risk procedure. For information related to how ICD-10-PCS and CPT codes can be helpful in answering the scope question see NHSN PSC Manual SSI Chapter 9 for details.
- Emergency:

- » A procedure that is documented per the facility's protocol to be an Emergency or Urgent procedure.
- Trauma:
 - » Blunt or penetrating injury occurring prior to the start of the procedure. Note: Complex trauma cases may require multiple trips to the OR during the same admission to repair the initial trauma. In such cases, trauma = Yes.
- Age:
 - » Patient's age, in years, at time of COLO procedure
- Height:
 - » The patient's height documented in the medical record in feet/inches or meters.
- Weight:
 - » The patient's most recent weight documented in the medical record in pounds (lbs) or kilograms (kg) prior to the procedure.
- Wound Class:
 - » Wound Class is an assessment of the degree of contamination of a surgical wound at the time of the surgical procedure.
 - » Wound class should be assigned by a person involved in the surgical procedure (for example, surgeon, circulating nurse, etc.) based on the wound class schema that is adopted within each organization.
 - » For COLO, if Wound Class=C the procedure is not eligible for SSI surveillance
 - » The three wound classes available for COLO include:
 - **Clean-Contaminated (CC), Contaminated (CO), or Dirty or Infected (D)**
- Duration of operative procedure:
 - » The interval in hours and minutes between the Procedure/Surgery Start Time and the Procedure/Surgery Finish Time, as defined by the Association of Anesthesia Clinical Directors (AACD).
 - Procedure/Surgery start time (PST) is when the procedure is begun (for example, incision for a surgical procedure).
 - Procedure/Surgery finish time (PF) is when all instruments and sponge counts are completed and verified, post-op x-rays in OR are done, all dressings and drains are secured, and physicians/surgeons have completed all procedure-related activities on the patient.
 - » If patient goes to OR again and another procedure is performed through the same incision or into the same surgical space within 24 hours of the original procedure finish time and during the same admission, count as only one procedure (report one Denominator for Procedure form for the original procedure) combining the durations for both procedures and using the higher of the wound class and ASA scores. Assign the surgical wound closure technique that applies when the patient leaves the OR from the first operative procedure (see NHSN PSC Manual SSI Chapter 9 for details – Denominator Reporting Instruction #7).
- Total number of beds:

- » Record the number of beds set up and staffed for the last full calendar year for the bed types listed below. If any bed type is new or has not been available long enough to have a full calendar years' worth of data record the number of beds used for the majority (six months or greater) of the survey year. For definitions of CDC location types, see CDC Locations and Descriptions chapter.
 - Enter the number of beds in locations designated as intensive care units (ICUs) in the facility. This includes all adult, pediatric, and neonatal levels II/III and III.
 - Enter the number of beds set up and staffed in all other inpatient locations used for overnight stay patients in this hospital. This includes all inpatient beds in the facility, and not just those that are subject to NHSN surveillance.
- Facility teaching hospital affiliation:
 - » Is your hospital a teaching hospital for physicians and/or physicians in training?
 - If a teaching hospital, select the type from the options listed: (Note: There is no minimum requirement for the number of students in training to meet these definitions.)
 - Major: Facility trains medical students and/or nursing students, and post-graduate residents.
 - Graduate: Facility trains only post-graduate medical (MD/DO only) residents/fellows
 - Undergraduate: Facility trains current (undergraduate) medical students and/or nursing students.
 - Select the highest level that your facility meets
- Sex
 - » Select Female or Male
- Oncology hospital
 - » Select 'Yes' if oncology hospital
 - » Select 'No' if not oncology hospital
 - » Based on NHSN enrollment as HOSP-ONC

Section 4. Document Subsequent Surgery / Invasive Procedure During COLO SSI Surveillance Period

Was a subsequent surgery performed through the same incision or into the same surgical space beyond 24 hours after the original procedure finish time but within the 30-day SSI surveillance period following the original procedure, OR was the surgical site otherwise entered or manipulated invasively (see NHSN PSC Manual SSI Chapter 9 for details – SSI Event Reporting Instruction #10) at any time during the 30-day SSI surveillance period [Date of procedure=Day 1]

Table 1. SSI Definition Criteria

Using the NHSN SSI Definitions criteria below, determine which depth of SSI criteria were met, if any, and the date of SSI event. For an SSI, the DOE is the date when the first element used to meet the SSI infection criterion occurs for the first time during the SSI surveillance period. The date of event must fall within the SSI surveillance period to meet SSI criteria.

