2018 HYST Procedure/SSI Medical Record Abstraction Tool Instructions

1. Patient and Medical Record Identifiers

Complete patient identifiers and demographics. Describe in words all procedures performed during index HYST procedure (e.g., hysterectomy, bilateral salpingoophorectomy (BSO), Cesarean section, appendectomy). Document ICD-10-PCS or CPT Codes for index HYST procedure.

2. NHSN Operative Procedure Criteria

HYST procedure performed on NHSN inpatient during trip to hospital inpatient O.R./equivalent where at least one (1) incision was made through skin/mucous membrane (including laparoscopic approach), or during reoperation via an incision that was left open during a prior procedure.

Notes:

- ***NHSN Inpatient Operative Procedure****: Procedure performed on a patient whose date of admission to the healthcare facility and the date of discharge are different calendar days and the procedure takes place in an inpatient O.R./equivalent. "O.R. equivalent" may include C-section room, interventional radiology room, or cardiac catheterization lab meeting FGI or AIA criteria. (See NHSN PS Manual SSI Chapter 9 for details.)*
- *Incisional closure is NO longer an element of the NHSN Operative Procedure definition, but is addressed under risk-adjustment. Regardless of wound class at the time of procedure or closure method (primary vs non-primary), all inpatient NHSN HYST procedures should be reported to the NHSN denominator and all infections meeting HYST SSI criteria during the surveillance period should be reported.*
- *Do not report procedure if ASA score=6.*

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

- Type of Closure:
  - *Primary closure is defined as closure of the skin level during the original surgery, regardless of the presence of wires, wicks, drains, or other devices or objects extruding through the incision. This category includes surgeries where the skin is closed by some means. Thus, if any portion of the incision is closed at the skin level, by any manner, a designation of primary closure should be assigned to the surgery.*
  - *If a procedure has multiple incision/laparoscopic trocar sites and any of the incisions are closed primarily then the procedure technique is recorded as primary closed. (See NHSN PS Manual SSI Chapter 9 for details.)*
- Diabetes:
  - *The NHSN SSI surveillance definition of diabetes indicates that the patient has a diagnosis of diabetes requiring management with insulin or a non-insulin anti-diabetic agent. This includes patients with "insulin resistance" who are on management with anti-diabetic agents. This also includes patients with a diagnosis of diabetes who are noncompliant with their diabetes medications. The ICD-10-CM diagnosis codes that reflect the diagnosis of diabetes are also acceptable for use to answer YES to the diabetes field question on the denominator for procedure entry if they are documented during the admission where the procedure is performed. These codes are found on the NHSN website in the SSI section under "Supporting Materials". The NHSN definition excludes patients with no diagnosis of diabetes. The definition also excludes patients who receive insulin for perioperative control of hyperglycemia but have no diagnosis of diabetes.*
  - *Gestational diabetes is a type of diabetes.*
- ASA Score (American Society of Anesthesiologists' Classification of Physical Status) Patient is assigned one of the following:
  1. *A normally healthy patient*
  2. *A patient with mild systemic disease*
  3. *A patient with severe systemic disease*
  4. *A patient with severe systemic disease that is a constant threat to life*
  5. *A moribund patient who is not expected to survive without the operation*
  6. *Declared brain-dead. Do NOT report procedures with this physical status*

- 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 visualize the interior of a body cavity or organ. 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). Robotic assistance is considered equivalent to use of a scope for NHSN SSI surveillance.*
- Emergency:
  - *A procedure that is documented per the facilities 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*.
- Gender:
  - *Select the gender that the facility has assigned to the patient on admission.*
- Weight:
  - *The patient's most recent weight documented in the medical record in pounds (lbs) or kilograms (kg) prior to otherwise closest to the procedure.*
- Wound Class:
  - *Wound class is an assessment of the degree of contamination of a surgical wound at the time of the operation.*
  - ***Clean (C):** An uninfected operative wound in which no inflammation is encountered and the respiratory, alimentary, genital, or uninfected urinary tracts are not entered.*
  - ***Clean-Contaminated (CC):** Operative wounds in which the respiratory, alimentary, genital, or urinary tracts are entered under controlled conditions and without unusual contamination.*
  - ***Contaminated (CO):** Open, fresh, accidental wounds. In addition, operations with major breaks in sterile technique (for example, open cardiac massage) or gross spillage from the gastrointestinal tract,*
  - ***Dirty or Infected (D):** Includes old traumatic wounds with retained devitalized tissue and those that involve existing clinical infection or perforated viscera.*
- *Procedure Duration:*
  - *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 <u>within 24 hours of the original procedure finish time</u> and during the same admission, count as only one procedure combining the durations for both procedures and using the higher of the wound class and ASA scores. (See NHSN PS Manual SSI Chapter 9 for details).*

***4*. Document Subsequent Surgery / Invasive Procedure During HYST SSI Surveillance Period.**

Was a subsequent surgery performed through the primary incision <u>beyond 24 hours after the original procedure finish time</u> but within the 30-day surveillance period following the original procedure, OR was the surgical organ/space otherwise entered or manipulated invasively (see NHSN PS Manual SSI Chapter 9 for details) at any time during the 30-day surveillance period [Date of procedure=Day 1]?

5. Additional / Post-Discharge Infection Surveillance

Was there any documentation of surgical infection within the surveillance period, including while hospitalized or post-discharge, e.g., communication from patient or other hospital, visits to the ED or clinic? (***NOTE:** Reporting an SSI to the surgical facility IP is required when SSI is detected at a different facility*).

