



2021 SSI Protocol Updates and Refresher

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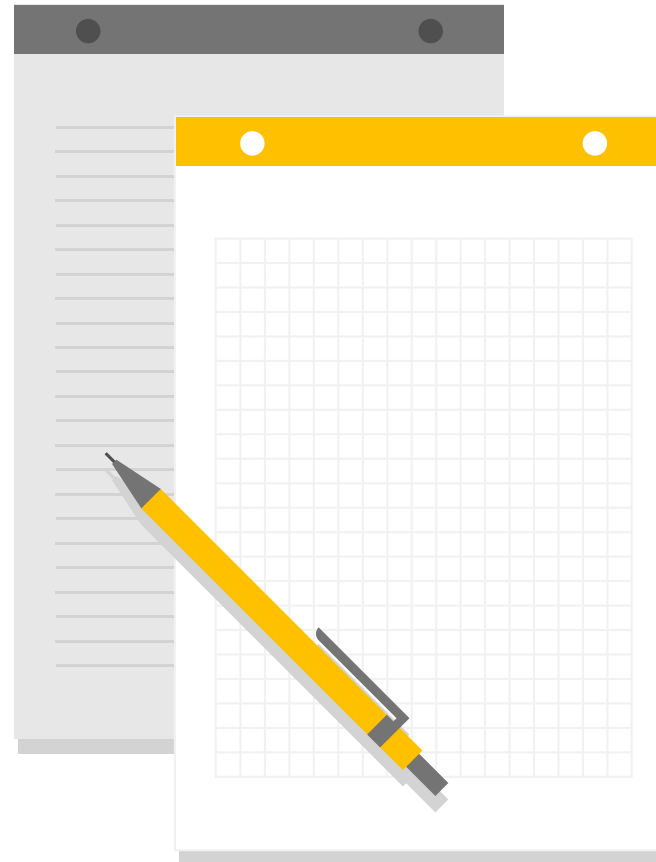
National Healthcare Safety Network [NHSN]

NCEZID, Division of Healthcare Quality Promotion/Surveillance Branch

Centers for Disease Control and Prevention

Overview

- 2021 SSI Protocol Updates
- Refresher – SSI Protocol



2021 SSI Protocol Updates

2021 SSI Protocol Update Addition – Page 9-3



January 2021

Procedure-associated Module
SSI Events

Surveillance Methods:

SSI monitoring requires active, patient-based, prospective surveillance. Concurrent and post-discharge surveillance methods should be used to detect SSIs following inpatient operative procedures and post-discharge surveillance for outpatient operative procedures.

For example, these methods include:

- Review of medical records or surgery clinic patient records
 - Admission, readmission, ED, and OR logs
 - Patient charts for signs and symptoms of SSI
 - Acceptable documentation includes patient-reported signs or symptoms within the SSI surveillance period, documented in the medical record by a healthcare professional.
 - Lab, imaging, other diagnostic test reports
 - Clinician/healthcare professional notes
 - ICD-10-CM Infection Diagnosis Codes to prompt further review
- Visit the ICU and wards – talk to primary care staff
- Surgeon surveys by mail or telephone
- Patient surveys by mail or telephone (though patients may have a difficult time assessing their infections).

Any combination of these methods (or other methods identified by the facility) with the capacity to identify all SSIs is acceptable for use; however, NHSN criteria for SSI must be used. To minimize Infection Preventionists' (IPs) workload of collecting denominator data, operating room data may be downloaded.

(See file specifications at:

<https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/ImportingProcedureData.pdf>).

2021 SSI Protocol Update Clarification – Page 9-4

Operative Procedure Codes Section:

January 2021

Procedure-associated Module
SSI Events

- *Current Procedural Terminology (CPT)*, as defined by the American Medical Association (AMA).

The mapping for [ICD-10-PCS](#) and [CPT](#) NHSN operative procedures is found in the “[Supporting Materials](#)” section of the SSI Protocol on the NHSN website. The mapping documents include a general definition for each NHSN operative procedure category as well as a description for each individual operative procedure code. Entering the operative procedure code into the NHSN application remains optional.

Note: The former NHSN Category “OTH - other” is not mapped to ICD-10-PCS and CPT NHSN operative procedure codes. For in-plan reporting purposes, an infection associated with a procedure that is not included in one of the NHSN operative procedure categories is not considered an NHSN SSI, although the infection may be investigated as a HAI.