Note: Available criteria for SSI may progress (for example, superficial incisional to deep incisional); review the entire SSI event and record the DEEPEST level of SSI during the SSI surveillance period. Enter the outcome in Section 5a and complete the rest of the section as appropriate.

NHSN SSI Definitions: Use checklist to establish elements met:

Superficial Incisional COLO SSI	Deep incisional COLO SSI	Organ/Space COLO SSI
☐ Date of event occurs within 30 days following the COLO procedure (where day 1 = the procedure date)	☐ Date of event occurs within 30 days following the COLO procedure (where day 1 = the procedure date)	☐ Date of event occurs within 30 days following the COLO procedure (where day 1 = the procedure date)
AND	AND	AND
☐ Involves only skin and/or subcutaneous tissue of the incision	☐ Involves deep soft tissues (for example, fascia and/or muscle layers) of the incision	☐ Involves any part of the body deeper than the fascial/muscle layers that is opened or manipulated during the operative procedure
AND	AND	AND
☐ At least one of the boxes:	☐ At least one of the boxes:	☐ At least one of the boxes:
purulent drainage from superficial incision	purulent drainage from deep incision	purulent drainage from a drain placed into the organ/space (for example, closed suction drainage system, open drain, T-tube drain, CT guided drainage)
organism(s) identified from an aseptically-obtained specimen from the superficial incision or		organism(s) are identified from fluid or tissue in the organ/space by a culture or non-culture based

subcutaneous tissue by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment		microbiologic testing method which is performed for purposes of clinical diagnosis or treatment
- surgeon, physician* or physician designee deliberately opened superficial incision AND - culture or non-culture-based testing is <u>not</u> performed AND - patient has at least one of the following signs or symptoms: » localized pain or tenderness » localized swelling » erythema » heat	- a deep incision that is deliberately opened, or aspirated by a surgeon, physician* or physician designee or spontaneously dehisces. AND - organism(s) identified from the deep soft tissues of the incision by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment OR - culture or non-culture based microbiologic testing method is <u>not</u> performed. A culture or non-culture-based test from the deep soft tissues of the incision that has a negative finding does not meet this criterion. AND - patient has at least one of the following: » fever (>38.0°C) » localized pain or tenderness	
diagnosis of superficial incisional SSI by a physician* or physician designee	- abscess or other evidence of infection involving the deep incision detected on (at least one of) » Gross anatomical exam*** » Histopathologic examination » Imaging test	- abscess or other evidence of infection involving the organ/space detected on (at least one of) » Gross anatomical exam*** » Histopathologic examination » Imaging test evidence definitive or equivocal for infection
		AND
		☐ Meets at least one criterion for a specific organ/space infection site; specifically for COLO: IAB, GIT, USI, or OREP.

		Document using NHSN Checklist.
Note: *Excludes any known multi-part/multi-phase procedures that occur over more than one operative episode [during the same admission] that is documented in the medical record by a surgeon prior to first phase of the procedure. **The term physician for the purpose of application of the NHSN SSI criteria may be interpreted to mean a surgeon, infectious disease physician, emergency physician, other physician on the case, or physician's designee (nurse practitioner or physician's assistant). *** Definition of terms are provided in Key Terms (NHSN General Key Terms Chapter 16) and Frequently Asked Questions, which can be accessed at https://www.cdc.gov/nhsn/pdfs/pscmanual/16psckeyterms_current.pdf and https://www.cdc.gov/nhsn/faqs/faq-index.html		
Reporting Notes:		
Do not report stitch abscess, localized stab wound, pin site infection, or cellulitis alone (see NHSN PSC Manual SSI Chapter 9 for full details, Table 1).	The type of SSI (SI, DI, or O/S) reported and the date of event assigned must reflect the deepest tissue level where SSI criteria are met during the SSI surveillance period.	If a patient has evidence of an infection during the index operative procedure, subsequent infection meeting NHSN SSI criteria is considered an SSI for NHSN reporting purposes. For guidance on PATOS determination, see PATOS reporting instruction below [SSI Event Reporting Instruction #3].