6. Document SSI Definition Criteria

- *Using the NHSN SSI Definitions criteria (see following), document which depth of infection criteria were met and the date of infection.*
  Date of event (DOE)/infection date: For an SSI, the date of event 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 (e.g., superficial to deep); review the entire infection event and record the **DEEPEST** level of SSI during the surveillance period. Use the open space in 5 above and the checklist that follows to document information for decision-making. Enter outcome of audit in part 7A, and for SSIs, continue to part 7B for attribution assignment.*

NHSN SSI Definitions: Use checklist to establish elements met:

Superficial Incisional HYST SSI	**Deep incisional HYST SSI**	**Organ/Space HYST SSI**
☐ Date of event for infection occurs within 30 days after the COLO procedure (where day 1 = the procedure date)	☐ Date of event for infection occurs within 30 days after the COLO procedure (where day 1 = the procedure date)	☐ Date of event for infection occurs within 30 days after 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 (e.g., fascia and/or muscle layers) of the incision	☐ Involves any body part opened or manipulated during surgery except skin incision, fascia or muscle.
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 (e.g., closed suction drainage system, open drain, T-tube drain, CT guided drainage)
○ organisms identified from an aseptically-obtained specimen from the superficial incision or subcutaneous tissue by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment		○ organisms are identified from an aseptically-obtained fluid or tissue in the organ/space by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment
○ attending physician* 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: o pain or tenderness o localized swelling o erythema o heat	○ a deep incision that spontaneously dehisces, or is deliberately opened or aspirated by attending physician* **AND** ○ organism is identified 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** **AND** ○ patient has at least one of the following: o fever (>38.0°C) o localized pain or tenderness	

○ diagnosis of superficial incisional SSI by attending physician*	○ abscess or other evidence of infection involving the deep incision that is found on (at least one of) o Gross anatomical exam*** o Histopathologic examination o Imaging test	○ Abscess or other evidence of infection involving the organ/space that is found on (at least one of) o Gross anatomical exam*** o Histopathologic examination o Imaging test evidence suggestive of infection
		AND ☐ Meets at least one criterion for a specific organ/space infection site; particularly for HYST: IAB, OREP, or VCUF. **Document using NHSN Checklist.**

**Note: The term attending physician for the purposes of application of the NHSN SSI criteria may be interpreted to mean the surgeon(s), infectious disease, other physician on the case, emergency physician or physician's designee (nurse practitioner or physician's assistant).*
*** A culture or non-culture based test that has a **negative** finding does not meet this criterion.*
**** 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/faqs/faq-index.html*

Reporting Notes:

➢ *Do not report stitch abscess, localized stab wound, pin site infection, or cellulitis alone (see NHSN PS Manual SSI Chapter 9 for full details).*	➢ *The depth of SSI (SI, DI, or O/S) reported should reflect the deepest tissue layer involved during the surveillance window.*	➢ *If a patient has O/S infection during the primary operative procedure, subsequent continuation meeting NHSN SSI criteria is considered to be an O/S SSI.*

7. Outcome of 2018 HYST SSI audit

7(A): Select (a), (b), or (c); if (b) is selected, define depth and date of SSI event.

7(B): **Infection present at time of surgery (PATOS):** *PATOS denotes that there is evidence of an infection or abscess at the start of or during the index surgical procedure (in other words, it is present preoperatively). The patient does not have to meet the NHSN definition of an SSI at the time of the primary procedure but there must be notation that there is evidence of an infection or abscess present at the time of surgery.*

8. Attribution of SSI to the Procedure

Note to validator: *In the context of serial invasive manipulations (including surgery) affecting the same operative site, an SSI is attributed to the most recent intervention. In the context of multiple concurrent NHSN Operative Procedures through the same incision, superficial and deep incisional infections are attributable to the procedure highest on the surgical hierarchy*, because there is no way to distinguish which of the NHSN Operative Procedures led to the infection. For organ/space SSIs, the specific location of infection should be examined for attribution: e.g., in the event of concurrent COLO and HYST, a vaginal cuff infection should be attributed to the HYST; e.g., in the event of concurrent HYST and SPLE, abscess of the bed of the spleen should be attributed to the SPLE; e.g., in the event of concurrent HYST and COLO, deep pelvic abscess would be attributed to the HYST, whereas the surgical hierarchy* would assign feculent peritonitis to the COLO. (*See surgical hierarchy below)*

*NHSN Principal Operative Procedure Category Selection Lists, from NHSN SSI Chapter 9, Table 4.		
Priority	**Code**	**Abdominal Operations**
1	LTP	Liver transplant
2	COLO	Colon surgery
3	BILI	Bile duct, liver, or pancreatic surgery
4	SB	Small bowel surgery
5	REC	Rectal surgery
6	KTP	Kidney transplant
7	GAST	Gastric surgery
8	AAA	Abdominal aortic aneurysm repair
9	HYST	Abdominal hysterectomy
10	CSEC	Cesarean section
11	XLAP	Exploratory laparotomy
12	APPY	Appendix surgery
13	HER	Herniorrhaphy
14	NEPH	Kidney surgery
15	VHYS	Vaginal hysterectomy
16	SPLE	Spleen surgery
17	CHOL	Gall bladder surgery
18	OVRY	Ovarian surgery

9. **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.
Site-specific criteria was not met or applied inappropriately.
SSI was attributed to the wrong procedure.
Post-procedure surveillance did not include review of readmission diagnosis.