

Surgical Site Infection (SSI) Surveillance

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March 13, 2014

Objectives

Upon completion of the program, participant will be able to...

- Identify methodology used for SSI data collection
- Identify SSI surveillance changes for 2014
- Complete a Denominator for Procedure record and SSI form using the 2014 CDC definitions and link SSI to Denominator for Procedure record
- Apply NHSN SSI definitions to patient case studies

All objectives will be reviewed within the context of 2014 NHSN updates.

NHSN Website

www.cdc.gov/nhsn/

NHSN

- About NHSN
- Enroll Here
- Materials for Enrolled Facilities
- Acute Care Hospitals/Facilities
 - Surveillance for Antimicrobial Use and Antimicrobial Resistance
 - Surveillance for CAUTI
 - Surveillance for *C. difficile* and MRSA Infections
 - Surveillance for CLABSI
 - Validation Guidance and Toolkit; Validation for 2012 CLABSI in ICUs
 - Surveillance for CLIP Adherence
 - Surveillance for SSI Events**

NHSN > Materials for Enrolled Facilities > Acute Care Hospitals/Facilities

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Surveillance for Surgical Site Infection (SSI) Events

Resources for NHSN Users Already Enrolled

Training

-  [SSI Training](#)
-  [Introduction to Procedure-associated Module Training](#)

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Protocols

- [Surgical Site Infection \(SSI\) Event January 2014](#)
- [NHSN Overview](#)  [PDF - 96 KB] January, 2014
- [Identifying Healthcare-associated Infections \(HAIs\) in NHSN](#)  [PDF - 149 KB] January 2014
- [Patient Safety Monthly Reporting Plan](#)  [PDF - 55 KB] January 2014

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Data Collection Forms

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- Supporting Materials
- Analysis Resources
- FAQs

New Users - Start Here



Step 1: Enroll into NHSN

Step 2: Set up NHSN

Step 3: Report

Resources for SSI Surveillance

Data Collection Forms

- 57.120 Surgical Site Infection (SSI)
 [PDF - 119 KB] January 2014
 - Table of instructions  [PDF - 82 KB]
 - Customizable form  [DOC - 59 KB]
- 57.121 Denominator for Procedure
 [PDF - 55 KB] January 2014
 - Table of instructions  [PDF - 78 KB]
 - Customizable form  [DOC - 45 KB]
- 57.122 Denominator for Custom Procedure
 [PDF - 42 KB] January 2013
 - Customizable form  [Doc - 91 KB] January 2013
- 57.103 Patient Safety Component—Annual Facility Survey form  [PDF - 75 KB] January 2014
 - Table of instructions  [PDF - 86 KB]
- 57.106 Patient Safety Monthly Reporting Plan form  [PDF - 66 KB] January 2014
 - Table of instructions  [PDF - 86 KB]
 - Customizable form  [DOC - 36 KB]

Resources for SSI Surveillance

CMS Supporting Materials

- [Healthcare Facility HAI Reporting Requirements to CMS via NHSN Current and Proposed Requirements](#)
 [PDF - 119 KB] December 2013
- Reporting Requirements and Deadlines in NHSN per CMS Current Rules  [PDF - 154 KB] December 2013
- Centers for Medicare and Medicaid Services (CMS) Hospital Inpatient Quality Reporting Program 
- CMS' Hospital Compare tool 
- Operational Guidance for Reporting Surgical Site Infection Data to CDC's NHSN for the Purpose of Fulfilling CMS's Hospital Inpatient Quality Reporting (IQR) Program Requirements  [PDF - 177 KB]
August 2012
- How to Report No Procedure or SSI Events for the CMS Inpatient Quality Reporting Program  [PDF - 182 KB]
June 2012
- Helpful Tips for SSI Reporting for the Centers for Medicare and Medicaid Services' Hospital Inpatient Quality Reporting Program (CMS Reporting Program)  [PDF - 294 KB]
September 2012
- Using the "SIR- Complex 30-Day SSI Data for CMS IPPS" Output Option  [PDF - 316 KB]
September 2012

CMS Reporting via NHSN – Current Requirements

Healthcare Facility HAI Reporting Requirements to CMS via NHSN-- Current Requirements

| CMS Reporting Program | HAI Event | Reporting Specifications | Reporting Start Date |
|--|--|---|----------------------|
| Hospital Inpatient Quality Reporting (IQR) Program | CLABSI | Adult, Pediatric, and Neonatal ICUs | January 2011 |
| | CAUTI | Adult and Pediatric ICUs | January 2012 |
| | SSI: COLO | Inpatient COLO Procedures | January 2012 |
| | SSI: HYST | Inpatient HYST Procedures | January 2012 |
| | MRSA Bacteremia LabID Event | FacWideIN | January 2013 |
| | <i>C. difficile</i> LabID Event | FacWideIN | January 2013 |
| | Healthcare Personnel Influenza Vaccination | All Inpatient Healthcare Personnel | January 2013 |
| | Medicare Beneficiary Number | All Medicare Patients Reported into NHSN | July 2014 |
| | CLABSI | Adult & Pediatric Medical, Surgical, & Medical/Surgical Wards | January 2015 |
| | CAUTI | Adult & Pediatric Medical, Surgical, & Medical/Surgical Wards | January 2015 |
| CMS Reporting Program | HAI Event | Reporting Specifications | Reporting Start Date |
| PPS-Exempt Cancer Hospital Quality Reporting (PCHQR) Program | CLABSI | All Bedded Inpatient Locations | January 2013 |
| | CAUTI | All Bedded Inpatient Locations | January 2013 |
| | SSI: COLO | Inpatient COLO Procedures | January 2014 |
| | SSI: HYST | Inpatient HYST Procedures | January 2014 |

Updated December 2013

Supporting Materials

Supporting Materials

- CDC Location Labels and Location Descriptions
 [PDF - 379 KB] January 2014
- NHSN Key Terms  [PDF - 228 KB] January 2014
- CDC/NHSN Surveillance Definitions for Specific Types of Infections  [PDF - 607 KB] January 2014
- ICD9-CM Procedure Code Mapping to NHSN Operative Procedure Categories
 [XLS - 173 KB] January 2013. Mapping of ICD-9-CM Procedure Codes to NHSN Operative Procedure categories.
- ICD-9 Mapping Tool for HPRO and KPRO
 [PDF - 71KB] February 2014
This is an update to the Mapping Tool guidance that was sent out last week for those NHSN users who are following HPRO – hip Arthroplasty and KPRO – Knee Arthroplasty in their monthly surveillance plan. We realized there is a defect in the NHSN system that will cause an error message with the mapping tool we provided. This update addresses how to work around this issue.
- NHSN Organisms Lists (All Organisms, Top Organisms, Common Commensals, MBI Organisms, & Uropathogens)
 [XLS - 223 KB] January 2014
- Current Patient Safety Procedure Data Import File Specifications  [PDF - 215 KB] January 2014
- Current Sample Procedure Import File
 [XLSX - 15 KB] January 2014

ICD-9 Mapping

| | A | B | C | D | E | F | G | H | I | J | K | L |
|-----|-------|-----|-------|-----|-------|-----|-------|------|-------|------|-------|------|
| 69 | 40.60 | NU | 41.60 | NU | 42.60 | NU | 43.60 | NU | 44.60 | NU | 45.60 | NU |
| 70 | 40.61 | OTH | 41.61 | NU | 42.61 | OTH | 43.61 | NU | 44.61 | GAST | 45.61 | SB |
| 71 | 40.62 | OTH | 41.62 | NU | 42.62 | OTH | 43.62 | NU | 44.62 | GAST | 45.62 | SB |
| 72 | 40.63 | OTH | 41.63 | NU | 42.63 | OTH | 43.63 | NU | 44.63 | GAST | 45.63 | SB |
| 73 | 40.64 | OTH | 41.64 | NU | 42.64 | OTH | 43.64 | NU | 44.64 | GAST | 45.64 | NU |
| 74 | 40.65 | NU | 41.65 | NU | 42.65 | OTH | 43.65 | NU | 44.65 | GAST | 45.65 | NU |
| 75 | 40.66 | NU | 41.66 | NU | 42.66 | OTH | 43.66 | NU | 44.66 | OTH | 45.66 | NU |
| 76 | 40.67 | NU | 41.67 | NU | 42.67 | NU | 43.67 | NU | 44.67 | OTH | 45.67 | NU |
| 77 | 40.68 | NU | 41.68 | NU | 42.68 | OTH | 43.68 | NU | 44.68 | GAST | 45.68 | NU |
| 78 | 40.69 | OTH | 41.69 | NU | 42.69 | OTH | 43.69 | NU | 44.69 | GAST | 45.69 | NU |
| 79 | 40.7 | NU | 41.7 | NU | 42.7 | OTH | 43.7 | GAST | 44.7 | NU | 45.7 | INV |
| 80 | 40.70 | NU | 41.70 | NU | 42.70 | NU | 43.70 | NU | 44.70 | NU | 45.70 | NU |
| 81 | 40.71 | NU | 41.71 | NU | 42.71 | NU | 43.71 | NU | 44.71 | NU | 45.71 | COLO |
| 82 | 40.72 | NU | 41.72 | NU | 42.72 | NU | 43.72 | NU | 44.72 | NU | 45.72 | COLO |
| 83 | 40.73 | NU | 41.73 | NU | 42.73 | NU | 43.73 | NU | 44.73 | NU | 45.73 | COLO |
| 84 | 40.74 | NU | 41.74 | NU | 42.74 | NU | 43.74 | NU | 44.74 | NU | 45.74 | COLO |
| 85 | 40.75 | NU | 41.75 | NU | 42.75 | NU | 43.75 | NU | 44.75 | NU | 45.75 | COLO |
| 86 | 40.76 | NU | 41.76 | NU | 42.76 | NU | 43.76 | NU | 44.76 | NU | 45.76 | COLO |
| 87 | 40.77 | NU | 41.77 | NU | 42.77 | NU | 43.77 | NU | 44.77 | NU | 45.77 | NU |
| 88 | 40.78 | NU | 41.78 | NU | 42.78 | NU | 43.78 | NU | 44.78 | NU | 45.78 | NU |
| 89 | 40.79 | NU | 41.79 | NU | 42.79 | NU | 43.79 | NU | 44.79 | NU | 45.79 | COLO |
| 90 | 40.8 | NU | 41.8 | NU | 42.8 | INV | 43.8 | INV | 44.8 | NU | 45.8 | INV |
| 91 | 40.80 | NU | 41.80 | NU | 42.80 | NU | 43.80 | NU | 44.80 | NU | 45.80 | NU |
| 92 | 40.81 | NU | 41.81 | NU | 42.81 | NO | 43.81 | GAST | 44.81 | NU | 45.81 | COLO |
| 93 | 40.82 | NU | 41.82 | NU | 42.82 | OTH | 43.82 | GAST | 44.82 | NU | 45.82 | COLO |
| 94 | 40.83 | NU | 41.83 | NU | 42.83 | OTH | 43.83 | NU | 44.83 | NU | 45.83 | COLO |
| 95 | 40.84 | NU | 41.84 | NU | 42.84 | OTH | 43.84 | NU | 44.84 | NU | 45.84 | NU |
| 96 | 40.85 | NU | 41.85 | NU | 42.85 | OTH | 43.85 | NU | 44.85 | NU | 45.85 | NU |
| 97 | 40.86 | NU | 41.86 | NU | 42.86 | OTH | 43.86 | NU | 44.86 | NU | 45.86 | NU |
| 98 | 40.87 | NU | 41.87 | NU | 42.87 | OTH | 43.87 | NU | 44.87 | NU | 45.87 | NU |
| 99 | 40.88 | NU | 41.88 | NU | 42.88 | NU | 43.88 | NU | 44.88 | NU | 45.88 | NU |
| 100 | 40.89 | NU | 41.89 | NU | 42.89 | OTH | 43.89 | GAST | 44.89 | NU | 45.89 | NU |
| 101 | 40.9 | OTH | 41.9 | INV | 42.9 | INV | 43.9 | INV | 44.9 | INV | 45.9 | INV |

No longer in use

NHSN Procedure

Invalid Code

Not an NSHN operative procedure

Resources for SSI Surveillance

- Interactive Training Courses:

Surveillance for Surgical Site Infection (SSI) Events

Resources for NHSN Users Already Enrolled

Training

-  [SSI Training](#)
-  [Introduction to Procedure-associated Module Training](#)

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Monthly Reporting Plan

- Plans are the roadmap to your data
- Only data included in Plans will be used by CDC in aggregate data analysis (i.e., only “in-Plan” data)
- Plans drive much of the business logic of the NHSN application
- Must have one for every month of the year

Monthly Reporting Plan

View Monthly Reporting Plan

Mandatory fields marked with *

Facility ID*: Memorial Test Hospital (14584)

Month*: January

Year*: 2014

Device-Associated Module [?HELP](#)

| Locations | CLABSI | DE VAE | CAUTI | CLIP | PedVAP (<18 years) |
|---------------------|--------|--------|-------|------|-----------------------|
| ICU WEST - ICU WEST | X | | X | | |

Procedure-Associated Module [?HELP](#)

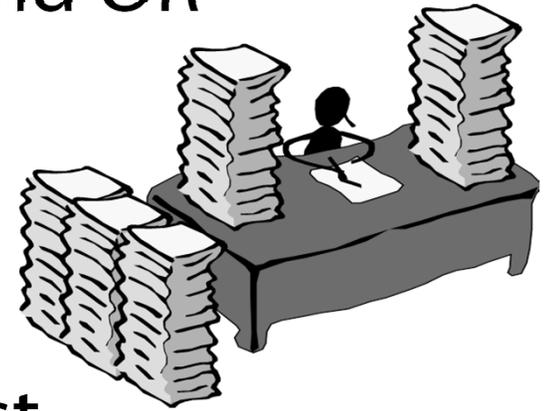
| Procedures | SSI |
|-------------------------------|------------|
| HYST - Abdominal hysterectomy | IN: X OUT: |

Antimicrobial Use and Resistance Module [?HELP](#)

| Locations | Antimicrobial Use |
|-----------|-------------------|
|-----------|-------------------|

SSI - Active Surveillance Methods

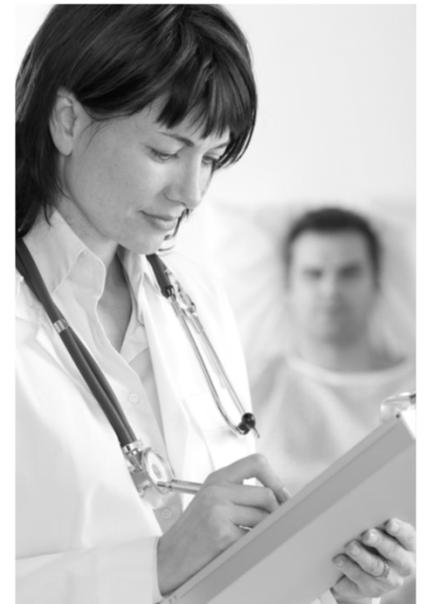
- Determine which surgical patients you will monitor
- Review admission, readmission, ED, and OR logs
- Review patient charts for signs and symptoms of SSI, risk factors
- Review lab, X-ray, other diagnostic test reports
- Review nurses and physician notes
- Visit the ICU and wards – talk to primary care staff



Post-discharge SSI Surveillance Methods

- Surgeon and/or patient surveys by mail or phone
 - Develop a tool that includes the SSI and most common specific infection site criteria for the operative procedures being monitored
 - Train surgeons and their office staff
- Review of postoperative clinic records

Criteria must be met regardless of where the SSI is detected!



SSI Surveillance Forms



Form Approved
OMB No. 0920-0666
Exp. Date: 10-31-2016
www.cdc.gov/nhsn

Denominator for Procedure

Page 1 of 1 *required for saving

| | |
|----------------------|--------------------------|
| Facility ID | Procedure #: |
| *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: PROC | *NHSN Procedure Code: |
| *Date of Procedure: | ICD-9-CM Procedure Code: |

Procedure Details

*Outpatient: Yes No *Duration: ____ Hours ____ Minutes

*Wound Class: C CC CO D *General Anesthesia: Yes No

ASA Score: 1 2 3 4 5 *Emergency: Yes No

*Trauma: Yes No *Scope: Yes No Diabetes Mellitus: Yes No

*Height: ____ feet ____ inches *Suture Technique: Primary Other than primary
(choose one) ____ meters

*Weight: ____ lbs/kg (circle one) *Code: ____

CSEC: *Duration of Labor: ____ hours

Circle one: FUSN RFUSN
*Spinal Level (check one)

- Atlas-axis
- Atlas-axis/Cervical
- Cervical
- Cervical/Dorsal/Dorsolumbar
- Dorsal/Dorsolumbar
- Lumbar/Lumbosacral

Circle one: HPRO KPRO

*Check one: Total Hemi Resurfacing (HPRO only)

If Total: Total Primary Total Revision Partial Revision

If Hemi: Partial Primary Total Revision Partial Revision

If Resurfacing (HPRO only): Total Primary Total Revision Partial Primary Partial Revision

Assurance of Confidentiality: The information obtained in this surveillance system that would permit identification of any individual or institution is collected with a guarantee that it will be held in strict confidence, will be used only for the purposes stated, and will not otherwise be disclosed or released without the consent of the individual, or the institution in accordance with Sections 304, 306 and 309(d) of the Public Health Service Act (42 USC 242b, 242k, and 242m(d)).

Public reporting burden of this collection of information is estimated to average 6 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC, Reports Clearance Officer, 1600 Clifton Rd., MS D-74, Atlanta, GA 30333, ATTN: PRA (0920-0666). CDC 57.121 Rev. 6, NHSN v8.1

Denominator data are collected using this form.



Form Approved
OMB No. 0920-0666
Exp. Date: 10-31-2016
www.cdc.gov/nhsn

Surgical Site Infection (SSI)

Page 1 of 4 *required for saving *required for completion

| | |
|-----------------------|-------------------------------|
| Facility ID | Event #: |
| *Patient ID: | Social Security #: |
| Secondary ID: | Medicare #: |
| Patient Name, Last: | First: |
| *Gender: F M Other | *Date of Birth: |
| Ethnicity (Specify): | Race (Specify): |
| *Event Type: SSI | *Date of Event: |
| *NHSN Procedure Code: | ICD-9-CM Procedure Code: |
| *Date of Procedure: | *Outpatient Procedure: Yes No |

*MDRO Infection Surveillance:
 Yes, this infection's pathogen & location are in-plan for
 No, this infection's pathogen & location are not in-plan

*Date Admitted to Facility: ____

Event Details

*Specific Event:

- Superficial Incisional Primary (SIP) Deep Incisional Primary (DIP)
- Superficial Incisional Secondary (SIS) Deep Incisional Secondary (DIS)
- Organ/Space (specify site):

*Specify Criteria Used (check all that apply):

| | |
|---|---|
| Signs & Symptoms | Laboratory |
| <input type="checkbox"/> Purulent drainage or material | <input type="checkbox"/> Positive culture |
| <input type="checkbox"/> Pain or tenderness | <input type="checkbox"/> Not cultured |
| <input type="checkbox"/> Localized swelling | <input type="checkbox"/> Positive blood culture |
| <input type="checkbox"/> Redness | <input type="checkbox"/> Blood culture not done or no organisms detected in blood |
| <input type="checkbox"/> Heat | <input type="checkbox"/> Positive Gram stain when culture is negative or not done |
| <input type="checkbox"/> Fever | <input type="checkbox"/> Positive culture from ≥ 2 separate tissue or fluid samples from affected joint |
| <input type="checkbox"/> Incision deliberately opened/drained | <input type="checkbox"/> Other positive laboratory tests ² |
| <input type="checkbox"/> Wound spontaneously dehisces | <input type="checkbox"/> Imaging test evidence of infection |
| <input type="checkbox"/> Abscess | |
| <input type="checkbox"/> Other evidence of infection found on direct exam, during invasive procedure, or by diagnostic tests ² | |
| <input type="checkbox"/> Other signs & symptoms ² | |

*per organ/space specific site criteria

Clinical Diagnosis

- Physician diagnosis of this event type
- Physician institutes appropriate antimicrobial therapy⁴

*Detected: A (During admission) P (Post-discharge surveillance)
 RF (Readmission to facility where procedure performed)
 RO (Readmission to facility other than where procedure was performed)

*Secondary Bloodstream Infection: Yes No **Died: Yes No SSI Contributed to Death: Yes No

Discharge Date: ____ *Pathogens Identified: Yes No *If Yes, specify on pages 2-3.

Assurance of Confidentiality: The voluntarily provided information obtained in this surveillance system that would permit identification of any individual or institution is collected with a guarantee that it will be held in strict confidence, will be used only for the purposes stated, and will not otherwise be disclosed or released without the consent of the individual, or the institution in accordance with Sections 304, 306 and 309(d) of the Public Health Service Act (42 USC 242b, 242k, and 242m(d)).

Public reporting burden of this collection of information is estimated to average 32 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of the collection of information, including suggestions for reducing this burden to CDC, Reports Clearance Officer, 1600 Clifton Rd., MS D-74, Atlanta, GA 30333, ATTN: PRA (0920-0666). CDC 57.120 (Rev) Rev 5, v8.1

SSI data are collected using this form.

KEY TERMS



Why all these SSI changes in 2013 and 2014?

- HICPAC SSI working group that met for over a year and a half at CDC (surgeons, IP, AORN, CDC, NHSN etc...)
- Goal to harmonize NHSN SSI definitions with those of other surgical professional organizations.
- Changes were based on input from 4 surgical professional organizations
 - ACS – American College of Surgeons
 - STS – Society of Thoracic Surgeons
 - ACOG- American College of Obstetricians and Gynecologists
 - AAOS – American Academy of Orthopedic Surgeons

Present on Admission

Present on Admission (POA) Infections

To standardize the classification of an infection as an infection present on admission (POA) or a healthcare-associated infection (HAI), the following objective criteria have been adopted. This classification **not** apply to SSI, VAE, or Laboratory events.