2021 SSI Protocol Update Clarification – Page 9-25

Denominator Reporting Instruction #9:



9. More than one operative procedure through same incision/surgical space within 24 hours:

When a patient has more than one operative procedure via the same incision or into the same surgical space and the second procedure start time is within 24 hours of the first procedure finish time, report only one Denominator for Procedure form for the original procedure, combining the durations for both procedures based on the procedure start times and finish times for both procedures. For example, a patient has a CBGB lasting 4 hours. He returns to the OR six hours later for another operative procedure via the same incision (for example, CARD). The second operation has duration of 1.5 hours. Record the operative procedure as one CBGB and the duration of operation as 5 hour 30 minutes. If the wound class has changed, report the higher wound class. If the ASA class has changed, report the higher ASA class. Do not report the CARD procedure in your denominator data.

Note: When the patient returns to the OR within 24 hours of the end of the first procedure assign the surgical wound closure technique that applies when the patient leaves the OR from the first operative procedure.

Refresher – SSI Protocol

Refresher – SSI Surveillance Period



January 2021 Procedure-associated Module
SSI Events

SSI Event Details Page 9-5

The Infection Window Period (IWP), Present on Admission (POA), Healthcare-Associated Infection (HAI), and Repeat Infection Timeframe (RIT) definitions do not apply to the SSI protocol. For additional POA and PATOS details, see SSI Event Reporting Instructions #2 and #3.

- A visit to the operating room [OR] for an NHSN operative procedure begins a 30-day or 90-day SSI surveillance period.
- A return trip to the OR via the same surgical site ends the surveillance period for the prior NHSN operative procedure and begins a new SSI surveillance period if an NHSN operative procedure is performed.
- Only **one** SSI event can be cited per procedure*
 - SSI event is reported at the deepest tissue level where SSI criteria are met within the surveillance period
- A patient with multiple trips to the OR for NHSN operative procedures has multiple opportunities for SSI citation [may have multiple SSIs].

*Only if the procedure has a primary and secondary incision site [such as CBGB], two SSI events can be attributed to the procedure [SIS & DIS available].

Refresher – PATOS [SSI Event Reporting Instruction #3]

- Required field found on SSI Event form
- PATOS determinations come directly from the narrative portion of the intra-operative report.
 - The 'narrative' of the intra-operative report should be the pieces of information dictated by the surgeon which reflect what is 'seen' and 'done' during the procedure.
 - Diagnosis, 'indication for surgery' and/or other headings routinely included in the operative report are **not allowed** for use with PATOS.

Form Approved
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Surgical Site Infection (SSI)

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*required for saving **required for completion

Facility ID:	Event #:
*Patient ID:	Social Security #:
Secondary ID:	Medicare #:
Patient Name, Last:	First: Middle:
*Gender: F M Other	*Date of Birth:
Ethnicity (Specify):	Race (Specify):
*Event Type: SSI	*Date of Event:
*NHSN Procedure Code:	ICD-10-PCS or CPT Procedure Code:
*Date of Procedure:	*Outpatient Procedure: Yes No
*Infection present at the time of surgery (PATOS): <input type="checkbox"/> Yes <input type="checkbox"/> No	
*Specify Criteria Used (check all that apply):	

PATOS Question

Pathogen & location are in-plan for Infection Surveillance in the MDRO/CDI Module

Pathogen & location are not in-plan for Infection Surveillance in the MDRO/CDI Module

Location:

Event Details

*Specific Event:

Superficial Incisional Primary (SIP) Deep Incisional Primary (DIP)

Superficial Incisional Secondary (SIS) Deep Incisional Secondary (DIS)

Organ/Space (specify site): _____

Refresher – PATOS [SSI Event Reporting Instruction #3]

- Evidence of infection [such as abscess, purulence] documented in the narrative of the intra-operative report must be at the same tissue level of subsequent SSI in order to state PATOS = Yes.
- Imaging findings, laboratory findings, wound classification assignment and other information outside of the narrative are **not eligible** for PATOS.
- PATOS SSI events are still SSI events and must be reported to NHSN.
- SSI Training: PATOS Quick Learn titled “Surgical Site Infection (SSI) Event PATOS – Infection Present at Time of Surgery”

Refresher – ‘With No Other Recognized Cause’ used in site-specific criteria

- Physician documentation that specifically states there is another recognized cause for the sign/symptom [the sign/symptom is due to something other than infection]
 - The local facility must make this determination based on the documentation available in the medical record.



Refresher – Gross Anatomical Exam



- Evidence of infection elicited or visualized on physical examination or observed during an invasive procedure; what is seen and documented, for instance:
 - Intraabdominal abscess visualized during an invasive procedure [such as during surgery]
 - Visualization of pus or purulent drainage from the surgical site [including from a drain into the surgical site]

Reminder: Imaging test findings cannot be applied as gross anatomic evidence of infection.