Section 5. Outcome of 2025 COLO SSI audit

5(A): Select **Outcome**. If (b) is selected, define depth, date of SSI event, and determine which point during the surveillance period the SSI was identified.

5(B): **Infection present at time of surgery (PATOS)**: PATOS is a YES/NO field on the SSI event form. PATOS denotes that there is evidence of infection visualized (seen) during the surgical procedure to which the subsequent SSI is attributed. The evidence of infection must be noted intraoperatively and documented within the narrative portion of the operative note or report of surgery to be eligible for PATOS (pre/post op diagnoses, 'indication for surgery', and other headings routinely included in an operative note are not eligible with answering PATOS).

Section 6. Attribution of SSI to the Procedure

Note to validator: Each NHSN operative procedure sets a surveillance period. If a patient returns to the OR for an NHSN operative procedure and the same surgical site is entered, the surveillance period for the prior NHSN operative procedure ends and a new SSI surveillance period begins.

If within the surveillance period following an NHSN operative procedure a non-NHSN operative procedure is performed, and all three tissue levels are entered, the SSI surveillance period for the NHSN operative procedure ends. If all three tissue levels are not entered, the SSI surveillance period continues for the tissue levels not entered during the non-NHSN operative procedure.

For details on SSI following invasive manipulation or accession of the operative site, refer to NHSN PSC Manual SSI Event Chapter 9 (SSI Event Reporting Instruction #10).

In the context of multiple concurrent NHSN Operative Procedures through the same incision/laparoscopic sites, the SSI is attributed to the procedure that is thought to be associated with the infection and if procedure attribution is not clear, as is often the case when the infection is an incisional SSI, then NHSN guidance is to refer to SSI Event Reporting Instruction #9 and use the NHSN Principal Operative Procedure Category Selection List (Table 4*) to select the operative procedure to which the SSI should be attributed. For organ/space SSIs, the specific location of infection should be examined for attribution. If the facility has documentation to support SSI attribution should go to a specific procedure (for example, an abscess is completely localized to the site of the liver procedure following COLO and BILI), then the facility can make the determination to assign the SSI event to the procedure they feel indicated. Otherwise, if the documentation is not clear, then NHSN guidance is to refer SSI Event Reporting Instruction #9. (*See Table 4 below)

*NHSN Principal Operative Procedure Category Selection List, from NHSN SSI Chapter 9, Table 4.		
Priority	Category	Abdominal Operative Procedures
1	LTP	Liver transplant
2	BILI	Bile duct, liver, or pancreatic surgery
3	SB	Small bowel surgery
4	REC	Rectal surgery
5	KTP	Kidney transplant

- Symptoms were not documented or recognized in the procedure surveillance period
- Organ/space site-specific criteria were not met or applied inappropriately
- SSI was attributed to the wrong procedure
- Incorrect tissue level was assigned to the SSI event

6	GAST	Gastric surgery
7	AAA	Abdominal aortic aneurysm repair
8	HYST	Abdominal hysterectomy
9	CSEC	Cesarean section
10	XLAP	Laparotomy
11	APPY	Appendix surgery
12	HER	Herniorrhaphy
13	NEPH	Kidney surgery
14	VHYS	Vaginal hysterectomy
15	SPLE	Spleen surgery
16	CHOL	Gall bladder surgery
17	OVRY	Ovarian surgery

Section 7. Classify the outcome results as Correctly Classified, Over-reported HAI or Underreported HAI

Select the reason from the table the SSI was classified incorrectly. Provide details as necessary for clarification.

Examples of reasons for misreporting:

- Symptoms were not documented or recognized in the procedure surveillance period
- Organ/space site-specific criteria were not met or applied inappropriately
- SSI was attributed to the wrong procedure
- Incorrect tissue level was assigned to the SSI event