- From "Identifying HAIs" Chapter 2 of NHSN Patient Safety Component Manual

HAI - Healthcare-associated Infection

For the purposes of NHSN surveillance in the acute care setting, a healthcare-associated infection (HAI) is a localized or systemic condition resulting from an immune reaction to the presence of an infectious agent(s) or its toxin that was not present prior to the acute care facility. The infection must be identified by VAE, or LabID Event protocols. All elements of a CDC/NHSN site-specific HAI must be present during the POA time period but were not present during the 3rd calendar day of admission to the facility (admission is calendar day 1). All elements used to identify an infection criterion must occur within a gap of 1 calendar day between any adjacent elements. The definition of a gap day is a calendar day during which no infection criterion elements are present. From "Identifying HAIs" Chapter 2 of NHSN Patient Safety Component Manual



NHSN Operative Procedure



An NHSN operative procedure is a procedure

- that is included in Table 1

and

- takes place during an operation where at least one incision (including laparoscopic approach) is made through the skin or mucous membrane, or reoperation via an incision that was left open during a prior operative procedure

and

- takes place in an operating room [OR], defined as a patient care area that met the Facilities Guidelines Institute's (FGI) or American Institute of Architects' (AIA) criteria for an operating room when it was constructed or renovated [9]. This may include an operating room, C-section room, interventional radiology room, or a cardiac catheterization lab.



Incisional Closure Method

As of 2014, incisional closure is **NO LONGER** a part of the NHSN operative procedure definition; all otherwise eligible procedures are included, regardless of closure type.

Q: Why are both primary closures as well as non-primary closures now collected as part of the denominator data that is being sent to NHSN for surgical procedures that are followed in a facility's surveillance plan?

A: Non-primary closures are common and the previous definition was not representative of this surgical practice. Therefore, it is important to collect data on these procedures and related infections to gain a comprehensive picture of surgical risk factors in order to effectively guide prevention needs.

Primary Closure

- **Primary closure is defined as closure of all tissue levels 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, including incisions that are described as being “loosely closed” at the skin level. 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.**

Non-primary Closure

Non-primary Closure is defined as closure that is other than primary and includes surgeries in which the superficial layers are left completely open during the original surgery and therefore cannot be classified as having primary closure. For surgeries with non-primary closure, the deep tissue layers may be closed by some means (with the superficial layers left open), or the deep and superficial layers may both be left completely open. An example of a surgery with non-primary closure would be a laparotomy in which the incision was closed to the level of the deep tissue layers, sometimes called "fascial layers" or "deep fascia," but the superficial layers are left open. Another example would be an "open abdomen" case in which the abdomen is left completely open after the surgery. If the deep fascial levels of an incision are left open but the skin is closed, this is considered a non-primary closure since the incision was not closed at all tissue levels. Wounds that are "closed secondarily" at some later date, or described as "healing by secondary intention" should also be classified as having non-primary closure. Wounds with non-primary closure may or may not be described as "packed" with gauze or other material, and may or may not be covered with plastic, "wound vacs," or other synthetic devices or materials.

Q: If a patient underwent an NHSN operative procedure with non-primary closure and subsequently this patient develops a surgical site infection from that operative procedure, must we include this case as an SSI in the numerator?

A: Yes, that procedure is in your denominator data and if the patient develops an SSI that meets criteria within the surveillance period it will be entered into your denominator data. It will be linked to the procedure that you have already noted in the denominator for procedure form was an open procedure.

NOTE: The SIR for 2014 will only use the primarily closed procedures and the SSIs attributable to them. In 2014 CMS will only be sent data for procedures that were closed primarily.

Correction for “Key Terms” and “Table of Instructions”

Non-primary closure

Closure that is other than primary and includes surgeries in which the superficial layers are left completely open during the original surgery and therefore cannot be classified as having primary closure. For surgeries with non-primary closure, the deep tissue layers may be closed by some means (with the superficial layers left open), or the deep and superficial layers may both be left completely open. In such cases, any subsequent infection would not be considered an SSI, although it may be an HAI if it meets criteria for another specific infection site (e.g., skin or soft tissue infection). An example of a surgery with non-primary closure would be a laparotomy in which the incision was closed to the level of the deep tissue.

This was the 2013 definition of a non-primary closure and should have been updated. The definition in the SSI Protocol is correct and this has been corrected on the website.

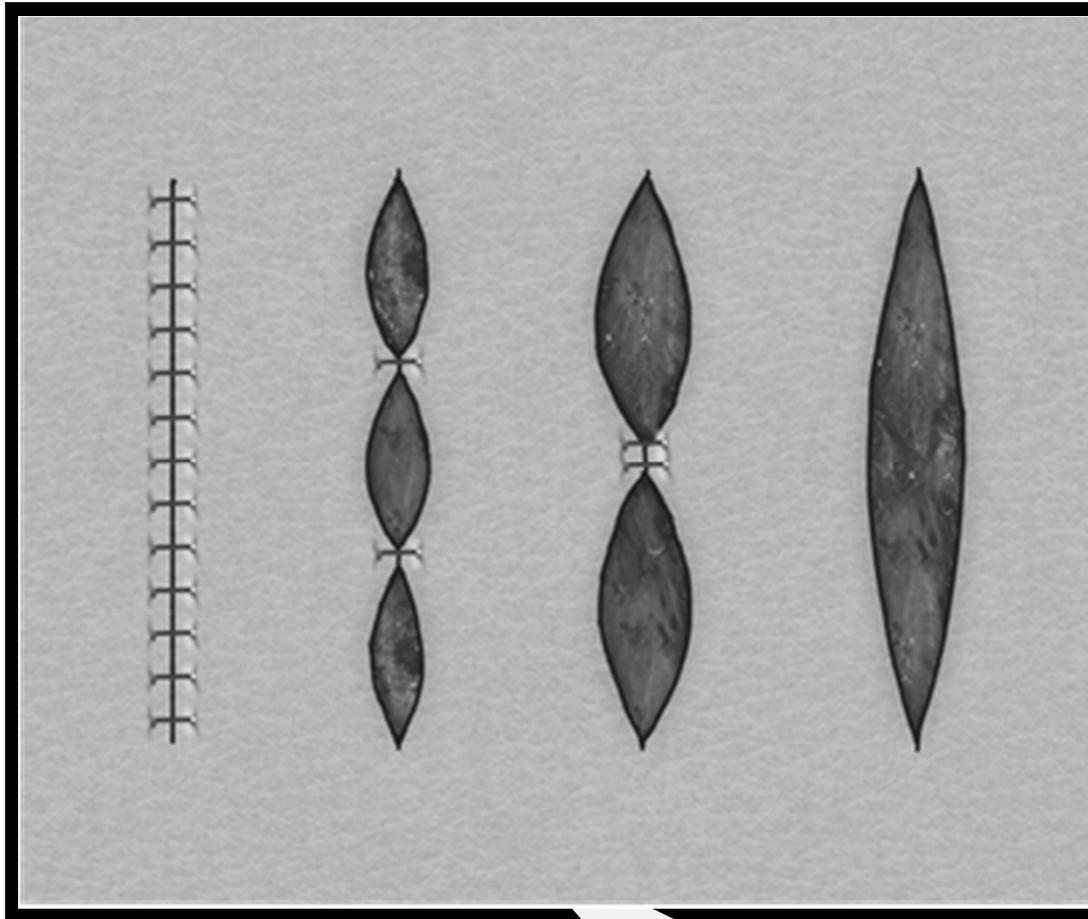
Non-Primary Closure may Include

- Superficial layers (skin) left completely open
- Deep may be closed by some means (partially) with superficial left open
- Deep and superficial left completely open
- Fascial layers or deep fascia closed with skin left open
- Open abdomen
- Deep fascial levels left open with skin closed
- Plans to be closed (secondarily) at a later date
- Surgical incision is expected to heal by secondary intention
 - May or may not have wound vacs or packing
 - may also have wires wicks or drains

Primary Closure may Include

- Closure at all levels of tissue (fascia is closed)
- Any portion at skin level is closed, if the fascia has been closed even if partially it should be considered primarily closed
 - Loosely closed at skin level
 - Left open at bottom for drainage purposes
 - May have wires wicks or drains
 - May have packing
 - May have wound VAC

Wound Closure Examples

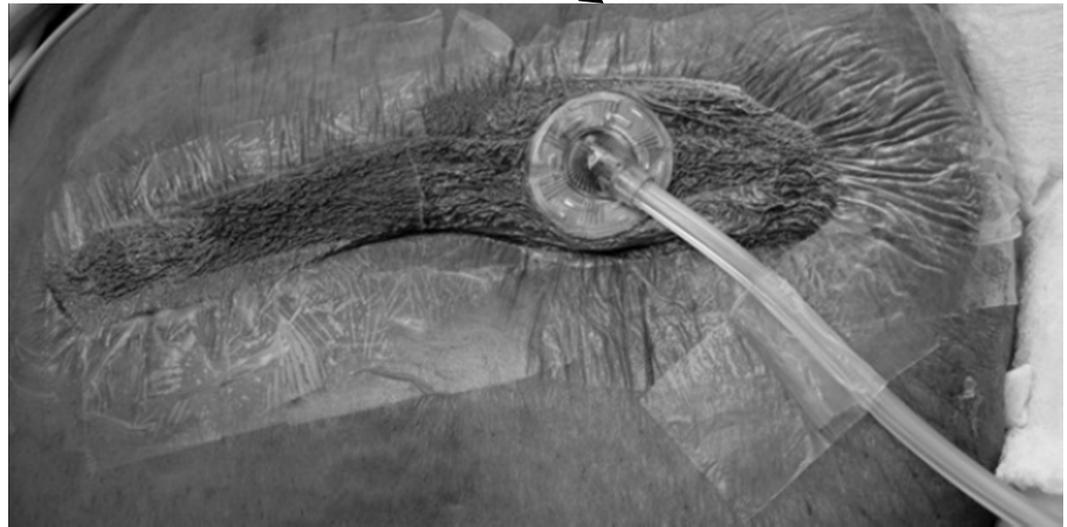


Closure other than primary

Primary Closure

Packing and wound VACs

Closure other than primary



Closure Technique Field

Procedure Details [?HELP](#)

Outpatient*: Duration (Hrs:Mins)*: 0 :

Wound Class*: General Anesthesia*:

ASA Score:

Emergency*: Trauma*: Scope *:

Diabetes Mellitus*: Closure Technique *:

Surgeon Code:

Height*: ' " or m

Weight *: lbs or kg BMI

In the past only incisions that were closed primarily should have been sent to NHSN

Incisional Closure – Workaround for 2014

- Although all SSI data fields are built into the NHSN application scheduled for release in 2014, CDC has decided to provide interim guidance for reporting diabetes and incisional closure type, which may be particularly burdensome for some NHSN users.

Information about a patient's incisional closure type should be available in the operative report. However, we are aware that in many facilities the incisional closure type may not be a standard element in the perioperative record. The interim method for data entry by NHSN users who lack time or resources to capture this information in 2014 is as follows: continue to report the procedure denominators exactly as you were doing for 2013. Further, we ask that for each SSI identified, a thorough evaluation be conducted to determine if the linked procedure was a primary closure or non-primary closure and update the procedure record (as non-primary closure) if necessary. From feedback we have gathered, this is likely the method most similar to the current practice, which has not been accurately removing all non-primarily closed procedures, but will at least allow NHSN to identify the SSIs linked to primarily closed procedures. We anticipate that this will not cause any large shift in the 2014 data used for inter-facility comparison.

NOTE: From guidance sent in a November 2013 NHSN Newsletter

Case 1

- A patient is admitted with a ruptured diverticulum and a COLO procedure is performed in the inpatient OR.
- Case is entered as a wound class 3
- Specimen is obtained in the OR which later returns (+) for *E. coli*
- Surgeon staples closed the incision at 4 locations with packing placed between the staples.

Is this procedure primarily
closed for 2014?

- ✓ 1. Yes
- 2. No

Case 1 - Rationale

- The skin is closed at some points along the incision.

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 you are following COLO in your monthly reporting plan should this case be entered into your denominator data?

- ★ 1. Yes
- 2. No

Case 2

- A patient is admitted with an acute abdomen
- Taken to OR for open appendectomy for suspected ruptured appendix
- Case is a wound class 3
- Surgeon does not close the incision leaves it open, with a wound vac, to heal by secondary intention

Is this procedure primarily
closed for 2014?

1. Yes
- ✓ 2. No

Case 2 - Rationale

- The incision was left completely open.

Non-primary Closure is defined as closure that is other than primary and includes surgeries in which the superficial layers are left completely open during the original surgery and therefore cannot be classified as having primary closure.

If you are following APPY in your monthly reporting plan should this procedure be entered into your denominator data?

1. Yes
2. No, it is a contaminated case

Case 2 - Rationale

- Wound class is not a part of the NHSN operative procedure definition. A high wound class is not an exclusion for reporting in denominator data. All procedures that meet the NHSN definition of an operative procedure should be reported if they are part of the facility's reporting plan.

Case 2 - continued

- ❑ Patient readmitted 2 weeks later (POD 21) and has fever, abdominal pain, and CT evidence of two intraabdominal abscesses. CT guided drainage of 100 CCs of purulent drainage.
- ❑ Drainage is culture (+) for *E. coli* and *B. fragillis*
- ❑ Patient meets criteria for an organ space GI-IAB SSI

Because this was a contaminated case this infection should not be reported to NHSN as attributable to the APPY procedure.

1. True

→ 2. False

Case 2 - Rationale

- As of 2014, incisional closure is NO LONGER a part of the NHSN operative procedure definition; all otherwise eligible procedures are included, regardless of closure type. Any subsequent infections that meet criteria for an SSI during the surveillance period should be reported and linked to the open procedure.



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): Time when the procedure is begun (e.g., incision for a surgical procedure).
- Procedure/Surgery Finish (PF): Time when all instrument and sponge counts are completed and verified as correct, all postoperative radiologic studies to be done in the OR are completed, all dressings and drains are secured, and the physicians/surgeons have completed all procedure-related activities on the patient.



Height and Weight for all procedures in monthly reporting plan

Height: The patient's most recent height documented in the medical record in **feet (ft.) and inches (in), or meters (m)**

Weight: The patient's most recent weight documented in the medical record in pounds (lbs) or kilograms (kg) prior to or otherwise closest to the procedure



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 NHSN definition excludes patients with no diagnosis of diabetes, or a diagnosis of diabetes that is controlled by diet alone. The definition excludes patients who receive insulin for perioperative control of hyperglycemia but have no diagnosis of diabetes.



Diabetes – Workaround

NHSN is aware that in many facilities the diabetes status that meets this definition may not be a standard element in medical record or perioperative record. The interim method for data entry by NHSN users who lack time or resources to capture this information in 2014 is as follows: default to “N” value for all patients until a system is in place to identify and report this information.

NOTE:NHSN has gotten a lot of feedback from users that this definition needs to be code based and we are in discussion about that now for a possible change in 2015.

Rationale for capturing height, weight, and diabetes status for all procedures

- ❑ Diabetes and obesity (determined from BMI calculated (within application) using height and weight) are known risk factors for the development of a surgical site infection. Therefore, these data will provide for more accurate risk adjustment in the NHSN SIR calculation.
- ❑ This new risk adjusted data will first be available for analysis in 2016

Key Term: NHSN Inpatient for SSI

A patient whose date of admission to the healthcare facility and the date of discharge are *different* calendar days.



Key Term: NHSN SSI Outpatient

A patient whose date of admission to the healthcare facility and the date of discharge are the *same* day



Key Term: Operating Room

- A patient care area that met the Facilities Guidelines Institute or American Institute of Architects' criteria for an operating room when it was constructed or renovated.
- May include:
 - Traditional operating room
 - C-section room
 - Interventional radiology room
 - Cardiac catheterization lab



NHSN Operative Procedure Codes

Each NHSN operative procedure category is defined by a group of ICD-9-CM procedure codes

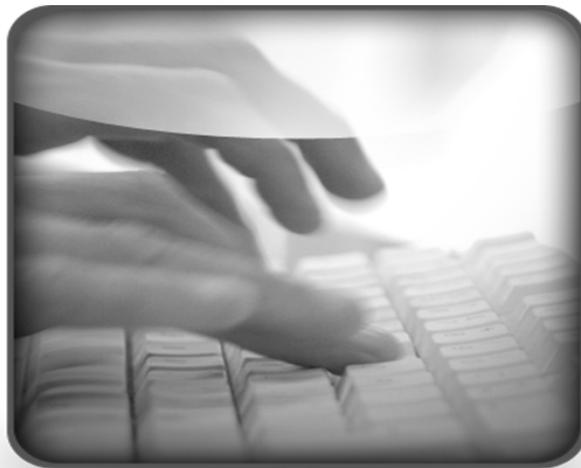
| Legacy Code | Operative Procedure | Description | ICD-9-CM Codes / CPT Codes |
|-------------|------------------------|--|--|
| HTP | Heart transplant | Transplantation of heart | 37.51-37.55 |
| HYST | Abdominal hysterectomy | Abdominal hysterectomy; includes that by laparoscope | 68.31, 68.39, 68.41, 68.49, 68.61, 68.69 |
| | | | 58150, 58152, 58180, 58200, 58210, 58541, 58542, 58543, 58544, 58548, 58570, 58571, 58572, 58573, 58951, 58953, 58954, 58956 |
| KPRO | Knee prosthesis | Arthroplasty of knee | 00.80-00.84, 81.54, 81.55 27438, 27440, 27441, 27442, 27443, 27446, 27447, 27486, 27487 |
| KTP | Kidney transplant | Transplantation of kidney | 55.61, 55.69 |

NHSN Operative Procedures

When an NHSN Operative Procedure is selected for monitoring, all the procedures within that category must be followed.

| Legacy Code | Operative Procedure | Description | ICD-9-CM Codes / CPT Codes |
|-------------|----------------------------------|--|---|
| AAA | Abdominal aortic aneurysm repair | Resection of abdominal aorta with anastomosis or replacement | 86.34, 86.44, 86.64 |
| AMP | Limb amputation | Total or partial amputation or disarticulation of the upper or lower limbs, including digits | 84.00-84.19, 84.91 |
| APPY | Appendix surgery | Operation of appendix | 47.01, 47.09, 47.2, 47.91, 47.92, 47.99 |
| AVSD | Shunt for dialysis | Arteriovenostomy for renal dialysis | 39.27, 39.42 |

Completing the Denominator for Procedure Information Form



Denominator Data

- ❖ The collection period is one month.
- ❖ Complete a Denominator for Procedure record for every operation meeting the NHSN operative procedure definition that was done during that month if it is in your Monthly Reporting Plan.
- ❖ Submit data within a month of the end of this period.



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OMB No. 0920-0696
Exp. Date: 10-31-2016
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Denominator for Procedure

Page 1 of 1 *required for saving

| | |
|----------------------|--------------------------|
| Facility ID: | Procedure #: |
| *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: PROC | *NHSN Procedure Code: |
| *Date of Procedure: | ICD-9-CM Procedure Code: |

Procedure Details

| | |
|-----------------------------------|--|
| *Outpatient: Yes No | *Duration: ____ Hours ____ Minutes |
| *Wound Class: C CC CO D | *General Anesthesia: Yes No |
| ASA Score: 1 2 3 4 5 | *Emergency: Yes No |
| *Trauma: Yes No | *Scope: Yes No |
| *Diabetes Mellitus: Yes No | *Closure Technique: Primary Other than primary |
| *Height: ____ feet ____ inches | Surgeon Code: _____ |
| (choose one) ____ meters | |
| *Weight: ____ lbs/kg (circle one) | |

CSEC: *Duration of Labor: ____ hours

| | |
|---|---|
| Circle one: FUSN RFUSN *Spinal Level (check one) <input type="checkbox"/> Atlas-axis <input type="checkbox"/> Atlas-axis/Cervical <input type="checkbox"/> Cervical <input type="checkbox"/> Cervical/Dorsal/Dorsolumbar <input type="checkbox"/> Dorsal/Dorsolumbar <input type="checkbox"/> Lumbar/Lumbosacral | *Approach/Technique (check one) <input type="checkbox"/> Anterior <input type="checkbox"/> Posterior <input type="checkbox"/> Anterior and Posterior <input type="checkbox"/> Transoral |
|---|---|

Circle one: HPRO KPRO

*Check one: Total Hemi Resurfacing (HPRO only)

If Total: Total Primary Total Revision Partial Revision

If Hemi: Partial Primary Total Revision Partial Revision

If Resurfacing (HPRO only): Total Primary Total Revision Partial Primary Partial Revision

Assurance of Confidentiality: The information obtained in this surveillance system that would permit identification of any individual or institution is collected with a guarantee that it will be held in strict confidence, will be used only for the purposes stated, and will not otherwise be disclosed or released without the consent of the individual, or the institution in accordance with Sections 304, 306 and 306(s) of the Public Health Service Act (42 USC 242b, 242k, and 242m(d)).

Public reporting burden of this collection of information is estimated to average 8 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of the collection of information, including suggestions for reducing this burden to CDC, Reports Clearance Officer, 1600 Clifton Rd., MS D-74, Atlanta, GA 30333. ATTY: PRA (0920-0696).

CDC 27-121 Rev. 6, NHSN v5.1

Denominator for Procedure

For example, if your Monthly Reporting Plan indicates that you will monitor COLO procedures in January, and 43 COLO were done that month, then you should enter / import 43 separate COLO procedure records into NHSN by the end of February.