Refresher – Gross Anatomical Exam

- SSI only: Abdominal pain or tenderness **post Cesarean section (CSEC) or hysterectomy (HYST or VHYS)** is sufficient gross anatomic evidence of infection without an invasive procedure to meet general Organ/Space SSI criterion “c” when **OREP** or **EMET** is also met.
 - Allowing the documentation of abdominal pain or tenderness as gross anatomic evidence of infection to meet general Organ/Space SSI criterion “c”, enables the user to report an SSI-OREP or SSI-EMET.

Refresher – Operative Procedure Codes

- Broad use of procedure codes in healthcare provides NHSN with a tool to standardize reporting of SSIs within each category.
- Procedure codes are required for identifying the correct NHSN operative procedure category but **not required** to be entered into the application.
 - In the future, NHSN may move toward **requiring** procedure codes
- Possible benefits to a facility when procedure codes are entered into the application:
 - Identify the specific procedures/procedure codes associated with increased SSI risk
 - Assist with tailoring prevention strategies to specific procedures
 - Allow precise feedback to surgeons based on specific procedures

Refresher – Accuracy in reported data



- Please ensure data that are submitted to NHSN is accurate
 - Many of the data elements collected are used in the risk adjustment of the SIR denominator and impacts your SIR
- NHSN conducts regular assessments of the completeness, accuracy and timely submission of the data received in NHSN
 - NHSN conducts data quality outreach to facilities based on results from regular data quality assessments
 - Facilities are encouraged to correct their data per the details provided in the data quality outreach email

Refresher – Requesting an SSI Case Review



- Please provide NHSN your thoughts regarding the case you are requesting for review.
 - Clearly outline your question(s).
 - Include the elements of the criteria for which you are having difficulty making a determination.
- Our hope is that the case review process will be educational for you for making future determinations. [Please refer to **SSI FAQ Q1** that outlines elements needed].

Refresher – Resources available for SSI

- Protocols – Chapter 9 & 17
- FAQs
- Quick Learns
- Annual Training
- Self-Paced Online Trainings
- Table of Instructions for Forms



National Healthcare Safety Network (NHSN)

CDC > NHSN Home > Patient Safety Component

Surgical Site Infection (SSI) Events

Protocols

- [Chapter 9: Surgical Site Infection \(SSI\) Event – January 2021](#) [PDF – 1 MB]
- [2021 Summary of Updates](#) [PDF – 200 KB]

Supporting Chapters

Data Collection Forms & Instructions

All Data Collection Forms are Print-only

SSI Event

- [Surgical Site Infection \(SSI\) form – January 2021 \(57.120\)](#) [PDF – 180 KB]
 - [Customizable form](#) [DOCX – 80 KB]
 - [Table of Instructions](#) [PDF – 150 KB]

Denominator Forms

- [Denominator for Procedure – January 2021 \(57.121\)](#) [PDF – 100 KB]
 - [Customizable form](#) [DOCX – 60 KB]
 - [Table of Instructions](#) [PDF – 200 KB]

Custom Event Form

- [HAI Custom Event form – January 2021 \(57.115\)](#) [PDF – 180 KB]
 - [Customizable form](#) [DOCX – 80 KB]

Not to be used for CLABSI, CAUTI, SSI, PedVAE, VAE, pediatric VAP, or LabID events.

To be used in conjunction with [Chapter 17: CDC/NHSN Surveillance Definitions for Specific Types of Infections](#) [PDF – 2 MB] in the NHSN Patient Safety Manual.

Miscellaneous

- [CDA](#)
- [View All FAQs](#)

Supporting Materials

- [NHSN Organism List \(All Organisms, Common Commensals, MBI Organisms, and UTI Bacteria\) – January 2021](#) [XLSX – 300 KB]
- [Sample Procedure Import File](#) [XLSX – 25 KB]
- [How to Import Patient Safety Procedure Data, January 2020](#) [PDF – 400 KB]
- [NHSN Patient Safety Component Alerts](#) [PDF – 1 MB]
- [Unusual Susceptibility Profiles Alert – January 2021](#) [PDF – 650 KB]

SSi Training

- [Educational Roadmap](#)
- [CMS Requirements](#)
- [HAI Checklists](#)
- [FAQs](#)
- [SSI Events](#)
- [Surgical Site Procedure Codes](#)
- [Analysis](#)
- [Annual Surveys](#)

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Please submit questions to be answered during the live Q&A session. You can select the title of the presentation and submit your question using the form located on the 2021 NHSN Training webpage.

If you are viewing this training video after March 2021, please submit any questions about the content of the presentation to NHSN@cdc.gov.



Additional NHSN training resources:

<https://www.cdc.gov/nhsn/training/>

Training Questions: NHSNTrain@cdc.gov

Thank you for viewing this 2021 NHSN Training presentation!

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