Procedure-Associated Module [?HELP](#)

| Procedures | SSI | |
|-------------------------------|----------------|--|
| COLO - Colon surgery | IN - Inpatient | |
| HYST - Abdominal hysterectomy | IN - Inpatient | |

Denominator for Procedure

**Patient Information:
Patient ID, Gender, and Date of
Birth are required**



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Denominator for Procedure



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| | |
|----------------------|--------------------------|
| Facility ID | Procedure #: |
| *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: PROC | *NHSN Procedure Code: |
| *Date of Procedure: | ICD-9-CM Procedure Code: |

Procedure Code and Procedure Date

Denominator for Procedure



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| | | |
|--------------------------|--------------------------|---------|
| Facility ID | Procedure #: | |
| *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: PROC | *NHSN Procedure Code: | |
| *Date of Procedure: | ICD-9-CM Procedure Code: | |
| Procedure Details | | |

The NHSN Procedure Code and the Date of Procedure must be entered. The ICD-9-CM code is optional.

If you enter the ICD-9 code first, the NHSN procedure code will be automatically populated.

White

Procedure Information [?HELP](#)

NHSN Procedure Code*:

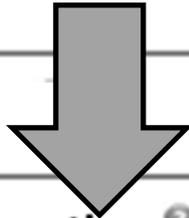
ICD-9-CM Code:

Procedure Date*:



Link/Unlink to Event

Procedure is not Linked



Procedure Information [?HELP](#)

NHSN Procedure Code*:

ICD-9-CM Code:

Procedure Date*:



Link/Unlink to Event

Procedure is not Linked

Procedure Details – Outpatient and Duration

| Procedure Details | |
|-------------------------|--------------------------------------|
| *Outpatient: Yes No | *Duration: _____ Hours _____ Minutes |
| *Wound Class: C CC CO D | *General Anesthesia: Yes No |
| ASA 1 2 3 4 5 | *Emergency: Yes No |
| *Trauma: Yes No | *Diabetes Mellitus: Yes No |
| *Scope: Yes No | *Closure Technique: Primary _____ |
| *Height: _____ inches | Surgeon Code: _____ |

Outpatient: Required.

If admission and discharge dates are the same calendar days Yes; otherwise, select No.

Duration: Required.

Record the PST and PF

Important Note



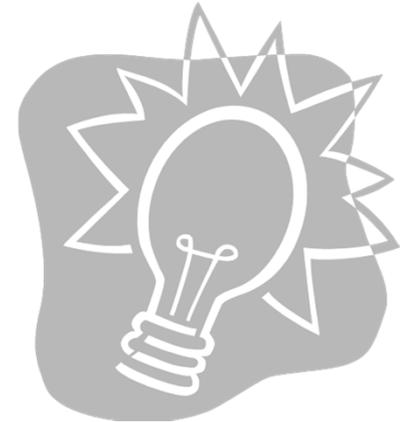
- In Chapter 9, the Reporting Instructions in the Denominator Data section and the Table of Instructions provide important guidance on the many nuances of how to report the number of operative procedure records and their details in a variety of situations.
- The examples shown in this presentation are only some of them.
- Please read and follow all of the instructions carefully!

New Reporting Instructions

- **Incidental appendectomy - reporting instruction change:** Any appendectomy (APPY) should be reported regardless of whether it is incidental.
- **XLAP – reporting instruction change:** Any exploratory laparotomy (XLAP) should be reported regardless of whether it results in a procedure from another category being performed.

Reporting Instructions

- Some operative procedures have more than one incision
 - CBGB, and certain operations in the CEA, FUSN, RFUSN, and PVBV categories
 - Example: CBGB in which an incision to harvest a donor vessel is made that is separate from the primary incision
 - Example: FUSN with both anterior and posterior approaches
- Complete only one *Denominator for Procedure* form
 - Record the duration as time from procedure start time to procedure finish time for the entire procedure



Reporting Instruction

- If procedures in more than one NHSN operative procedure category are done *through the same incision* during the same trip to the OR, create a record for each procedure that you are monitoring in the Monthly Reporting Plan, and use the total time for the duration for each record.

Example: Patient had a coronary artery bypass graft with a chest incision only (CBGC) and also a mitral valve replacement (CARD). The time from PST to PF was 5 hours. A *Denominator* form is completed for the CBGC and another for the CARD, indicating the duration as 5 hours and 0 minutes on each form.



Reporting Instruction

- **EXCEPTION:** If a patient has both a CBGC and a CBGB during the same trip to the OR, report only as a CBGB.

Example: Patient was scheduled to have a coronary artery bypass graft with a chest incision only (CBGC), however during the procedure it became necessary to harvest a vessel from the leg. Even though an ICD-9-CM procedure code for a CBGC and a CBGB will be assigned by coders, only complete a CBGB *Denominator for Procedure* form. The time from PST to the PF time reported for the duration of the procedure.

Reporting Instruction

- If the patient goes to the OR more than once during the same admission and another procedure of the same or different NHSN operative procedure category is performed through the same incision within 24 hours of the end of the original procedure, report only one *Denominator for Procedure* form for the original procedure combining the durations for both procedures.

Example: Patient had colon surgery (COLO) performed on Tuesday morning which had a duration of 3 hours and 10 minutes. On Tuesday evening, he was returned to the OR where the COLO incision was opened to repair a bleeding vessel (OTH). The duration of the second procedure was 1 hour and 10 minutes.

Report only one COLO with a combined duration of 4 hours and 20 minutes. Do not report an OTH record.

Apply this guidance when a patient goes back to the OR within 24 hours of the first procedure

- **NOTE:** Assign the surgical wound closure that applies when the patient leaves the OR from the principal operative procedure. This instruction should be followed in scenarios where a patient leaves the OR with non-primary closure, but returns to the OR for a subsequent procedure that results in primary closure of the procedure.

Case 3

- A patient had a COLO and a HYST through a single incision during a single trip to the OR. Both of these procedures are in the monthly reporting plan.
 - Incision at 0823 and PF time is 1133
 - Note that the HYST part of procedure began at 1000

Which statement is true?

1. Only the COLO should be reported since it is higher on the priority list.
2. Two separate procedures should be reported: COLO with a duration of 1 hr. 37 min and HYST with a duration of 1 hr. 33 min
3. Two separate procedures should be reported one for COLO and one for HYST, each with a duration of 3 hrs. 10 min.



Case 3 - Rationale

Duration of the procedure when more than one category of NHSN operative procedure is done through the same incision: If more than one NHSN operative procedure category is performed through the same incision during the same trip to the operating room, record the combined duration of all procedures, which is the time from procedure/surgery start time to procedure/surgery finish time. For example, if a CBGC and a CARD are performed on a patient during the same trip to the operating room, the time from start time to finish time is reported for both operative procedures.

SSI Chapter : Denominator Data Reporting Instructions

Additional Information

- Because of bleeding during surgery, a drain was placed in the abdominal incision. The incision was then loosely closed.

Does this incision meet criteria
for primary closure in 2014?

- 😊 1. Yes
- 2. No

Case 3 - Rationale

- **Primary closure is defined as closure of all tissue levels 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, including incisions that are described as being “loosely closed” at the skin level. 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.**

SSI Protocol : Definition of Primary Closure

Reporting Instruction: Bilateral Procedures



- For procedures that are performed bilaterally during the same trip to the OR (e.g., KPRO), two separate *Denominator for Procedure* forms are completed.

To document the duration of the procedure, indicate the PST to PF time for each procedure separately or, alternatively, take the total time for both procedures and split it evenly between the two.

Case 4

- A patient had bilateral knee prostheses (KPRO) implanted during a single trip to the OR.
 - Left KPRO PST at 8:30 a.m. there was no note of finish time for this knee
 - Right KPRO PF time was 11:30 a.m.

Which statement is correct?

1. One KPRO procedure should be reported with a combined duration of 3 hrs. 0 min.
2. Two separate KPRO procedures should be reported, each with a duration of 1 hr. 30 min.
3. Two separate KPRO should be entered, each with a duration of 3 hrs. 0 min.

Case 4 - Rationale

- For bilateral operative procedures (e.g., KPRO), two separate Denominator for Procedure (CDC 57.121) records are completed. To document the duration of the procedure, indicate the PST to PF time for each procedure separately or, alternatively, take the total time for both procedures and split it evenly between the two.

SSI Chapter : Denominator Data Reporting Instructions

Reporting Instructions

- There are *new and updated* Reporting Instructions for your use in the SSI Protocol
 - SSI Event Reporting Instructions begin on p. 9-15
 - Denominator Reporting Instructions begin on p. 9-19



Procedure Details – Wound Class

Denominator for Procedure



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| | | |
|-----------------------------------|--|----------------------------|
| Facility ID | Procedure #: | |
| *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: PROC | *NHSN Procedure Code: | |
| *Date of Procedure: | ICD-9-CM Procedure Code: | |
| Procedure Details | | |
| *Outpatient: Yes No | *Duration: _____Hours _____Minutes | |
| *Wound Class: C CC CO D | *General Anesthesia: Yes No | |
| ASA Score: 1 2 3 4 5 | *Emergency: Yes No | |
| *Trauma: Yes No | *Scope: Yes No | *Diabetes Mellitus: Yes No |
| *Height: _____feet _____inches | *Closure Technique: Primary Other than primary | |
| (choose one) _____meters | Surgeon Code: _____ | |
| *Weight: _____lbs/kg (circle one) | | |

D = Dirty or Infected
Unknown has been removed as a choice

INVOLVED IN
performing the
operation; rarely by
the IP.

Wound Class

Clean: An uninfected operative wound in which no inflammation is encountered and the respiratory, alimentary, genital, or uninfected urinary tracts are not entered. In addition, clean wounds are primarily closed and, if necessary, drained with closed drainage. Operative incisional wounds that follow nonpenetrating (blunt) trauma should be included in this category if they meet the criteria.

NHSN NOTE: The clean wound classification level will not be available for denominator data entry for the following NHSN operative procedure categories: APPY, BILI, CHOL, COLO, REC, SB, and VHYS

Wound Class

Clean-Contaminated: Operative wounds in which the respiratory, alimentary, genital, or urinary tracts are entered under controlled conditions and without unusual contamination. Specifically, operations involving the biliary tract, appendix, vagina, and oropharynx are included in this category, provided no evidence of infection or major break in technique is encountered.

NOTE: The asterisk next to the word genital was removed in 2014. In 2013 it had stated that genital should include the female and male reproductive tracts

Wound Class

Contaminated: Open, fresh, accidental wounds. In addition, operations with major breaks in sterile technique (e.g., open cardiac massage) or gross spillage from the gastrointestinal tract, and incisions in which acute, nonpurulent inflammation is encountered including necrotic tissue without evidence of purulent drainage (e.g., dry gangrene) are included in this category.

Dirty or Infected: Includes old traumatic wounds with retained devitalized tissue and those that involve existing clinical infection or perforated viscera. This definition suggests that the organisms causing postoperative infection were present in the operative field before the operation.

Procedures that can never be coded as clean wound class

The procedures that can never be entered as clean are: APPY, BILI, CHOL, COLO, REC, SB and VHYS. In the application clean is not on the drop down menu.

Based on that a CSEC, HYST, or OVRV can be a clean wound class based on the particular events and findings of an individual case.

Wound class should be set by someone who is part of the surgical team based on the findings of each specific case.

Procedure Details – General Anesthesia

General Anesthesia: Required.

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.

Operator for Procedure

*required for saving

| | |
|--|---------|
| Procedure #: | |
| Social Security #: | |
| Medicare #: | |
| First Name: | Middle: |
| Date of Birth: | |
| Sex (Specify): | |
| ICD-9-CM Procedure Code: | |
| ICD-9-CM Procedure Code: | |
| *Duration: _____ Hours _____ Minutes | |
| *General Anesthesia: Yes No | |
| *Emergency: Yes No | |
| *Diabetes Mellitus: Yes No | |
| *Closure Technique: Primary Other than primary | |
| Surgeon Code: _____ | |

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Procedure Details – ASA Score

Denominator for Procedure



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| | |
|-------------------------------------|--------------------|
| Facility ID | Procedure #: |
| *Patient ID: | Social Security #: |
| Secondary ID: | Medicare #: |
| Patient Name, Last: | First: |
| *Gender: F M Other | *Date of Birth: |
| Ethnicity (Specify): | Race (S): |
| Event Type: PROC | *NHSN: |
| *Date of Procedure: | ICD-9-CM: |
| Procedure Details | |
| *Outpatient: Yes No | |
| *Wound Class: C CC CO D | |
| ASA Score: 1 2 3 4 5 | |
| *Trauma: Yes No *Scope: Yes No | |
| *Height: _____ feet _____ inches | |
| (choose one) _____ meters | |
| *Weight: _____ lbs/kg (circle one) | |
| Surgeon Code: _____ | |

**ASA Score:
Required.**
An assessment score by the anesthesiologist of the patient's preoperative physical condition using the American Society of Anesthesiologists' Classification of Physical Status schema.

ASA Score

- Required only for inpatient procedures

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.



NOTE: Do NOT report procedures with an ASA physical status of 6 (a declared brain-dead patient whose organs are being removed for donor purposes) to NHSN.

Procedure Details – Emergency

Denominator for Procedure



Page 1 of 1

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| | | |
|--------------------------|------------------------------------|---------|
| Facility ID | Procedure #: | |
| *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: PROC | *NHSN Procedure Code: | |
| *Date of Procedure: | ICD-9-CM Procedure Code: | |
| Procedure Details | | |
| *Outpatient: Yes No | *Duration: ____ Hours ____ Minutes | |
| *Wound Class: C CC CO D | *General Anesthesia: Yes No | |
| ASA Score: 1 2 3 4 5 | *Emergency: Yes No | |
| *Trauma: Yes No | *Diabetes Mellitus: Yes No | |

Emergency:

Select Yes if a nonelective, unscheduled operative procedure otherwise, select No. Emergency operative procedures are those that do not allow for the standard immediate preoperative preparation normally done within the facility for a scheduled operation (e.g., stable vital signs, adequate antiseptic skin preparation, colon decontamination in advance of colon surgery, etc.)..

Procedure Details – Trauma

| Procedure Details | |
|-------------------------------------|--|
| *Outpatient: Yes No | *Duration: ____Hours ____Minutes |
| *Wound Class: C CC CO D | *General Anesthesia: Yes No |
| ASA Score: 1 2 3 4 5 | *Emergency: Yes No |
| *Trauma: Yes No | *Scope: Yes No |
| *Diabetes Mellitus: Yes No | *Closure Technique: Primary Other than primary |
| *Height: ____feet ____inches | Surgeon Code: ____ |
| (choose one) ____meters | |
| *Weight: ____lbs/kg (circle one) | |
| CSEC: *Duration of Labor: ____hours | |

Trauma: Required.

If this operation was done because of a recent blunt or penetrating trauma, select Yes.

Procedure Details – Scope

| Procedure Details | |
|------------------------------------|--|
| *Outpatient: Yes No | minutes |
| *Wound Class: C CC CO D | |
| ASA Score: 1 2 3 4 5 | Emergency: Yes No |
| *Trauma: Yes No | *Scope: Yes No |
| *Height: _____ feet _____ inches | *Diabetes Mellitus: Yes No |
| (choose one) _____ meters | *Closure Technique: Primary Other than primary |
| *Weight: _____ lbs/kg (circle one) | |

**Scope:
Required.**
If the entire NHSN operative procedure was performed using a laparoscope/robotic assist, select Yes.

Select No if incision was extended for hand assist or fully converted to an open approach.

Select Yes if scope used for entire HYST or VHYS even if uterus was removed through the vagina.

Select Yes if scope used to harvest donor vessel during a CBGB.

Procedure Details – Diabetes

| Procedure Details | |
|-----------------------------------|--|
| *Outpatient: Yes No | *Duration: ____ Hours ____ Minutes |
| *Wound Class: C CC CO D | *General Anesthesia: Yes No |
| ASA Score: 1 2 3 4 5 | *Emergency: Yes No |
| *Trauma: Yes No | *Scope: Yes No |
| | *Diabetes Mellitus: Yes No |
| *Height: ____ feet ____ inches | *Closure Technique: Primary Other than primary |
| (choose one) ____ meters | Surgeon Code: _____ |
| *Weight: ____ lbs/kg (circle one) | |

Diabetes: Required.
See definition in SSI protocol

Procedure Details – Height and Weight

| Procedure Details | |
|--------------------------------------|--|
| *Outpatient: Yes No | *Duration: ____ Hours ____ Minutes |
| *Wound Class: C CC CO D | *General Anesthesia: Yes No |
| ASA Score: 1 2 3 4 5 | *Emergency: Yes No |
| *Trauma: Yes No | *Scope: Yes No |
| *Diabetes Mellitus: Yes No | *Closure Technique: Primary Other than primary |
| *Height: ____ feet ____ inches | Surgeon Code: _____ |
| (choose one) ____ meters | |
| *Weight: ____ lbs/kg (circle one) | |
| CSEC: *Duration of Labor: ____ hours | |

Height and Weigh: Required.
Enter height in feet and inches or
meters
Enter weight in pound or kilograms

The application calculates the BMI automatically

Procedure Details [?HELP](#)

Outpatient*: Duration (Hrs:Mins)*: :

Wound Class*: General Anesthesia*:

ASA Score*:

Emergency*: Trauma*: Scope*:

Diabetes Mellitus*: Closure Technique *:

Surgeon Code:

Height*: ' " or m

Weight*: lbs or kg BMI

Procedure Details – Closure technique

| Procedure Details | |
|-----------------------------------|--|
| *Outpatient: Yes No | *Duration: ____ Hours ____ Minutes |
| *Wound Class: C CC CO D | *General Anesthesia: Yes No |
| ASA Score: 1 2 3 4 5 | *Emergency: Yes No |
| *Trauma: Yes No | *Scope: Yes No |
| *Diabetes Mellitus: Yes No | |
| *Height: ____ feet ____ inches | *Closure Technique: Primary Other than primary |
| (choose one) ____ meters | |
| *Weight: ____ lbs/kg (circle one) | Surgeon Code: _____ |

**Closure Technique:
Required.**
See definition in SSI protocol

Procedure Details – Surgeon Code

| Procedure Details | |
|------------------------------------|--|
| *Outpatient: Yes No | *Duration: _____ |
| *Wound Class: C CC CO D | *General Anesthesia: Yes No |
| ASA Score: 1 2 3 4 5 | *Emergency: Yes No |
| *Trauma: Yes No | *Scope: Yes No |
| *Diabetes Mellitus: Yes No | *Closure Technique: Primary Other than primary |
| *Height: _____ feet _____ inches | Surgeon Code: _____ |
| (choose one) _____ meters | |
| *Weight: _____ lbs/kg (circle one) | |

**Surgeon Code:
Optional.**

Enter the code of the surgeon who performed the principal operative procedure.



If more than one surgeon performed the operation, enter the code for the surgeon who was primarily responsible for the case. Surgeon code teams may be created.

Additional Fields Required for Specific Procedures



Additional Fields for Specific Procedures

- There are 5 procedures for which additional risk factors are collected:
 - Cesarean Section – CSEC
 - Spinal Fusion and Refusion – FUSN; RFUSN
 - Hip Arthroplasty – HPRO
 - Knee Arthroplasty – KPRO

When any of the above procedures are included in the *Monthly Reporting Plan*, the corresponding additional fields must be completed.



Cesarean Section — CSEC

Procedure Details

*Outpatient: Yes No

*Wound Class: C CC CO D

ASA Score: 1 2 3 4 5

*Trauma: Yes No

*Scope: Yes No

*Height: _____feet _____inches

(choose one) _____meters

*Weight: _____lbs/kg (circle one)

*Duration: _____Hours _____Minutes

*General Anesthesia: Yes No

*Emergency: Yes No

*Diabetes Mellitus: Yes No

*Closure Technique: Primary Other than primary

Surgeon Code: _____

CSEC: *Duration of Labor: _____hours

Number of hours of labor *in the hospital*

Reporting Instruction: Labor

- Length of time from beginning of active labor ***as an inpatient*** to delivery of the infant, expressed in hours (if ≤ 30 min, round down; > 30 min, round up)
- No labor, hours = 0
- Check for documentation in chart
- May be defined by your hospital's policies and procedures but should reflect the onset of regular contractions or induction that leads to delivery during this admission

Fusion (FUSN) and Refusion (RFUSN)

Select whether the procedure was FUSN or RFUSN

Circle one: FUSN RFUSN

*Spinal Level (check one)

- Atlas-axis
- Atlas-axis/Cervical
- Cervical
- Cervical/Dorsal/Dorsolumbar
- Dorsal/Dorsolumbar
- Lumbar/Lumbosacral

Select the approach used in the procedure

Lateral transverse and unspecified were removed. Transoral was added.

*Approach/Technique (check one)

- Anterior
- Posterior
- Anterior and Posterior
- Transoral

Check the appropriate spinal level

Hip Arthroplasty – HPRO

Knee Arthroplasty - KPRO

| | |
|--|---|
| PSEC: *Duration of Labor: _____ hours | |
| Circle one: FUSN RFUSN *Spinal Level (check one) <input type="checkbox"/> Atlas-axis <input type="checkbox"/> Atlas-axis/Cervical <input type="checkbox"/> Cervical <input type="checkbox"/> Cervical/Dorsal/Dorsolumbar <input type="checkbox"/> Dorsal/Dorsolumbar <input type="checkbox"/> Lumbar/Lumbosacral | *Approach (check one) <input type="checkbox"/> Anterior <input type="checkbox"/> Anterior and Posterior <input type="checkbox"/> Transoral |
| Circle one: HPRO KPRO *Check one: <input type="checkbox"/> Total <input type="checkbox"/> Hemi <input type="checkbox"/> Resurfacing (HPRO only) If Total: <input type="checkbox"/> Total Primary <input type="checkbox"/> Total Revision <input type="checkbox"/> Partial Revision If Hemi: <input type="checkbox"/> Partial Primary <input type="checkbox"/> Total Revision <input type="checkbox"/> Partial Revision If Resurfacing (HPRO only): <input type="checkbox"/> Total Primary <input type="checkbox"/> Total Revision <input type="checkbox"/> Partial Primary <input type="checkbox"/> Partial Revision | |

If the procedure is an HPRO or KPRO, indicate here which type of HPRO or KPRO was performed

HPRO

- **Total -> Total Primary** – both acetabulum and femoral head replaced ; plastic liner between the two if not metal-on-metal
- **Total -> Total Revision** – all components revised
- **Total -> Partial Revision** – only one or 2 of the components is revised (the second component probably being the liner)
- **Hemi -> Partial Primary** – only femoral head replaced
- **Hemi -> Partial Revision** – take out the femoral component and revise it with another femoral component-
- **Resurfacing -> Total Primary** – both femoral and acetabular surfaces replaced
- **Resurfacing -> Partial Primary** – most likely only femoral surface replaced

Total hip: <http://orthoinfo.aaos.org/topic.cfm?topic=a00377>

Hip hemiarthroplasty: <http://orthoinfo.aaos.org/topic.cfm?topic=A00392>

Hip resurfacing: <http://orthoinfo.aaos.org/topic.cfm?topic=A00586>

KPRO

- **Total -> Total Primary** – distal femur, proximal tibia and patellar surfaces replaced; plastic liner “spacer” between femoral and tibial component
- **Total -> Total Revision** – all components revised
- **Total -> Partial Revision** – only one or two of the components revised (the second component probably being the liner)
- **Hemi -> distal femur, proximal tibia and plastic liner replaced for HALF the knee (only the affected side)**
- **Hemi -> Partial Revision** - only one or two of the components revised (the second component probably being the liner)
- **Hemi -> Total Revision** – all components revised

Total Knee: <http://orthoinfo.aaos.org/topic.cfm?topic=A00389>

Knee Hemi (unicompartmental) :

<http://orthoinfo.aaos.org/topic.cfm?topic=A00585>

ICD - 9 - CM KPRO Mapping

The NHSN Denominator for Procedure form will collect additional detailed information about HPRO and KPRO procedures that are conducted in 2014. Unfortunately, manual chart review or direct entry in the OR data base would be required to correctly specify all of the available HPRO and KPRO fields, due to the lack of specificity of ICD-9-CM codes. Therefore for facilities that don't have this capability, NHSN is providing a mapping to these HPRO and KPRO fields based on ICD-9-CM codes that should be used during 2014

| | |
|---------------------|---|
| 81.54: | KPRO -> Total -> Total Primary |
| 81.55: | KPRO -> Total -> Total Revision |
| 00.80: | KPRO -> Total -> Total Revision |
| 00.81-00.84: | KPRO -> Hemi -> Partial Revision |

ICD – 9 HPRO Mapping

| | |
|---------------------|---|
| 81.51: | HPRO -> Total -> Total Primary |
| 81.52: | HPRO -> Hemi -> Partial Primary |
| 81.53: | HPRO -> Total -> Total Revision |
| 00.70: | HPRO -> Total -> Total Revision |
| 00.71-00.73: | HPRO -> HEMI -> Partial Revision |
| 00.85: | HPRO -> Resurfacing -> Total Primary |
| 00.86-00.87: | HPRO -> Resurfacing -> Partial Primary |

NOTE: Due to a defect that must be corrected in the NHSN system, two ICD-9 codes (00.71 and 00.73) will be rejected at this time if they are entered using the guidance provided below. As a workaround, for procedures with ICD-9 codes of 00.71 and 00.73, you must leave the optional ICD-9 code field **BLANK** on the procedure data entry screen or in your CSV/CDA import file and only enter the required “type of HPRO” fields (Hemi, Partial Revision).



Denominator for Procedure

Page 1 of 1

*required for saving

| | |
|---|---|
| Facility ID | Procedure #: |
| *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: PROC | *NHSN Procedure Code: |
| *Date of Procedure: | ICD-9-CM Procedure Code: |
| Procedure Details | |
| *Outpatient: Yes No | *Duration: ____ Hours ____ Minutes |
| *Wound Class: 0 00 00 0 | *General Anesthesia: Yes No |
| ABA Score: 1 2 3 4 5 | *Emergency: Yes No |
| *Trauma: Yes No | *Scope: Yes No |
| *Diabetes Mellitus: Yes No | *Closure Technique: Primary Other than primary |
| *Height: ____ feet ____ inches | Surgeon Code: _____ |
| (choose one) ____ meters | |
| *Weight: ____ lbs/kg (circle one) | |
| OBEC: *Duration of Labor: ____ hours | |
| Circle one: FUSN RFUSN | |
| *Spinal Level (check one) | *Approach/Technique (check one) |
| <input type="checkbox"/> Atlas-axis | <input type="checkbox"/> Anterior |
| <input type="checkbox"/> Atlas-axis/Cervical | <input type="checkbox"/> Posterior |
| <input type="checkbox"/> Cervical | <input type="checkbox"/> Anterior and Posterior |
| <input type="checkbox"/> Cervical/Dorsal/Coccygeal | <input type="checkbox"/> Transoral |
| <input type="checkbox"/> Dorsal/Coccygeal | |
| <input type="checkbox"/> Lumbar/Lumbosacral | |
| Circle one: HPRO KPRO | |
| *Check one: <input type="checkbox"/> Total <input type="checkbox"/> Hemil <input type="checkbox"/> Resurfacing (HPRO only) | |
| If Total: <input type="checkbox"/> Total Primary <input type="checkbox"/> Total Revision <input type="checkbox"/> Partial Revision | |
| If Hemil: <input type="checkbox"/> Partial Primary <input type="checkbox"/> Total Revision <input type="checkbox"/> Partial Revision | |
| If Resurfacing (HPRO only): <input type="checkbox"/> Total Primary <input type="checkbox"/> Total Revision <input type="checkbox"/> Partial Primary <input type="checkbox"/> Partial Revision | |
| <small>Assurance of Confidentiality: The information obtained in this surveillance system that would identify any individual or institution is collected with a guarantee that it will be held in strict confidence, will be used only for the purposes stated, and will not otherwise be disclosed or released without the consent of the individual, or the institution in accordance with Sections 204, 205 and 206 of the Public Health Service Act (42 USC 262, 263, and 264e).</small> | |
| <small>Public reporting burden of this collection of information is estimated to average 6 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: CDC, Reports Clearance Office, 1600 Clifton Road, NE, Atlanta, GA 30333, (404) 953-2060-0460. CDC-27-101 Rev. 6/10-01-01</small> | |

Summary

- Complete and enter or import a *Denominator for Procedure* record for every NHSN operative procedure performed that is selected for surveillance.
- Use the SSI Protocol, Tables of Instructions, and Key Terms chapters of the Patient Safety Manual for guidance.

Linking Procedures





Denominator for Procedure

Page 1 of 1

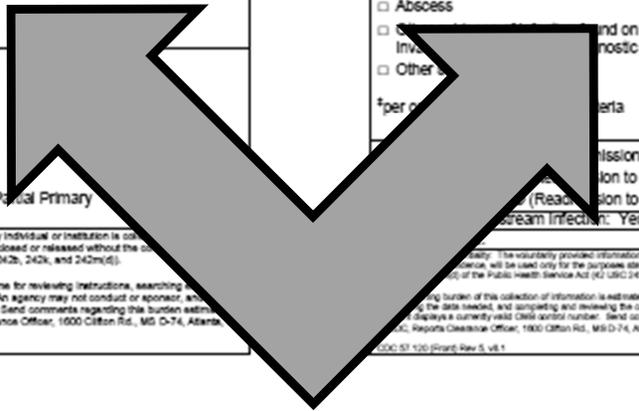
| | | | |
|--|---|----------------------|--|
| Facility ID: | Procedure #: | *required for saving | |
| *Patient ID: | Social Security #: | | |
| Secondary ID: | Medicare #: | | |
| Patient Name, Last: | First: | Middle: | |
| *Gender: F M Other | *Date of Birth: | | |
| Ethnicity (Specify): | Race (Specify): | | |
| Event Type: PROC | *NHSN Procedure Code: | | |
| *Date of Procedure: | ICD-9-CM Procedure Code: | | |
| Procedure Details | | | |
| *Outpatient: Yes No | *Duration: ____ Hours ____ Minutes | | |
| *Wound Class: C CC CO D | *General Anesthesia: Yes No | | |
| ASA Score: 1 2 3 4 5 | *Emergency: Yes No | | |
| *Trauma: Yes No | *Scope: Yes No | | |
| *Diabetes Mellitus: Yes No | *Closure Technique: Primary Other than primary | | |
| *Height: ____ feet ____ inches | *Surgeon Code: _____ | | |
| (choose one) ____ meters | | | |
| *Weight: ____ lb/kg (circle one) | | | |
| CSEC: *Duration of Labor: ____ hours | | | |
| Circle one: FUSN RFUSN | | | |
| *Spinal Level (check one) | *Approach/Technique (check one) | | |
| <input type="checkbox"/> Atlas-axis | <input type="checkbox"/> Anterior | | |
| <input type="checkbox"/> Atlas-axis/Cervical | <input type="checkbox"/> Posterior | | |
| <input type="checkbox"/> Cervical | <input type="checkbox"/> Anterior and Posterior | | |
| <input type="checkbox"/> Cervical/Dorsal/Dorsolumbar | <input type="checkbox"/> Transoral | | |
| <input type="checkbox"/> Dorsal/Dorsolumbar | | | |
| <input type="checkbox"/> Lumbar/Lumbosacral | | | |
| Circle one: HPRO KPRO | | | |
| *Check one: <input type="checkbox"/> Total <input type="checkbox"/> Heml <input type="checkbox"/> Resurfacing (HPRO only) | | | |
| If Total: <input type="checkbox"/> Total Primary <input type="checkbox"/> Total Revision <input type="checkbox"/> Partial Revision | | | |
| If Heml: <input type="checkbox"/> Partial Primary <input type="checkbox"/> Total Revision <input type="checkbox"/> Partial Revision | | | |
| If Resurfacing (HPRO only): <input type="checkbox"/> Total Primary <input type="checkbox"/> Total Revision <input type="checkbox"/> Partial Primary | | | |
| Assurance of Confidentiality: The information obtained in this surveillance system that would permit identification of any individual or institution is collected with a guarantee that it will be held in strict confidence, will be used only for the purposes stated, and will not otherwise be disclosed or released without the consent of the individual, or the institution in accordance with Sections 304, 306 and 309(d) of the Public Health Service Act (42 USC 242b, 242k, and 242m(d)). | | | |
| Public reporting burden of this collection of information is estimated to average 8 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC, Reports Clearance Officer, 1600 Clifton Rd., MS D-74, Atlanta, GA 30333, ATTN: PRA (0920-0666). CDC 57-121 Rev. 6, NHSN v8.1 | | | |



Surgical Site Infection (SSI)

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| | | |
|--|--|---|
| 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-9-CM Procedure Code: | |
| *Date of Procedure: | *Outpatient Procedure: Yes No | |
| *MDRO Infection Surveillance: | | |
| <input type="checkbox"/> Yes, this infection's pathogen & location are in-plan for Infection Surveillance in the MDRO/CDI Module | | |
| <input type="checkbox"/> No, this infection's pathogen & location are not in-plan for Infection Surveillance in the MDRO/CDI Module | | |
| *Date Admitted to Facility: | Location: | |
| Event Details | | |
| *Specific Event: | | |
| <input type="checkbox"/> Superficial Incisional Primary (SIP) | <input type="checkbox"/> Deep Incisional Primary (DIP) | |
| <input type="checkbox"/> Superficial Incisional Secondary (SIS) | <input type="checkbox"/> Deep Incisional Secondary (DIS) | |
| <input type="checkbox"/> Organ/Space (specify site): | | |
| *Specify Criteria Used (check all that apply): | | |
| <input type="checkbox"/> Purulent drainage or material | <input type="checkbox"/> Sinus tract | Laboratory |
| <input type="checkbox"/> Pain or tenderness | <input type="checkbox"/> Hypothermia | <input type="checkbox"/> Positive culture |
| <input type="checkbox"/> Localized swelling | <input type="checkbox"/> Apnea | <input type="checkbox"/> Not cultured |
| <input type="checkbox"/> Redness | <input type="checkbox"/> Bradycardia | <input type="checkbox"/> Positive blood culture |
| <input type="checkbox"/> Heat | <input type="checkbox"/> Lethargy | <input type="checkbox"/> Blood culture not done or no organisms detected in blood |
| <input type="checkbox"/> Fever | <input type="checkbox"/> Cough | <input type="checkbox"/> Positive Gram stain when culture is negative or not done |
| <input type="checkbox"/> Incision deliberately opened/draind | <input type="checkbox"/> Nausea | <input type="checkbox"/> Positive culture from ≥ 2 separate tissue or fluid samples from affected joint |
| <input type="checkbox"/> Wound spontaneously dehisces | <input type="checkbox"/> Vomiting | <input type="checkbox"/> Other positive laboratory tests [‡] |
| <input type="checkbox"/> Abscess | <input type="checkbox"/> Dysuria | <input type="checkbox"/> Imaging test evidence of Infection |
| <input type="checkbox"/> Infection on direct exam, during | <input type="checkbox"/> Other | |
| <input type="checkbox"/> Infection on diagnostic tests [‡] | | |
| <input type="checkbox"/> Other | | |
| Clinical Diagnosis | | |
| <input type="checkbox"/> Physician diagnosis of this event type | | |
| <input type="checkbox"/> Physician institutes appropriate antimicrobial therapy [‡] | | |
| *Stream Infection: Yes No | | |
| *Died: Yes No | | |
| *SSI Contributed to Death: Yes No | | |
| *Pathogens Identified: Yes No *If Yes, specify on pages 2-3. | | |
| Assurance of Confidentiality: The voluntarily provided information obtained in this surveillance system that would permit identification of any individual or institution is collected with a guarantee that it will be held in strict confidence, will be used only for the purposes stated, and will not otherwise be disclosed or released without the consent of the individual, or the institution in accordance with Sections 304, 306 and 309(d) of the Public Health Service Act (42 USC 242b, 242k, and 242m(d)). | | |
| Public reporting burden of this collection of information is estimated to average 32 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC, Reports Clearance Officer, 1600 Clifton Rd., MS D-74, Atlanta, GA 30333, ATTN: PRA (0920-0666). CDC 57-121 (Post) Rev 5, v8.1 | | |



Denominator for Procedure and SSI records must be LINKED so that the correct risk factor data are matched to the SSI for a given patient.

Linking Procedure and SSI Event

1. Enter the Denominator for Procedure record
2. Enter the SSI record
3. Link the two records

Linking Procedures and SSI Events

When SSI is selected from the Event Type field, the link button automatically appears on the screen and message indicates that the event is not linked. Click on the button. Don't need to enter the procedure data.

Event Information HELP

Event Type*: Date of Event*:

NHSN Procedure Code*:

ICD-9-CM Code: Outpatient Procedure*:

Procedure Date*:  **Event is not Linked**

MDRO Infection Surveillance*:

Location:

Date Admitted to Facility>: 

A new screen appears listing all the operative procedures this patient has had.

Check the box next to the appropriate procedure, and click on the "Link/Unlink" button.

Link Procedure List

Patient ID: 123456

Check the procedure to link this Event to and click Link

First | Previous | Next | Last

Displaying 1 - 6 of 6

| Link/Unlink | Event # | NHSN Procedure Code | ICD-9-CM Code | Procedure Date | Linked Events |
|-------------------------------------|----------|---------------------|---------------|----------------|---------------|
| <input checked="" type="checkbox"/> | 13227825 | COLO | | 01/16/2014 | |

Event Information 

Event Type*: SSI - Surgical Site Infection Date of Event*: 

NHSN Procedure Code*: COLO - Colon surgery

ICD-9-CM Code: Outpatient Procedure*: N - No

Procedure Date*: 01/16/2014 **Event Linked**

MDRO Infection Surveillance*:

Location:

Date Admitted to Facility>: 

After linking an SSI to its corresponding procedure, the remainder of the SSI form must still be completed and the record saved for linking to occur.

Event Information 

Event Type*: SSI - Surgical Site Infection Date of Event*: 02/01/2014 

NHSN Procedure Code*: COLO - Colon surgery

ICD-9-CM Code: Outpatient Procedure*: N - No

Procedure Date*: 01/16/2014 **Event Linked**

MDRO Infection Surveillance*: No, this infection's pathogen/location are not in-plan for Infection Surveillance in the MDRO/CDI Module

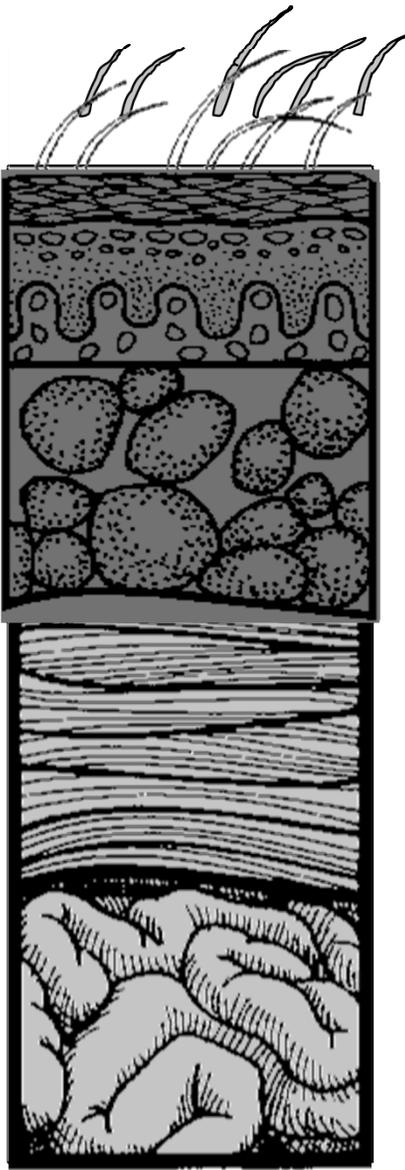
Location: MS2 - MED SURG 2

Date Admitted to Facility>: 01/16/2014 

Definitions of Surgical Site Infections

<http://www.cdc.gov/nhsn/PDFs/pscManual/9pscSSIcurrent.pdf>

Superficial Incisional SSI



Infection occurs within 30 days after any NHSN operative procedure (where day 1 = the procedure date), including those coded as ‘OTH’*

and

involves only skin and subcutaneous tissue of the incision

and

patient has at least one of the following:

a. purulent drainage from the superficial incision.

b. organisms isolated from an aseptically-obtained culture of fluid or tissue from the superficial incision.

c. superficial incision that is deliberately opened by a surgeon, attending physician** or other designee and is culture positive or not cultured

and

patient has at least one of the following signs or symptoms: pain or tenderness; localized swelling; redness; or heat. A culture negative finding does not meet this criterion.

d. diagnosis of a superficial incisional SSI by the surgeon or attending physician** or other designee .

New Reporting Instruction



Multiple tissue levels are involved in the infection:

The type of SSI (superficial incisional, deep incisional, or organ/space) reported should reflect the deepest tissue layer involved in the infection:

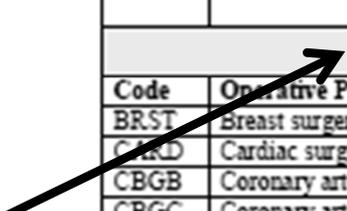
- a) Report infection that involves the organ/space as an organ/space SSI, whether or not it also involves the superficial or deep incision sites.
- b) Report infection that involves the superficial and deep incisional sites as a deep incisional SSI.



Table 3. Surveillance Period for Deep Incisional or Organ/Space SSI Following Selected NHSN Operative Procedure Categories. Day 1 = the date of the procedure.

| 30-day Surveillance | | | |
|---------------------|---|------|--|
| Code | Operative Procedure | Code | Operative Procedure |
| AAA | Abdominal aortic aneurysm repair | LAM | Laminectomy |
| AMP | Limb amputation | LTP | Liver transplant |
| APPY | Appendix surgery | NECK | Neck surgery |
| AVSD | Shunt for dialysis | NEPH | Kidney surgery |
| BILI | Bile duct, liver or pancreatic surgery | OVRY | Ovarian surgery |
| CEA | Carotid endarterectomy | PRST | Prostate surgery |
| CHOL | Gallbladder surgery | REC | Rectal surgery |
| COLO | Colon surgery | SB | Small bowel surgery |
| CSEC | Cesarean section | SPLE | Spleen surgery |
| GAST | Gastric surgery | THOR | Thoracic surgery |
| HTP | Heart transplant | THYR | Thyroid and/or parathyroid surgery |
| HYST | Abdominal hysterectomy | VHYS | Vaginal hysterectomy |
| KTP | Kidney transplant | XLAP | Exploratory Laparotomy |
| | | OTH | Other operative procedures not included in the NHSN categories |
| 90-day Surveillance | | | |
| Code | Operative Procedure | | |
| BRST | Breast surgery | | |
| CARD | Cardiac surgery | | |
| CBGB | Coronary artery bypass graft with both chest and donor site incisions | | |
| CBGC | Coronary artery bypass graft with chest incision only | | |
| CRAN | Craniotomy | | |
| FUSN | Spinal fusion | | |
| FX | Open reduction of fracture | | |
| HER | Herniorrhaphy | | |
| HPRO | Hip prosthesis | | |
| KPRO | Knee prosthesis | | |
| PACE | Pacemaker surgery | | |
| PVBY | Peripheral vascular bypass surgery | | |
| RFUSN | Refusion of spine | | |
| VSHN | Ventricular shunt | | |

Only for DI and O/S SSI



NOTE: Superficial incisional SSIs are only followed for a 30-day period for all procedure types.

Reporting Instructions

- Do not report a stitch abscess (minimal inflammation and discharge confined to the points of suture penetration) as a SSI.
- Do not report a localized stab wound or pin site infection as a SSI. While it would be considered either a skin (SKIN) or soft tissue (ST) infection, depending on its depth, it is not reportable under this module.
- Diagnosis of “cellulitis”, by itself, does not meet criterion for superficial incisional SSI.

SIP and SIS

Superficial incisional primary (SIP)

A superficial incisional SSI that is identified in the primary incision in a patient that has had an operation with one or more incisions (e.g., C-section incision or chest incision for CBGB)

Superficial incisional secondary (SIS)

A superficial incisional SSI that is identified in the secondary incision in a patient that has had an operation with more than one incision (e.g., donor site incision for CBGB)

Example



Patient delivers a baby by C-Section on August 23. On her first postpartum visit to her surgeon on September 20, she notes yellow purulent drainage in the superficial incision.

Does Gretchen have a surgical site infection?

Yes

Is it a superficial SSI?

Yes

Is it an SIP or an SIS?

SIP

Example

Patient underwent a coronary artery bypass graft (CBGB) in which the surgeon obtained a donor vessel from a site in patients left leg.

5 days postoperatively, patient had pain and edema in the leg incision. The surgeon opened the superficial incision, drained the pus, and irrigated the wound.

Does Robert have a superficial incisional SSI?

Yes

Is it a SIS or SIP?

SIS



Case 5

- 2/18: 45-year-old male admitted and had a laparoscopic left hemicolectomy, ICD-9-CM code 17.35 (COLO)
 - Three trocar sites were closed and the fourth site was used for placement of a JP drain.
- 2/24: Purulent drainage noted at one of the trocar sites. Culture obtained and was (+) for *Enterobacter* spp. and *E. coli*); patient started on antibiotics

Is this procedure primarily
closed for 2014?

- ★ 1. Yes
- 2. No

Case 5 - Rationale

- Surgeon is using the existing trocar site to place the JP drain rather than creating another stab wound for the same purpose.
- If there are multiple incisions, if one of them is primarily closed it is considered a closed procedure.

What should be reported to NHSN?

1. Nothing. The surgeon did not open the wound, so the criteria are not met.
2. Nothing. It is an SSI, but not an HAI.
- ✓ 3. SSI – SIP
4. SSI – DIP

Case 5 - Rationale

Superficial Incisional SSI

- ✓ Infection occurs within 30 days after any NHSN operative procedure (where day 1 = the procedure date), including those coded as 'OTH'*
and
- ✓ involves only skin and subcutaneous tissue of the incision
and
- ✓ patient has at least one of the following:
 - a. purulent drainage from the superficial incision.
 - ✓ b. organisms isolated from an aseptically-obtained culture of fluid or tissue from the superficial incision.
 - c. superficial incision that is deliberately opened by a surgeon, attending physician** or other designee and is culture positive or not cultured
and
- patient has at least one of the following signs or symptoms: pain or tenderness; localized swelling; redness; or heat. A culture negative finding does not meet this criterion.
- d. diagnosis of a superficial incisional SSI by the surgeon or attending physician** or other designee .

Case 6

- Patient has a total hip arthroplasty (HPRO) performed on 03/17 at Hospital A.
- Discharged from Hospital A on 3/19.
- Admitted to Hospital B on 3/25 with purulent drainage from the superficial incision.
- Further investigation concludes this is a superficial incisional SSI.

What should Hospital B do?

Notify Hospital A about the SSI

What should Hospital A do?

Report the SSI to NHSN if it is in their monthly reporting plan

What if the infection met criteria on day postop day 35?

Not an SSI; not reported

Case 6 - Rationale

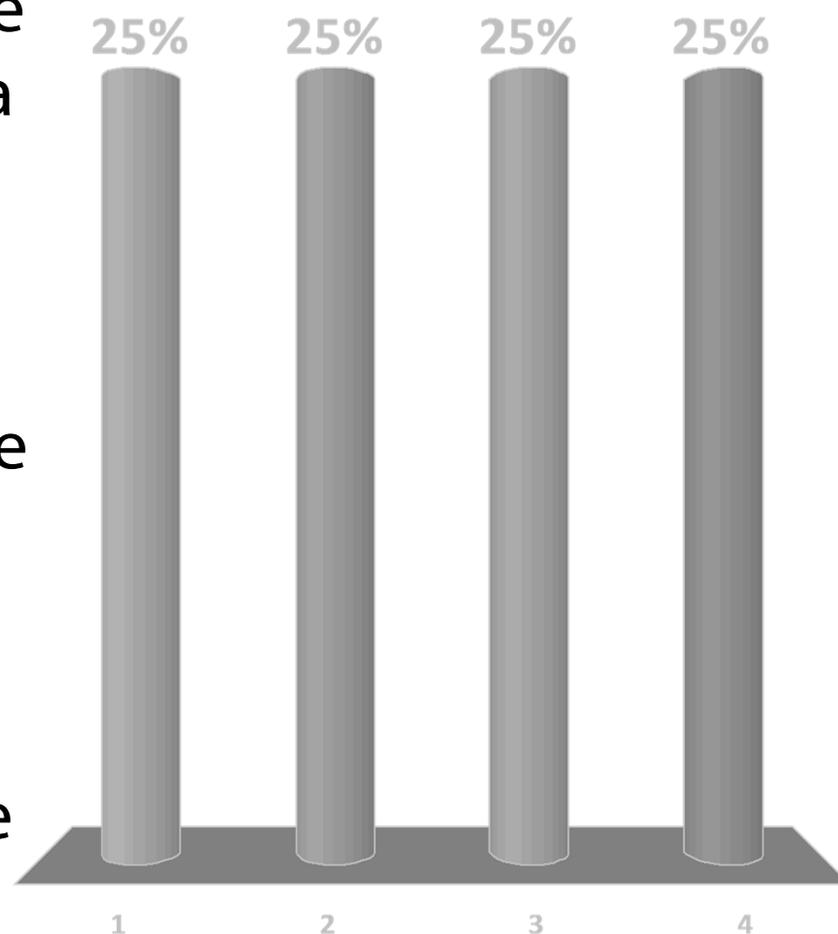
- SSIs are always associated with a particular operative procedure (through linking) and with the facility in which that operation was performed; in this case, that was Hospital A
- Superficial incisions are followed for only 30 days

Case 7

- ❑ 70 y. o. male patient admitted on 3/10/14 and underwent a hemi-colectomy (ICD 9 Code 17.39) and repair of an abdominal wall hernia (ICD 9 Code 53.59) via the same incision on day of admission. The incision was closed and a JP drain was placed via a stab wound in the LLQ.
- ❑ Patient discharged on 3/14/14.
- ❑ 3/17/14 patient arrives to ED with a red, painful incision and the incision is draining yellow foul smelling discharge from the superficial incision. Physician removes 2 staples and probes wound .The fascia is intact and only the subcutaneous tissue is involved. No cultures were obtained.
- ❑ Antibiotics ordered, wound packed and patient discharged home.

What should be reported to NHSN?

1. Nothing. The wound culture was negative, so the criteria are not met.
2. Nothing. He had 2 procedures so you don't know which one caused the infection.
- ✓ 3. SSI – SIP attributable to the COLO
4. SSI – DIP attributable to the HERN



If more than one operation is done through a single incision...

First, attempt to determine the procedure that is thought to be associated with the infection.

Example: If the patient had a CBGC and CARD done at the same time and develops an infected valve, then the SSI will be linked to the CARD.

If it's not clear (as in the case of a superficial incisional SSI), use the NHSN Principal Operative Procedure Selection Lists to select which operative procedure to report.

NHSN Principal Operative Procedure Category Selection Lists

- Five lists in Table 5
 - Abdominal operations
 - Thoracic operations
 - Neurosurgical (spine) operations
 - Neurosurgical (brain) operations
 - Neck operations
- Categories with the highest risk of SSI are listed before those with lower risks

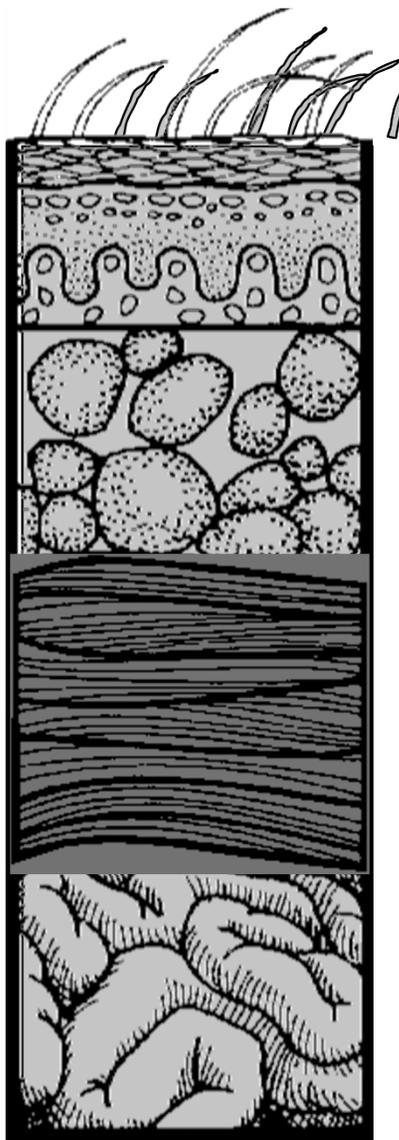
Table 5. NHSN Principal Operative Procedure Category Selection Lists

Table 5. NHSN Principal Operative Procedure Category Selection Lists
 The following lists are derived from the operative procedures listed in [Table 1](#). The categories with the highest risk of SSI are listed before those with lower risks.

| 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 | 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 |
| Priority | Code | Thoracic Operations |
| 1 | HTP | Heart transplant |
| 2 | CBGB | Coronary artery bypass graft with donor incision(s) |
| 3 | CBGC | Coronary artery bypass graft, chest incision only |
| 4 | CARD | Cardiac surgery |
| 5 | THOR | Thoracic surgery |
| Priority | Code | Neurosurgical (Brain/Spine) Operations |
| 1 | VSHN | Ventricular shunt |
| 2 | RFUSN | Refusion of spine |
| 3 | CRAN | Cranotomy |
| 4 | FUSN | Spinal fusion |
| 5 | LAM | Laminectomy |
| Priority | Code | Neck Operations |
| 1 | NECK | Neck surgery |
| 2 | THYR | Thyroid and or parathyroid surgery |

Deep Incisional SSI

MD diagnosis has
been removed



Infection occurs within 30 or 90 days after the NHSN operative procedure (where day 1 = the procedure date) according to the list in Table 3

and

involves deep soft tissues of the incision (e.g., fascial and muscle layers)

and

patient has at least one of the following:

- a. purulent drainage from the deep incision.
- b. a deep incision that spontaneously dehisces or is deliberately opened by a surgeon, attending physician** or other designee and is culture-positive or not cultured

and

patient has at least one of the following signs or symptoms: fever ($>38^{\circ}\text{C}$); localized pain or tenderness. A culture-negative finding does not meet this criterion.

- c. an abscess or other evidence of infection involving the deep incision that is detected on direct examination, during invasive procedure, or by histopathologic examination or imaging test.

DIP and DIS

Deep incisional primary (DIP)

Deep Incisional Primary (DIP) – a deep incisional SSI that is identified in a primary incision in a patient that has had an operation with one or more incisions (e.g., C-section incision or chest incision for CBGB)

Deep incisional secondary (DIS)

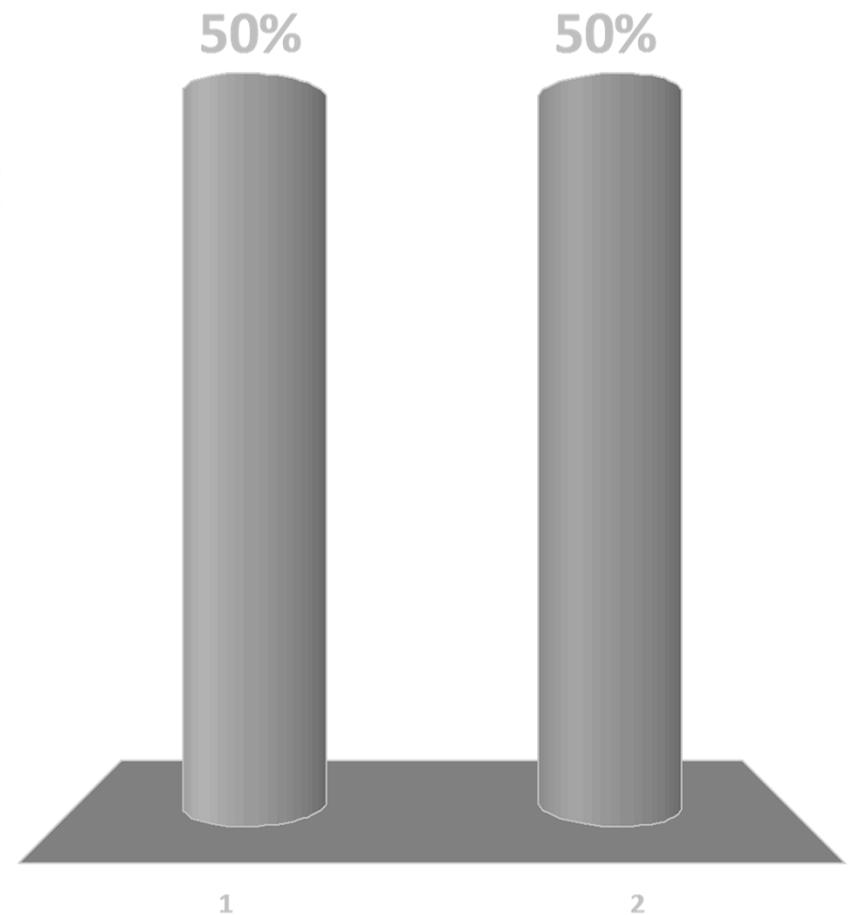
Deep Incisional Secondary (DIS) – a deep incisional SSI that is identified in the secondary incision in a patient that has had an operation with more than one incision (e.g., donor site incision for CBGB)

Case 8

- Patient is admitted to the hospital on 03/12 for elective surgery and active MRSA screening test is positive.
- On the same day, patient undergoes total abdominal hysterectomy (HYST).
- Postoperative course is unremarkable; patient discharged on 3/15.
- On 3/18, patient is readmitted with complaints of acute incisional pain since day before. Surgeon opens the wound and notes that the fascia was not intact and sends a specimen from the deep wound.
- On 3/20 culture results are positive for MRSA.

Is this an SSI?

- ✓ 1. Yes, meets criteria
- 2. No, patient was colonized with MRSA so this was POA



What infection should be reported?

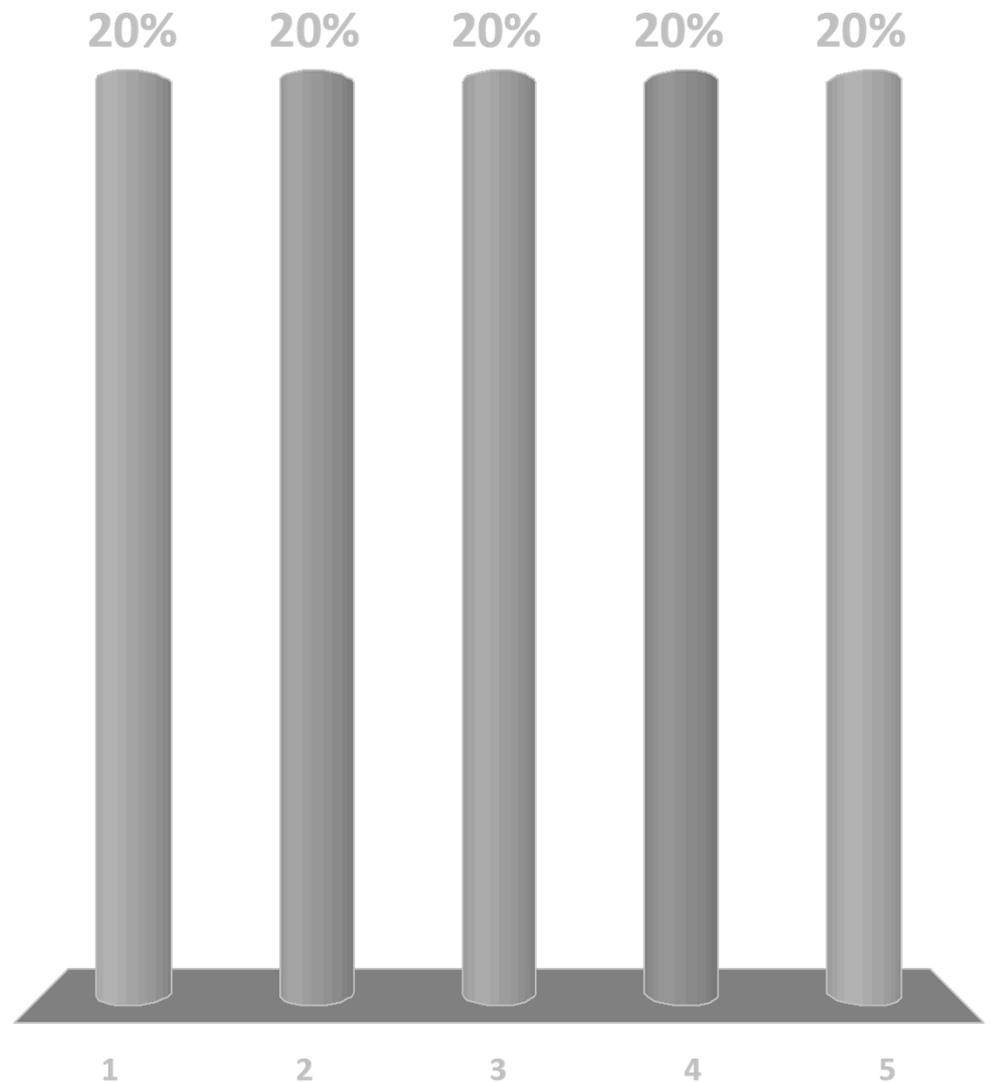
1. SSI-SIP

2. SSI-SIS

3. SSI-DIP

4. SSI-DIS

5. SSI-IAB



Case 8 – Rationale

Deep Incisional SSI - Criterion b

✓ Must meet the following criteria:

Infection occurs within 30 or 90 days after the NHSN operative procedure (where day 1 = the procedure date) according to the list in Table 3

✓ *and*

involves deep soft tissues of the incision (e.g., fascial and muscle layers)

and

patient has at least one of the following:

a. purulent drainage from the deep incision.

✓ b. a deep incision that spontaneously dehisces or is deliberately opened by a surgeon, attending physician** or other designee and is culture-positive or not cultured

and

patient has at least one of the following signs or symptoms: fever (>38°C); localized pain or tenderness. A culture-negative finding does not meet this criterion.

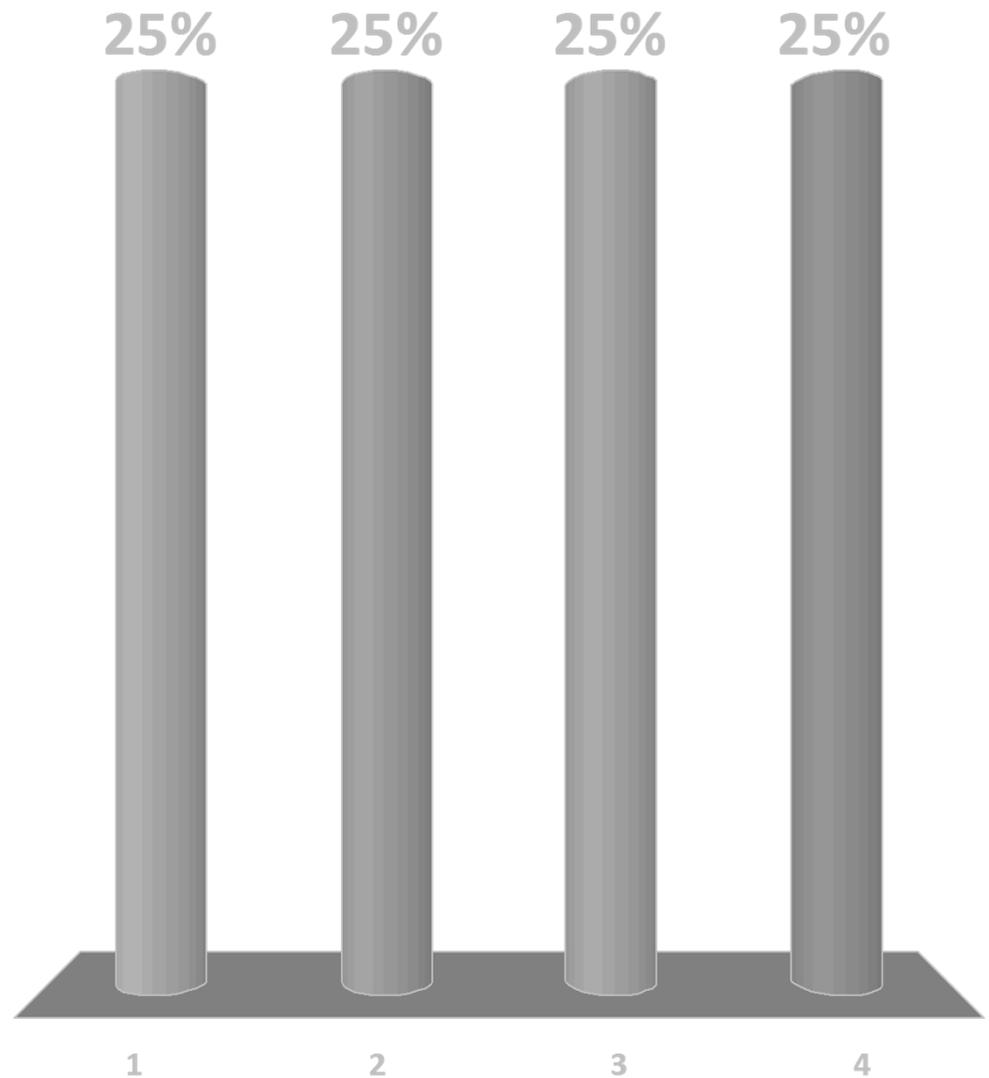
c. an abscess or other evidence of infection involving the deep incision that is detected on direct examination, during invasive procedure, or by histopathologic examination or imaging test.

Case 8 – different scenario

- Patient is admitted to the hospital on 03/12 for elective surgery and active MRSA screening test is positive.
- On the same day, patient undergoes total abdominal hysterectomy (HYST).
- Postoperative course is unremarkable; patient discharged on 3/15.
- On 3/18, patient is readmitted with complaints of acute incisional pain since day before. Surgeon opened the wound and clear serous drainage is found and notes that the fascia was not intact and sent a specimen from the deep wound.
- On 3/20 culture results are final and no growth.

What infection should be reported?

1. SSI-SIP
2. SSI-DIP
3. SSI-Organ space
- ✓ 4. Nothing – not an SSI



Case 8 – Rationale

Deep Incisional SSI - Criterion b

✓ Must meet the following criteria:

Infection occurs within 30 or 90 days after the NHSN operative procedure (where day 1 = the procedure date) according to the list in Table 3

✓ *and*

involves deep soft tissues of the incision (e.g., fascial and muscle layers)

and

patient has at least one of the following:

a. purulent drainage from the deep incision.

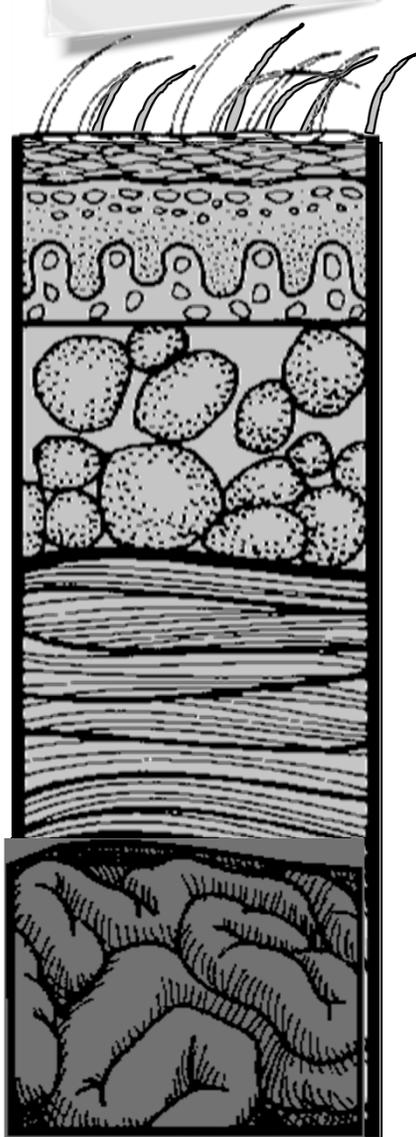
b. a deep incision that spontaneously dehisces or is deliberately opened by a surgeon, attending physician** or other designee and is culture-positive or not cultured

and

patient has at least one of the following signs or symptoms: fever (>38°C); localized pain or tenderness. A culture-negative finding does not meet this criterion.

c. an abscess or other evidence of infection involving the deep incision that is detected on direct examination, during invasive procedure, or by histopathologic examination or imaging test.

*MD diagnosis
has been
removed*



Organ/Space SSI

Infection occurs within 30 or 90 days after the NHSN operative procedure (where day 1 = the procedure date) according to the list in Table 3

and

infection involves any part of the body, excluding the skin incision, fascia, or muscle layers, that is opened or manipulated during the operative procedure

and

patient has at least one of the following:

a. purulent drainage from a drain that is placed into the organ/space

b. organisms isolated from an aseptically-obtained culture of fluid or tissue in the organ/space

c. an abscess or other evidence of infection involving the organ/space that is detected on direct examination, during invasive procedure, or by histopathologic examination or imaging test

and

meets at least one criterion for a specific organ/space infection site listed in Table 4.

Specific sites of infection must be used to differentiate organ/space SSI and their criteria must also be met. Use Chapter 17.

Organ/Space SSI

Table 4. *Specific Sites of an Organ/Space SSI.* Criteria for these sites can be found in the NHSN Help system (must be logged in to NHSN) or the Surveillance Definitions for Specific Types of Infections chapter.

| Code | Site | Code | Site |
|------|-------------------------------------|------|---|
| BONE | Osteomyelitis | LUNG | Other infections of the respiratory tract |
| BRST | Breast abscess or mastitis | MED | Mediastinitis |
| CARD | Myocarditis or pericarditis | MEN | Meningitis or ventriculitis |
| DISC | Disc space | ORAL | Oral cavity (mouth, tongue, or gums) |
| EAR | Ear, mastoid | OREP | Other infections of the male or female reproductive tract |
| EMET | Endometritis | OUTI | Other infections of the urinary tract |
| ENDO | Endocarditis | PJI | Periprosthetic Joint Infection |
| EYE | Eye, other than conjunctivitis | SA | Spinal abscess without meningitis |
| GIT | GI tract | SINU | Sinusitis |
| HEP | Hepatitis | UR | Upper respiratory tract |
| IAB | Intraabdominal, not specified | VASC | Arterial or venous infection |
| IC | Intracranial, brain abscess or dura | VCUF | Vaginal cuff |
| JNT | Joint or bursa | | |

NOTE: New PJI definition.

PJI – Periprosthetic Joint Infection

NOTE: This is the correct definition and it is what is currently in the Protocol.

3a is CRP > 100 mg/L AND ESR > 30 mm/hr

PJI – Periprosthetic Joint Infection (following HPRO and KPRO only)

Joint or bursa infections must meet at least 1 of the following criteria:

- 1. Two positive periprosthetic (tissue or fluid) cultures with identical organisms**
- 2. A sinus tract communicating with the joint**
- 3. Having three of the following minor criteria:**
 - a. Elevated serum C-reactive protein (CRP; > 100 mg/L) AND erythrocyte sedimentation rate (ESR; > 30 mm/hr.).**
 - b. Elevated synovial fluid white blood cell (WBC; > 10,000 cells/μL) count OR ++ (or greater) change on leukocyte esterase test strip of synovial fluid.**
 - c. Elevated synovial fluid polymorphonuclear neutrophil percentage (PMN% > 90%).**
 - d. Positive histological analysis of periprosthetic tissue (> 5 neutrophils (PMNs) per high power field).**
 - e. A single positive periprosthetic (tissue or fluid) culture.**

Reporting Instruction

- ❑ If a patient has an infection in the organ/space being operated on, subsequent continuation of this infection type during the remainder of the surveillance period is considered an organ/space SSI, if organ/space SSI and site-specific infection criteria are met.

Example

- ❑ On 8/1 - Patient presents to ED with acute abdomen and is admitted to the OR on the same day for colon resection (COLO). Peritoneal abscess noted at time of surgery. Abdominal abscesses drained and thorough abdominal washout incision loosely closed with some packing between staples and a JP drain in an adjacent stab wound.
- ❑ 8/4 - Patient discharged wounds healing well.
- ❑ 8/8 - Patient presents to ED with fever, abdominal pain, and purulent drainage via the JP drain.
- ❑ This is reported as an SSI-IAB (meets IAB criterion 3a.

Organ Space Reporting Instructions



- In Chapter 9, the Reporting Instructions in the SSI criteria table, the Numerator Data section and the Table of Instructions provide important guidance on the many nuances of how to report SSI details in a variety of situations.
- The examples shown in this presentation are only some of them.
- Please read and follow all of the instructions carefully!

When a patient with an SSI has had more than one operation...



If a patient has several NHSN operations prior to an SSI, report the operation that was performed most closely in time prior to the infection date. This does not apply when 2 operative procedure are done within the same 24 hour period via the same incision.

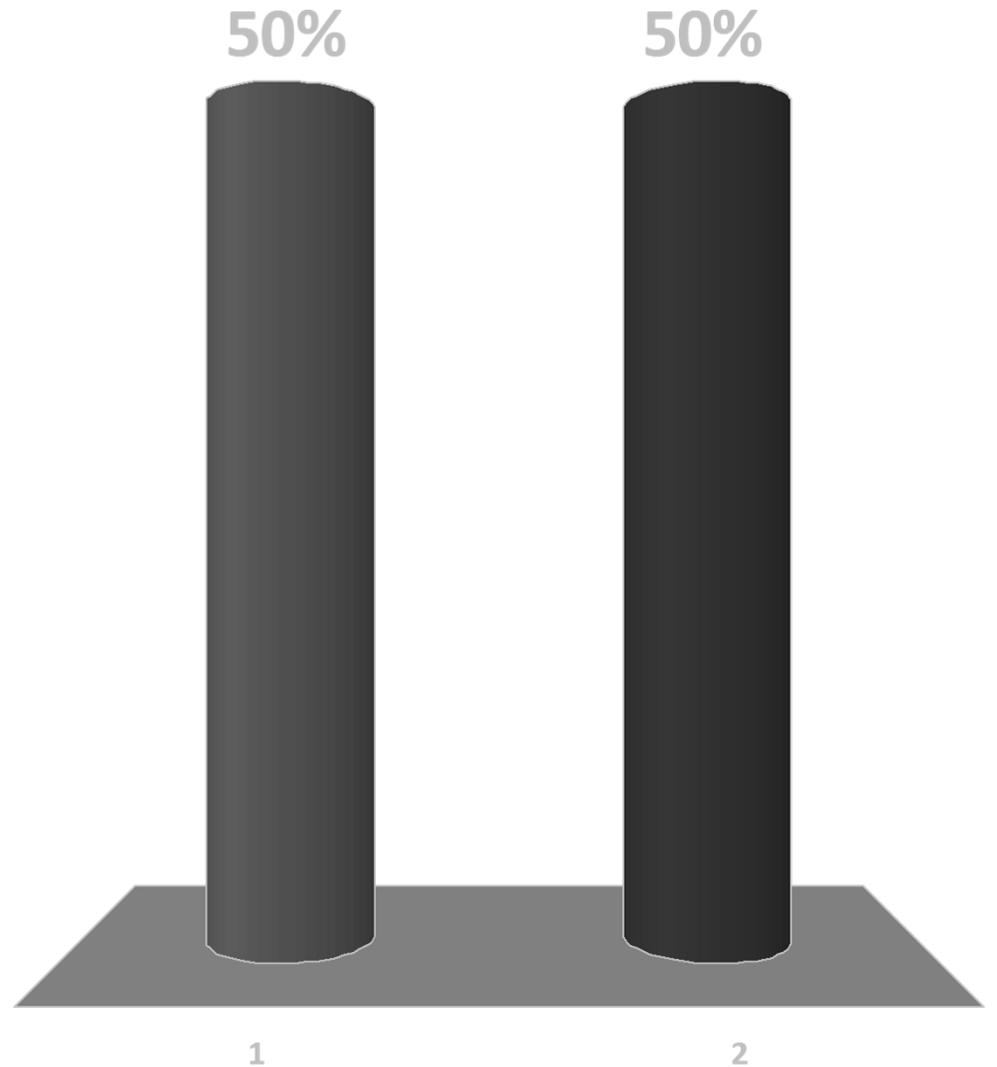
Example: Patient underwent a COLO on 2/12/14. One week later on 2/19/14, he returns to OR for an APPY via the same incision. He developed an incisional SSI on 2/28/14. This SSI is attributed to the second procedure (CHOL), not the COLO.

Case 9

- 3/10 - Patient admitted and underwent a hemicolectomy due to colon cancer. Wound class = Clean Contaminated.
- 3/14: Temp up to 38.7°C, abdominal pain. Ultrasonography shows intraabdominal abscess.
- 3/15: To OR for I&D of the abscess. Abscess specimen collected for culture. Antibiotics begun. Abscess culture positive for *E. coli*.
- 3/18: Discharged from hospital on oral antibiotics.

Does this patient meet criteria for an organ space SSI?

- ✓ 1. Yes
- 2. No



Case 9 – Answer

✓ Infection occurs within 30 or 90 days after the NHSN operative procedure (where day 1 = the procedure date) according to the list in Table 3

and

✓ infection involves any part of the body, excluding the skin incision, fascia, or muscle layers, that is opened or manipulated during the operative procedure

and

patient has at least one of the following:

a. purulent drainage from a drain that is placed into the organ/space

✓ b. organisms isolated from an aseptically-obtained culture of fluid or tissue in the organ/space

✓ c. an abscess or other evidence of infection involving the organ/space that is detected on direct examination, during invasive procedure, or by histopathologic examination or imaging test

and

✓ meets at least one criterion for a specific organ/space infection site listed in Table 4.

Case 9 – (cont.)

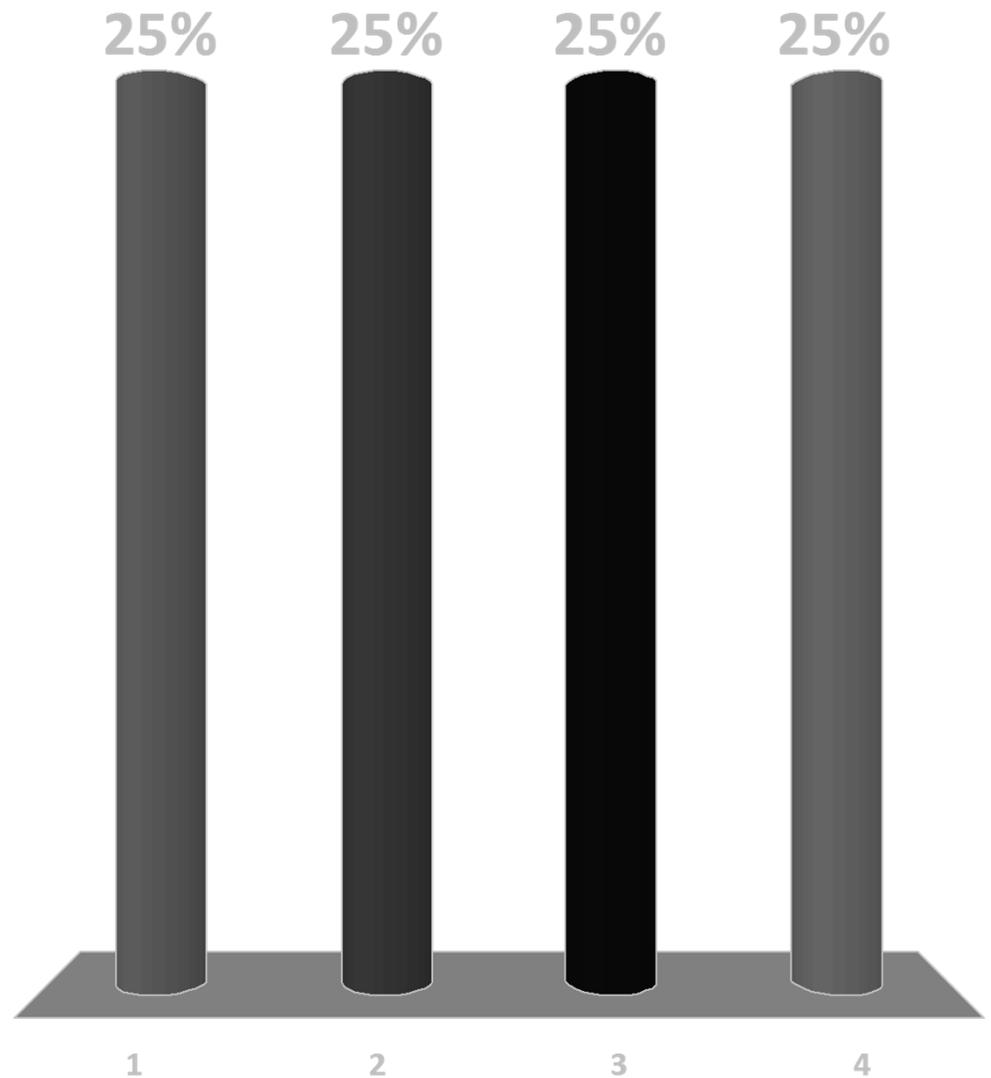
- 2 different criteria must be met for Organ/Space SSI
 - SSI organ/space criteria AND
 - Those of the specific site of the organ/space operated on

| | |
|---|---|
| Event Details: Specify Criteria Used | Required. Check each of the elements of the definition that were used to identify the specific type of SSI. Specific organ/space event types have their own unique criteria which must be met. They are found in the <u>Surveillance Definitions</u> chapter. |
|---|---|

SSI event form Table of Instructions

What type of SSI does this patient have?

1. SSI-SIP
2. SSI-DIP
3. SSI-IAB
4. SSI-GIT



GI- IAB- Intraabdominal

IAB-Intraabdominal infection, not specified elsewhere including gallbladder, bile ducts, liver (excluding viral hepatitis), spleen, pancreas, peritoneum, subphrenic or subdiaphragmatic space, or other intraabdominal tissue or area not specified elsewhere

Intraabdominal infections must meet at least 1 of the following criteria:

1. Patient has organisms cultured from abscess and/or purulent material from intraabdominal space obtained during an invasive procedure.
2. Patient has abscess or other evidence of intraabdominal infection seen during an invasive procedure or histopathologic examination.
3. Patient has at least 2 of the following signs or symptoms: fever ($>38^{\circ}\text{C}$), nausea*, vomiting*, abdominal pain*, or jaundice*

and

at least 1 of the following:

- a. organisms cultured from drainage from an aseptically-placed drain (e.g., closed suction drainage system, open drain, T-tube drain, CT guided drainage)
- b. organisms seen on Gram's stain of drainage or tissue obtained during invasive procedure or from an aseptically-placed drain
- c. organisms cultured from blood and imaging test evidence of infection (e.g., abnormal findings on ultrasound, CT scan, MRI, or radiolabel scans [gallium, technetium, etc.] or on abdominal x-ray).

* With no other recognized cause

Case 9 - Rationale

- Why not GI-GIT –Gastrointestinal tract as the specific site of SSI?
 - The abscess is in general intraabdominal space and not involving the actual GI tract
 - GIT focuses on organs of the GI tract
 - Therefore, IAB is the appropriate choice site of SSI in this case

Site Definitions Chapter; Chapter 17

Case 9 - (cont.)

Let's change the scenario -- at the time of the I & D, it was discovered that the patient had suffered an anastomotic leak from which the abscess developed.

- Does this change your determination of an SSI - IAB?

No. Although an anastomotic leak can be a complication of surgery, the fact remains that this patient meets the criterion for an SSI. If the surgery had not been performed there would not have been an anastomotic leak.

Case 10

1/22: Patient had an abdominal hysterectomy (HYST)

2/1: Pelvic pain; Temp 38.4°C

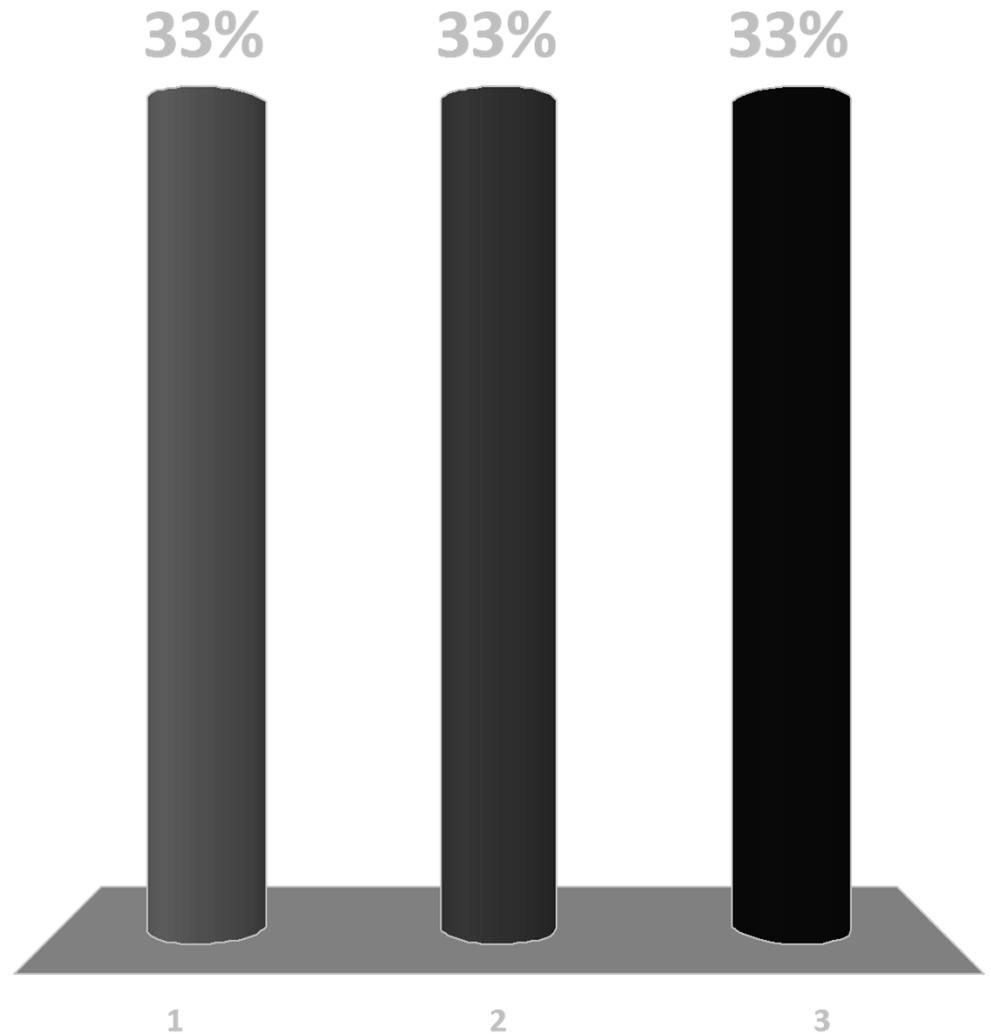
2/2: MRI reveals a fluid in the deep pelvic tissue

2/3: Surgeon opened wound in the OR and drained purulent fluid; specimen to lab for culture; notes 'infected hematoma"; antibiotics begun; incision closed primarily

2/5: Culture positive for *Pseudomonas aeruginosa*

What should be reported?

1. SSI – IAB
2. SSI – OREP
3. SSI – EMET



Why isn't this an SSI-IAB?

IAB – Intraabdominal, not specified elsewhere including gallbladder, bile ducts, liver (excluding viral hepatitis), spleen, pancreas, peritoneum, subphrenic or subdiaphragmatic space, or other intraabdominal tissue or area not specified elsewhere

Site Definitions Chapter; Chapter 17

Case 10 - Rationale

OREP-Other infection of the male or female reproductive tract (epididymis, testes, prostate, vagina, ovaries, uterus, or other deep pelvic tissues, excluding endometritis or vaginal cuff infections)

Other infections of the male or female reproductive tract must meet at least *1* of the following criteria:

1. Patient has organisms cultured from tissue or fluid from affected site.
2. Patient has an abscess or other evidence of infection of affected site seen during an invasive procedure or histopathologic examination.
3. Patient has 2 of the following signs or symptoms: fever ($>38^{\circ}\text{C}$), nausea*, vomiting*, pain*, tenderness*, or dysuria*

and

at least *1* of the following:

- a. organisms cultured from blood
- b. physician diagnosis.

* With no other recognized cause

Reporting instructions

- Report endometritis as EMET.
- Report vaginal cuff infections as VCUF.

Case 11

On 5/15 a 45-year-old female undergoes an abdominal hysterectomy (HYST) and colectomy (COLO) performed through the same incision.

If both of these procedures are in your Monthly Reporting Plan in May, which one(s) do you enter into NHSN?

Both HYST and COLO procedures are entered

Case 11 - Rationale

3. **Different operative procedure categories performed during same trip to the**

OR: If procedures in more than one NHSN operative procedure category are performed during the same trip to the operating room through the same or different incisions, a *Denominator for Procedure* form is reported for each NHSN operative procedure category being monitored. For example, if a CARD and CBGC are done through the same incision, a *Denominator for Procedure* form is reported for each. In another example, if following a motor vehicle accident, a patient has an open reduction of fracture (FX) and splenectomy (SPLE) performed during the same trip to the operating room and both procedure categories are being monitored, complete a *Denominator for Procedure* form for each.

EXCEPTION: If a patient has both a CBGC and CBGB during the same trip to the operating room, report only as a CBGB. Only report as a CBGC when there is a chest incision only. CBGB and CBGC are never reported for the same patient for the same trip to the operating room. The time from chest incision to chest primary closure is reported as the duration of the procedure.

SSI Chapter: Denominator Reporting Instructions

Case 11 (cont.)

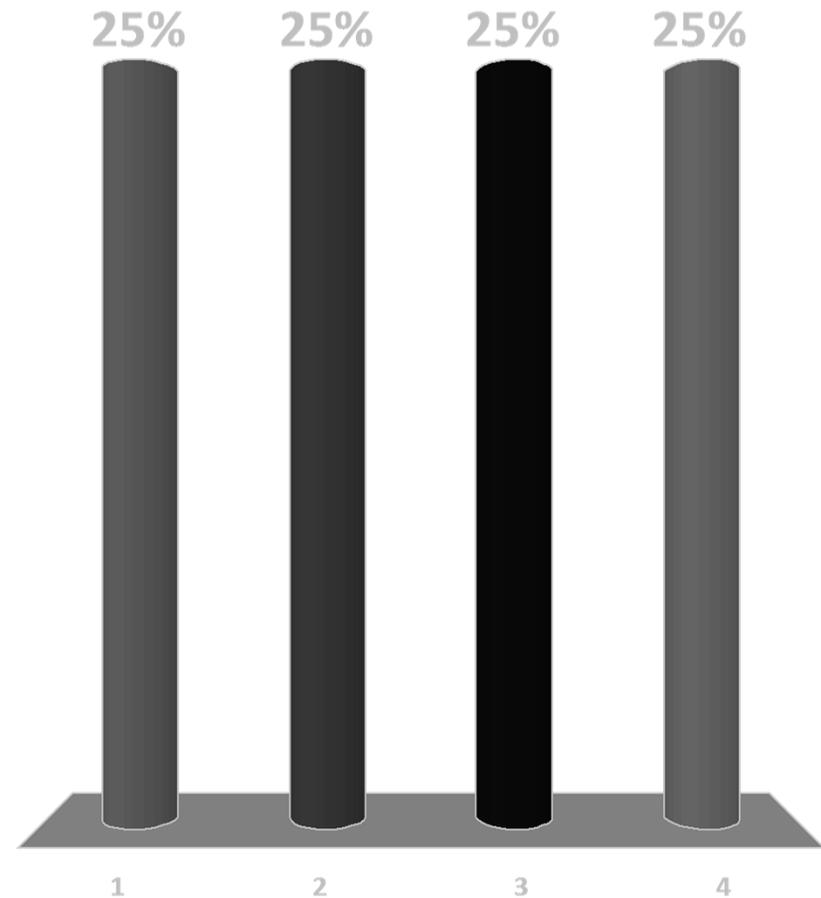
- 5/15: A 45-year-old female undergoes an abdominal hysterectomy (HYST) and colectomy (COLO) performed through the same incision.
- 5/19: Patient spikes temp to 38°C, has abdominal pain and emesis. Ultrasound shows fluid collection in abdominal cavity. Fluid specimen for culture is obtained by needle aspiration.
- 5/20: Culture positive for *E. faecium*, many neutrophils seen

Is this an HAI?

Yes

Is this an SSI?

1. SSI-Deep Incisional Primary
2. SSI-Deep Incisional Secondary
3. SSI Organ/Space, specific site IAB
4. This is an IAB but there is no SSI infection

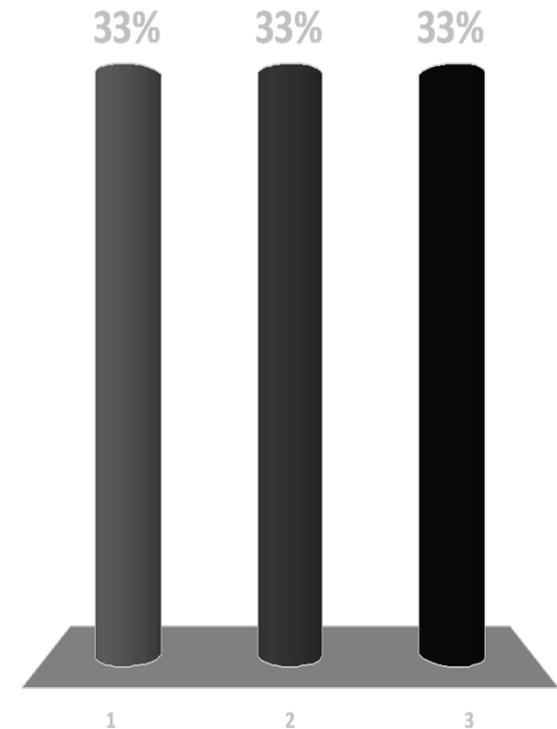


To which procedure is the SSI attributed?

1. **HYST**

★ 2. **COLO**

3. **Both HYST and COLO**



Case 11 - Rationale

If a procedure from more than one NHSN operative procedure category was done through a single incision, attempt to determine the procedure that is thought to be associated with the infection. If it is not clear (as is often the case when the infection is a superficial incisional SSI), or if the infection site being reported is not an SSI, use the NHSN Principal Operative Procedure Selection Lists (Table 5) to select which operative procedure to report.

SSI Chapter: Numerator Data Reporting Instructions

Case 11 - Rationale

Table 5. NHSN Principal Operative Procedure Category Selection Lists

The following lists are derived from Table 1, NHSN Operative Procedure Categories. The categories with the highest risk of SSI are listed before those with lower risks.

| 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 | Laparotomy |
| 12 | APPY | Appendix surgery |
| 13 | HER | Hemiorrhaphy |
| 14 | NEPH | Kidney surgery |
| 15 | VHYS | Vaginal Hysterectomy |
| 16 | SPLE | Spleen surgery |
| 17 | CHOL | Gall bladder surgery |
| 18 | OVRY | Ovarian surgery |

Case 12

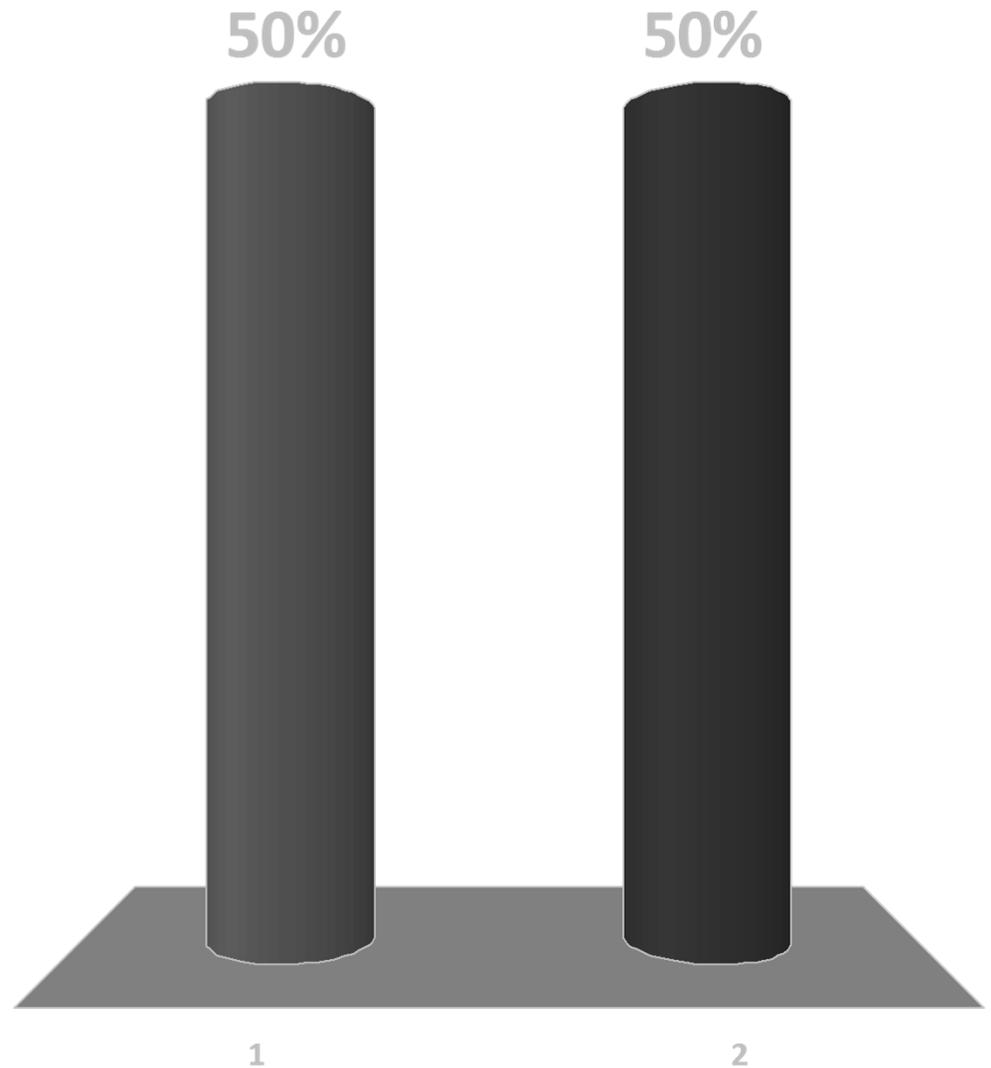
1/15/14: A 60 year-old female admitted with an acute abdomen. Patient sent to OR and finding was a ruptured diverticulum with fecal contamination of the abdominal cavity (wound class = Contaminated). A colectomy is performed with a colostomy formation. Incision is loosely closed with staples to allow for drainage. Antibiotics ordered.

1/19/14: Patient progressing well; afebrile; discharged home

1/25/14: Patient presents to ED with fever of 38.5°C; abdominal pain; CT scan suspicious for small abscess in the intraabdominal space; MD starts antibiotics; patient discharged. No cultures obtained. Discharge note states patient returned with possible intraabdominal abscess.

Should this patient's chart be reviewed to see if they meet criteria for an organ space SSI?

- 1. Yes
- 2. No



Case 12 - Rationale

Organ/Space SSI

Must meet the following criteria:

Infection occurs within 30 or 90 days after the NHSN operative procedure (where day 1 = the procedure date) according to the list in Table 3

and

infection involves any part of the body, excluding the skin incision, fascia, or muscle layers, that is opened or manipulated during the operative procedure

and

patient has at least one of the following:

a. purulent drainage from a drain that is placed into the organ/space

b. organisms isolated from an aseptically-obtained culture of fluid or tissue in the organ/space

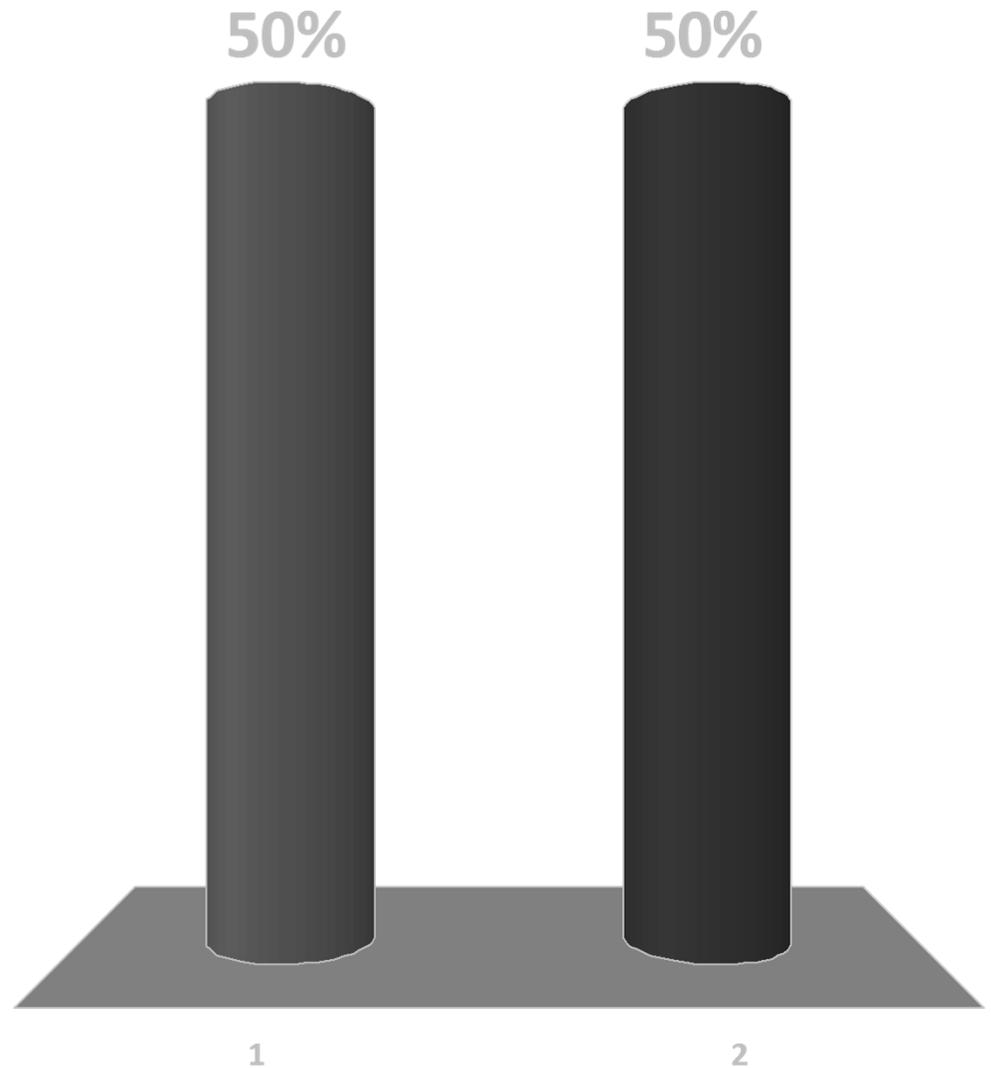
c. an abscess or other evidence of infection involving the organ/space that is detected on direct examination, during invasive procedure, or by histopathologic examination or imaging test

and

meets at least one criterion for a specific organ/space infection site listed in Table 4.

Does this patient meet criteria for a site specific infection?

1. Yes
- ✓ 2. No



Case 12 - Rationale

IAB-Intraabdominal infection, not specified elsewhere including gallbladder, bile ducts, liver (excluding viral hepatitis), spleen, pancreas, peritoneum, subphrenic or subdiaphragmatic space, or other intraabdominal tissue or area not specified elsewhere

Intraabdominal infections must meet at least 1 of the following criteria:

1. Patient has organisms cultured from abscess and/or purulent material from intraabdominal space obtained during an invasive procedure. - NO
2. Patient has abscess or other evidence of intraabdominal infection seen during an invasive procedure or histopathologic examination. NO
3. Patient has at least 2 of the following signs or symptoms: fever ($>38^{\circ}\text{C}$), nausea*, vomiting*, abdominal pain*, or jaundice*

and

at least 1 of the following:

- a. organisms cultured from drainage from an aseptically-placed drain (e.g., closed suction drainage system, open drain, T-tube drain, CT guided drainage) - NO
- b. organisms seen on Gram's stain of drainage or tissue obtained during invasive procedure or from an aseptically-placed drain - NO
- c. organisms cultured from blood and imaging test evidence of infection (e.g., abnormal findings on ultrasound, CT scan, MRI, or radiolabel scans [gallium, technetium, etc.] or on abdominal x-ray). - NO

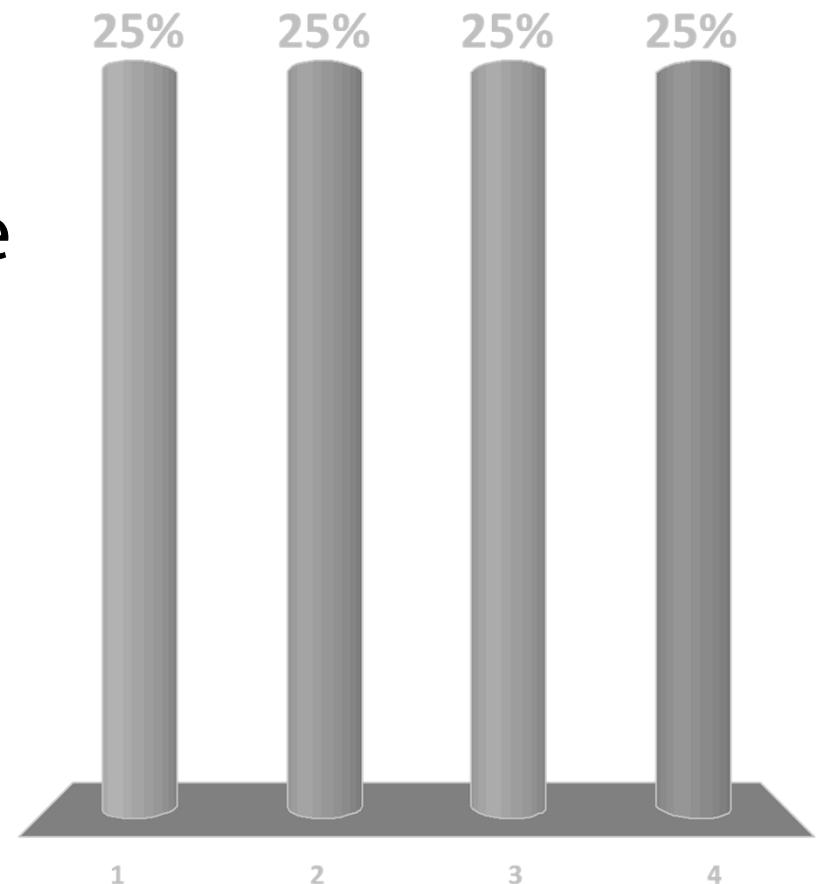
* With no other recognized cause

Case 13

- ❑ A male patient underwent a KPRO in August 2013.
- ❑ In January 2014 , the prosthesis was removed due to an unresolved infection in the joint space with MRSA. A spacer was placed and a replacement procedure was scheduled for the following March 2014.
- ❑ The replacement KPRO was completed in March 2014 and, within 3 weeks after discharge, he developed osteomyelitis with MRSA near the attachment site.

How should this osteomyelitis be reported?

1. SSI linked to the August 2013 operative procedure
2. SSI linked to the January 2014 operative procedure
3. SSI linked to the March 2014 operative procedure
4. Does not meet the criteria for SSI



Case 13 - Rationale

- If a patient has an infection in the organ/space being operated on, subsequent continuation of this infection type during the remainder of the surveillance period is considered an organ/space SSI, if organ/space SSI and site-specific infection criteria are met.

Completing the SSI Event Form (Numerator)



Reporting SSIs



OMB No. 0920-0666
Exp. Date: 01-31-2015
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Surgical Site Infection (SSI)

Page 1 of 4

| | |
|---|--|
| *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-9-CM Procedure Code: |
| *Date of Procedure: | *Outpatient Procedure: Yes No |
| *MDRO Infection Surveillance: | |
| <input type="checkbox"/> Yes, this infection's pathogen & location are in-plan for Infection Surveillance in the MDRO/CDI Module <input type="checkbox"/> No, this infection's pathogen & location are not in-plan for Infection Surveillance in the MDRO/CDI Module | |
| *Date Admitted to Facility | Location |
| Event Details | |
| *Specific Event: | |
| <input type="checkbox"/> Superficial Incisional Primary (SIP) | <input type="checkbox"/> Deep Incisional Primary (DIP) |
| <input type="checkbox"/> Superficial Incisional Secondary (SIS) | <input type="checkbox"/> Deep Incisional Secondary (DIS) |
| <input type="checkbox"/> Organ/Space (specify site): | |
| *Specify Criteria Used (check all that apply): | |
| <u>Signs & Symptoms</u> | |
| <input type="checkbox"/> Purulent drainage or material | <input type="checkbox"/> Positive culture |
| <input type="checkbox"/> Pain or tenderness | <input type="checkbox"/> Not cultured |
| <input type="checkbox"/> Localized swelling | <input type="checkbox"/> Positive blood culture |
| <input type="checkbox"/> Redness | <input type="checkbox"/> Blood culture not done or no organisms detected in blood |
| <input type="checkbox"/> Heat | <input type="checkbox"/> Positive Gram stain when culture is negative or not done |
| <input type="checkbox"/> Fever | <input type="checkbox"/> Other positive laboratory tests [†] |
| <input type="checkbox"/> Incision deliberately opened by surgeon | <input type="checkbox"/> Imaging test evidence of infection |
| <input type="checkbox"/> Wound spontaneously dehisces | |
| <input type="checkbox"/> Abscess | |
| <input type="checkbox"/> Hypothermia | |
| <input type="checkbox"/> Apnea | |
| <input type="checkbox"/> Bradycardia | <u>Clinical Diagnosis</u> |
| <input type="checkbox"/> Lethargy | <input type="checkbox"/> Physician diagnosis of this event type |
| <input type="checkbox"/> Cough | <input type="checkbox"/> Physician institutes appropriate antimicrobial therapy [†] |
| <input type="checkbox"/> Nausea | |
| <input type="checkbox"/> Vomiting | |
| <input type="checkbox"/> Dysuria | |
| <input type="checkbox"/> Other evidence of infection found on direct exam, during invasive procedure, or by diagnostic tests [†] | [†] per organ/space specific site criteria |
| <input type="checkbox"/> Other signs & symptoms [†] | |
| *Detected: <input type="checkbox"/> A (During admission) <input type="checkbox"/> P (Post-discharge surveillance) <input type="checkbox"/> RF (Readmission to facility where procedure was performed) | |
| <input type="checkbox"/> RO (Readmission to facility other than where procedure was performed) | |
| *Secondary Bloodstream Infection: Yes No | **Died: Yes No SSI Contributed to Death: Yes No |
| Discharge Date: | *Pathogens Identified: Yes No *If Yes, specify on pages 2-3. |
| <small>Assurance of Confidentiality: The voluntarily provided information obtained in this surveillance system that would permit identification of any individual or institution is collected with a guarantee that it will be held in strict confidence, will be used only for the purposes stated, and will not otherwise be disclosed or released without the consent of the individual, or the institution in accordance with Sections 304, 306 and 306(j) of the Public Health Service Act (42 USC 242d, 242k, and 242m(d)).</small> | |
| <small>Public reporting burden of this collection of information is estimated to average 32 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC, Reports Clearance Officer, 1600 Clifton Rd., MS D-74, Atlanta, GA 30333, ATTN: PRA (0920-0666).</small> | |
| <small>CDC 07-120 (Form) Rev 8, 7-1</small> | |

Complete a Surgical Site Infection (SSI) form for each patient found to have an SSI using the definitions.

SSI Form – Patient Demographics

Required fields are highlighted



Form Approved
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Surgical Site Infection (SSI)



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| | |
|---|--|
| *required for saving **required for completion | |
| Facility ID: 40000 | Event #: 246810 |
| *Patient ID: 144141 | Social Security #: |
| Secondary ID: | Medicare #: Required as of 7/1/14 for Events that are reported to NHSN for the Acute Care Facilities that participate in CMS Hospital IQR Program. |
| Patient Name, Last: | First: Middle: |
| *Gender: <input checked="" type="radio"/> F <input type="radio"/> M <input type="radio"/> Other | *Date of Birth: 6/16/59 |
| Ethnicity (Specify): | Race (Specify): |

Medicare Beneficiary Number (MBN)

The entry of a MBN number is a CMS requirement that goes into effect on July 1, 2014 for events that are reported to NHSN for the Acute Care Facilities that participate in CMS Hospital IQR Program. This applies to all events that are required to be reported to CMS for Acute care facilities' for applicable patients.

This is for events they did not write the rule at this time to include procedures. So SSIs events should have the MBN included but it does not need to be entered on the COLO and HYST procedures that are sent to NHSN at this time.

<http://www.cdc.gov/nhsn/PDFs/CMS/CMS-Reporting-Requirements-Deadlines.pdf>

SSI Form – Basic SSI Information

| | |
|--|--|
| *Event Type: SSI | *Date of Event: 03/02/14 |
| *NHSN Procedure Code: CARD | ICD-9-CM Procedure Code: 35.35 |
| *Date of Procedure: 02/14/14 | *Outpatient Procedure: Yes <input type="radio"/> No <input checked="" type="radio"/> |
| *MDRO Infection Surveillance: | |
| <input type="checkbox"/> Yes, this infection's pathogen & location is in-plan for Infection Surveillance in the MDRO/CDI Module <input checked="" type="checkbox"/> No, this infection's pathogen & location is not in-plan for Infection Surveillance in the MDRO/CDI Module | |
| *Date Admitted to Facility: 02/14/14 | *Discharge Location: CTICU |

Highlighted fields are required fields.

ICD-9-CM code is optional

If this SSI is an NHSN-defined MDRO infection that you are monitoring in your Monthly Reporting Plan, select Yes.

Was the patient's date of admission and date of discharge the same calendar day?

SSI Form – Basic SSI Information

| | |
|---|--|
| *Event Type: SSI | *Date of Event: 03/02/14 |
| *NHSN Procedure Code: CARD | ICD-9-CM Procedure Code: 35.35 |
| *Date of Procedure: 02/14/14 | *Outpatient Procedure: Yes <input type="radio"/> No <input checked="" type="radio"/> |
| *MDRO Infection Surveillance: <input type="checkbox"/> Yes, this infection's pathogen & location are in-plan for Infection Surveillance in the MDRO/CDI Module <input checked="" type="checkbox"/> No, this infection's pathogen & location are not in-plan for Infection Surveillance in the MDRO/CDI Module | |
| *Date Admitted to Facility: 02/14/14 | Location: CTICU |

Enter the date the patient was admitted to the hospital when the operation was performed (not the date of readmission) and the location where the patient was housed after leaving the OR / PACU.

Note: Location is an optional field for SSI!

Reporting SSI for Patients who are Readmitted

- Use the admission date of the surgical admission as the date admitted to facility, not the readmission date
- Then the date of procedure and date of event will be in the correct sequence

Date Admitted to Facility \leq Date of Procedure $<$ Date of Event

SSI Form – Event Details

*Date Admitted to Facility: _____ Location: _____

Event Details

*Specific Event:

| | |
|---|---|
| <input type="checkbox"/> Superficial Incisional Primary (SIP) | <input checked="" type="checkbox"/> Deep Incisional Primary (DIP) |
| <input type="checkbox"/> Superficial Incisional Secondary (SIS) | <input type="checkbox"/> Deep Incisional Secondary (DIS) |
| <input type="checkbox"/> Organ/Space (specify site): _____ | |

*Specify Criteria Used (check all that apply):

| | |
|--|--------------------------------|
| <u>Signs & Symptoms</u> | <u>Laboratory</u> |
| <input type="checkbox"/> Purulent drainage or material | <input type="checkbox"/> _____ |

**Specific Event:
Required.**

Check the box to indicate the definition that was used to identify the SSI.

SSI – Event Details

*Date Admitted to Facility: _____ 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): MED

*Specify Criteria Used (check all that apply):

Signs & Symptoms Laboratory

Purulent drainage or material

If the specific event is Organ/Space, specify the organ/space site that was identified. See Chapter 17.

SSI – Event Details

*Specify Criteria Used (check all that apply):

Signs & Symptoms

- | | |
|---|--------------------------------------|
| <input type="checkbox"/> Purulent drainage or material | <input type="checkbox"/> Sinus tract |
| <input checked="" type="checkbox"/> Pain or tenderness | <input type="checkbox"/> Hypothermia |
| <input type="checkbox"/> Localized swelling | <input type="checkbox"/> Apnea |
| <input checked="" type="checkbox"/> Redness | <input type="checkbox"/> Bradycardia |
| <input type="checkbox"/> Heat | <input type="checkbox"/> Lethargy |
| <input type="checkbox"/> Fever | <input type="checkbox"/> Cough |
| <input checked="" type="checkbox"/> Incision deliberately opened/drained | <input type="checkbox"/> Nausea |
| <input type="checkbox"/> Wound spontaneously dehisces | <input type="checkbox"/> Vomiting |
| <input type="checkbox"/> Abscess | <input type="checkbox"/> Dysuria |
| <input type="checkbox"/> Other evidence of infection found on direct exam, during invasive procedure, or by diagnostic tests [†] | |

Laboratory

- Positive culture
- Not cultured
- Positive blood culture
- Blood culture not done or no organisms detected in blood
- Positive Gram stain when culture is negative or not done
- Positive culture from ≥ 2 separate tissue or fluid samples from affected joint
- Other positive laboratory tests[†]
- Imaging test evidence of infection

Clinical Diagnosis

- Physician diagnosis of this event type
- Physician institutes appropriate antimicrobial therapy[†]

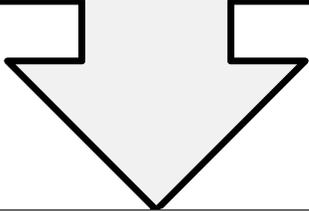
Select the specific elements of the criterion that were used to identify this infection.

[†]per

SSI – Event Details

- A** SSI was identified before the patient was discharged from the facility following the operation
- P** SSI was identified only as part of post-discharge surveillance, including ED visit without readmission. If readmitted, use RF or RO as appropriate.
- RF** SSI was identified due to patient readmission to the facility where the operation was performed.
- RO** SSI was identified due to patient admission to a facility other than where the operation was performed.

**Detected:
Required.**
Check the box to indicate when/how the SSI was identified.



| | | | | | |
|---|--|----|--|--|--|
| *Detected: | | | | <input type="checkbox"/> A (During admission) | <input type="checkbox"/> P (Post-discharge surveillance) |
| | | | | <input type="checkbox"/> RF (Readmission to facility where procedure performed) | |
| | | | | <input type="checkbox"/> RO (Readmission to facility other than where procedure was performed) | |
| *Secondary Bloodstream Infection: Yes | | No | | **Died: Yes No SSI Contributed to Death: Yes No | |
| Discharge Date: | | | *Pathogens Identified: Yes No *If Yes, specify on pages 2-3. | | |
| <small>Assurance of Confidentiality: The voluntarily provided information obtained in this surveillance system that would permit identification of any individual or institution is collected with a guarantee that it will be held in strict confidence, will be used only for the purposes stated, and will not otherwise be disclosed or released without the consent of the individual, or the institution in accordance with Sections 304, 306 and 308(d) of the Public Health Service Act (42 USC 242b, 242k, and 242m(d)).</small> | | | | | |

SSI – Event Details

| | | |
|--|-------------------------------|----------------------------------|
| *Secondary Bloodstream Infection: Yes No | **Died: Yes No | SSI Contributed to Death: Yes No |
| Discharge Date: | *Pathogens Identified: Yes No | *If Yes, specify on pages 2-3. |

Assurance of Confidentiality: The voluntarily provided information obtained in this surveillance system that would permit identification of any individual or institution is collected with a guarantee that it will be held in confidence and used only for the purposes stated, and will be destroyed when no longer needed. See the Assurance of Confidentiality with Sections

**Secondary BSI:
Required.**

If the patient had a culture-confirmed bloodstream infection that is secondary to the SSI circle Yes.

Died:

Required for completion.

If the patient died during this hospitalization, circle Yes.

** The record may be saved without completing this field, but it will be considered incomplete.

SSI Contributed to Death: Required only if the patient died.

If the SSI caused the death or exacerbated an existing condition which led to death, circle Yes.

SSI – Event Details

*Detected: A (During admission) P (Post-discharge surveillance)
 RF (Readmission to facility where procedure performed)
 RO (Readmission to facility other than where procedure was performed)

*Secondary Bloodstream Infection: Yes No **Died: Yes No SSI Contributed to Death: Yes No

Discharge Date: *Pathogens Identified: Yes No | *If Yes, specify on pages 2-3.

Assurance of Confidentiality: The voluntarily provided information obtained in this surveillance system that would permit identification of any individual or institution is collected with a guarantee that it will be held in strict confidence, will be used only for the purposes stated, and will not otherwise be disclosed or released without the consent of the individual or the institution in accordance with Sections

Discharge Date: Optional.

The date the patient was discharged from the hospital. This is the hospitalization during which the operation was performed.

Pathogens Identified: Required.

Circle Yes if one or more pathogens was identified.

Specific information about the pathogen is entered on the back of the form.

Surgical Site Infection (SSI)

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| Pathogen # | Gram-positive Organisms | | | | | | | | |
|------------|--|----------------------|-------------------------|--------------------|----------------------|-----------------|-------------|--|--|
| _____ | <i>Staphylococcus</i> coagulase-negative (specify species if available): | VANC | | | | | | | |
| 1 | _____ <i>Enterococcus faecium</i> | DAPTO S | GENHL ¹ S | LNZ S | VANC S | | | | |
| | _____ <i>Enterococcus faecalis</i> | | | | | | | | |
| | _____ <i>Enterococcus</i> spp. (Only those not identified to the species level) | | | | | | | | |
| _____ | <i>Staphylococcus aureus</i> | CIPRO/LEVO/MOXI S | DAPTO S | DOXY/MINO S | ERYTH S | GENT S | LNZ S | | |
| | | OXI/CEFOX/METH S | TETRA S | TIG S | TMZ S | VANC S | | | |
| Pathogen # | | | | | | | | | |
| _____ | | | | | TAZ S | CIPRO/LEVO S | COL/PB S | | |
| | | | | | PIPTAZ S | | | | |
| | | S | S | | | | | | |
| _____ | <i>Escherichia coli</i> | AMK S | AMP S | AMPSUL/AMXCLV S | AZT S | CEFAZ S | | | |
| | | CEFTAZ S | CEFUR S | CEFOX/TET S | CIPRO/LEVO/MOXI S | | | | |
| | | ERTA S | GENT S | IMI S | MERO/DORI S | PIPTAZ S | | | |
| | | TIG S | TMZ S | TOBRA S | | | | | |
| _____ | <i>Enterobacter</i> (species) | AMK S | AMP S | AMPSUL/AMXCLV S | AZT S | CEFAZ S | | | |
| | | CEFTAZ S | CEFUR S | CEFOX S | | | | | |

For each antimicrobial agent identified, circle the pathogen's susceptibility result.

S = Susceptible
I = Intermediate
R = Resistant
NS = Non-susceptible
S-DD = Susceptible-dose dependent
N = Not tested

Alerts – Missing Procedure Event

Alerts
Reporting Plan
Patient
Event
Procedure
Summary Data
Import/Export
Analysis
Surveys
Users
Facility
Group
Log Out

NHSN Patient Safety Component Home Page

Use the Navigation bar on the left to access the features of the application.

Action items

You must complete these items.

- A survey is required for 2013

Alerts

- You have 2 missing summary items
- You have 1 missing Procedure-associated event

If you have no SSI to report...

Click on Event → Incomplete
Click on Missing PA Events tab
Check Report No Events next to SSI; Save

NHSN Home Logged into Memorial Test Hospital (ID 14584) as JANET.
Facility Memorial Test Hospital (ID 14584) is following the PS component.

Alerts
Reporting Plan
Patient
Event
Add
Find
Incomplete
Procedure
Summary Data
Import/Export
Analysis
Surveys
Users
Facility
Group
Log Out

Incomplete/Missing List

| | | | | | | |
|-------------------|----------------|-------------------------|----------------------|-----------------------|--------------------|-------------------------------------|
| Incomplete Events | Missing Events | Incomplete Summary Data | Missing Summary Data | Incomplete Procedures | Missing Procedures | Missing Procedure-associated Events |
|-------------------|----------------|-------------------------|----------------------|-----------------------|--------------------|-------------------------------------|

Print this report
[Display All](#)
Displaying 1 - 1 of 1

| Month/Year | Procedures | SSI | Report No Events |
|------------|-------------------------------|----------------|--------------------------|
| 01/2014 | HYST - Abdominal hysterectomy | IN - Inpatient | <input type="checkbox"/> |

First | Previous | Next | Last
First | Previous | Next | Last
Displaying 1 - 1 of 1

Save Reset

Summary



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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-9-CM Procedure Code: |
| *Date of Procedure: | *Outpatient Procedure: Yes No |
| *MDRO Infection Surveillance: | |
| <input type="checkbox"/> Yes, this infection's pathogen & location are in-plan for Infection Surveillance in the MDRO/CDI Module <input type="checkbox"/> No, this infection's pathogen & location are not in-plan for Infection Surveillance in the MDRO/CDI Module | |
| *Date Admitted to Facility | Location |
| Event Details | |
| *Specific Event: | |
| <input type="checkbox"/> Superficial Incisional Primary (SIP) <input type="checkbox"/> Superficial Incisional Secondary (SIS) <input type="checkbox"/> Organ/Space (specify site): | <input type="checkbox"/> Deep Incisional Primary (DIP) <input type="checkbox"/> Deep Incisional Secondary (DIS) |
| *Specify Criteria Used (check all that apply): | |
| <u>Signs & Symptoms</u> <input type="checkbox"/> Purulent drainage or material <input type="checkbox"/> Pain or tenderness <input type="checkbox"/> Localized swelling <input type="checkbox"/> Redness <input type="checkbox"/> Heat <input type="checkbox"/> Fever <input type="checkbox"/> Incision deliberately opened by surgeon <input type="checkbox"/> Wound spontaneously dehisces <input type="checkbox"/> Abscess <input type="checkbox"/> Hypothermia <input type="checkbox"/> Apnea <input type="checkbox"/> Bradycardia <input type="checkbox"/> Lethargy <input type="checkbox"/> Cough <input type="checkbox"/> Nausea <input type="checkbox"/> Vomiting <input type="checkbox"/> Dysuria <input type="checkbox"/> Other evidence of infection found on direct exam, during invasive procedure, or by diagnostic tests† <input type="checkbox"/> Other signs & symptoms‡ | <u>Laboratory</u> <input type="checkbox"/> Positive culture <input type="checkbox"/> Not cultured <input type="checkbox"/> Positive blood culture <input type="checkbox"/> Blood culture not done or no organisms detected in blood <input type="checkbox"/> Positive Gram stain when culture is negative or not done <input type="checkbox"/> Other positive laboratory tests‡ <input type="checkbox"/> Imaging test evidence of infection |
| | <u>Clinical Diagnosis</u> <input type="checkbox"/> Physician diagnosis of this event type <input type="checkbox"/> Physician institutes appropriate antimicrobial therapy‡ |
| †per organ/space specific site criteria | |
| *Detected: <input type="checkbox"/> A (During admission) <input type="checkbox"/> P (Post-discharge surveillance) <input type="checkbox"/> RF (Readmission to facility where procedure performed) | |
| <input type="checkbox"/> RO (Readmission to facility other than where procedure was performed) | |
| *Secondary Bloodstream Infection: Yes No | **Died: Yes No SSI Contributed to Death: Yes No |
| Discharge Date: | *Pathogens Identified: Yes No *If Yes, specify on pages 2-3. |
| <small>Assurance of Confidentiality: The voluntarily provided information obtained in this surveillance system that would permit identification of any individual or institution is collected with a guarantee that it will be held in strict confidence, will be used only for the purposes stated, and will not otherwise be disclosed or released without the consent of the individual, or the institution in accordance with Sections 304, 306 and 306(d) of the Public Health Service Act (42 USC 242b, 242c, and 242m(d)). Public reporting burden of this collection of information is estimated to average 32 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC, Reports Clearance Officer, 1600 Clinton Rd., MS D-74, Atlanta, GA 30333, ATTN: PRA (0920-0666). CDC 07-150 (FRODO) Rev. 5, 7-1</small> | |

- Complete and enter or import *Surgical Site Infection* records for the procedures that are selected for surveillance.
- Use the SSI Protocol, Tables of Instructions, and Surveillance Definitions chapters of the Patient Safety Manual for guidance.

SSI – Errata

Clarifications to the 2014 SSI Protocol

- ❑ The definition for “Non-primary Closure” in the Key Terms and in the table of Instructions for SSI denominator for procedure form was the 2013 definition when the protocol was published this has been corrected and the current 2014 definition has been inserted.
- ❑ “Not incidental to another procedure” should be deleted for APPY in Table 1 on pg. 3 of the SSI protocol

Transition to ICD-10 CM/PCS and CPT Code-based NHSN Procedure Categories

- ❑ CDC continues to work on updated ICD-10-CM/PCS and CPT mappings to all NHSN operative procedure categories for SSI surveillance. These mappings are anticipated to be available by July 2014.**
- ❑ ICD-10-CM/PCS codes will replace ICD-9-CM codes on October 1, 2014 but NHSN will not have the ability to receive these codes until the January 2015 release.**
- ❑ The NHSN guidance for entry of surgical denominator data for the last quarter of 2014 data is to enter the NHSN Procedure Code (e.g. COLO or HYST) but do not enter any ICD-10-CM/PCS codes associated with the procedure.**
- ❑ At the time of the January 2015 release NHSN will be able to accept the new ICD-10-CM/PCS codes.**

What else is coming in 2015

- ❑ Present at Time of Surgery (PATOS) - captures a condition or diagnosis that the patient has at the time of the start of or during the index surgical procedure (in other words, it is present preoperatively). This must be noted preoperatively or found intraoperatively.**
 - ❑ This will be a field on the SSI Event form.**

- ❑ For HPRO and KPRO Procedures:**
 - ❑ If a total or partial revision, was the revision associated with a prior infection at the index joint?**
 - ❑ This will be a field on the denominator for procedure form.**

THE END





THANK YOU

Questions: Email user support:

nhsn@cdc.gov

NHSN website:

<http://www.cdc.gov/nhsn/>