

National Healthcare Safety Network (NHSN)

Surgical Site Infection Surveillance (SSI)

Surgical Site Infection (SSI) surveillance is a part of the Infection Control Program of ambulatory surgery centers (ASCs). Recently, the Center for Disease Control's (CDC) National Healthcare Safety Network (NHSN) revised their SSI Surveillance definitions and reporting instructions included in the NHSN Procedure Associated Module of the Patient Safety Component, available at: <http://www.cdc.gov/nhsn/pdfs/pscmanual/9pscscsscurrent.pdf>. The current SSI event instructions were designed primarily with acute care facilities in mind; however it is also used by outpatient settings including ambulatory surgery centers (ASCs) that are located in states that mandate SSI reporting to NHSN. Those states that mandate SSI reporting by ASCs include Colorado, Massachusetts, Nevada, New Hampshire, New Jersey, and Texas. Missouri also requires reporting by ASCs using NHSN SSI definitions, but to a separate, state-based database. A new NHSN Outpatient Procedure Component (OPC) is under development for voluntary use in ASCs in 2014, however until then ASCs that are required under state mandates to use NHSN methodology to conduct SSI surveillance must use the current, SSI event instructions of the Patient Safety Component.

State-Based Reporting Requirements

ASCs located in Colorado, Massachusetts, Nevada, New Hampshire, New Jersey, and Texas

- The revised SSI Surveillance protocol mentioned above must be followed and reported to NHSN according to state requirements.
- The protocol can be found at <http://www.cdc.gov/nhsn/pdfs/pscmanual/9pscscsscurrent.pdf>

ASCs located in Missouri

- Missouri requires reporting by ASCs using NHSN SSI definitions, but to their state-based database.

ASCs located in states excluding Colorado, Massachusetts, Missouri, Nevada, New Hampshire, New Jersey, and Texas

- The main purpose of this document is to give guidance for ASCs who are tracking SSI but do not have mandatory NHSN SSI surveillance reporting.
- It is recommended to follow the criteria listed below for SSI surveillance, but not report the data to NHSN at this time. The data can be used for internal benchmarking, trending, and reporting.

Table 1 below is adapted from the full, NHSN operative procedure category mappings to ICD-9-CM and CPT Codes in Table 1 of the NHSN, Surgical Site Infection Event chapter, Jan 2013 version at <http://www.cdc.gov/nhsn/pdfs/pscmanual/9pscscsscurrent.pdf>. The NHSN Operative Procedure Categories in the adapted table below are those that are subject to various state-based reporting mandates for ASCs and will be included in the upcoming first release of the OPC. Please use the current OPC protocol (when available) to obtain the updated, correct CPT code mappings for these procedure categories.

Table 1. NHSN Operative Procedure Category Mappings to CPT Codes with Required Follow-up Period for Deep Incisional and Organ/Space SSIs; the Required Follow-up Period is 30 days for all Superficial SSIs.

Legacy Code	NHSN Operative Procedure Category	CPT Codes	Required follow-up period for Deep Incisional and Organ/Space SSI	Required follow-up period for Superficial SSI
BRST	Breast surgery	19101, 19112, 19120, 19125, 19126, 19300, 19301, 19302, 19303, 19304, 19305, 19306, 19307, 19316, 19318, 19324, 19325, 19328, 19330, 19340, 19342, 19350, 19355, 19357, 19361, 19364, 19366, 19367, 19368, 19369, 19370, 19371, 19380	90 days	30 days
CHOL	Gallbladder surgery	47480, 47562, 47563, 47564, 47600, 47605, 47610, 47612, 47620	30 days	30 days
COLO	Colon surgery	44140, 44141, 44143, 44144, 44145, 44146, 44147, 44150, 44151, 44160, 44204, 44205, 44206, 44207, 44208, 44210	30 days	30 days
FX	Open reduction of fracture	23615, 23616, 23630, 23670, 23680, 24515, 24516, 24538, 24545, 24546, 24575, 24579, 24586, 24587, 24635, 24665, 24666, 24685, 25337, 25515, 25525, 25526, 25545, 25574, 25575, 25607, 25608, 25609, 25652, 27236, 27244, 27245, 27248, 27254, 27269, 27283, 27506, 27507, 27511, 27513, 27514, 27535, 27536, 27540, 27758, 27759, 27766, 27769, 27784, 27792, 27814, 27822, 27826, 27827, 27828	90 days	30 days
HER	Herniorrhaphy	49491, 49492, 49495, 49496, 49500, 49501, 49505, 49507, 49520, 49521, 49525, , 49550, 49553, 49555, 49557, 49560, 49561, 49565, 49566, 49568, 49570, 49572, 49580, 49582, 49585, 49587, 49590, 49650, 49651, 49652, 49653, 49654, 49655, 49656, 49657, 49659, 55540	90 days	30 days
HPRO	Arthroplasty of hip	27125, 27130, 27132, 27134, 27137, 27138, 27236, 27299	90 days	30 days
HYST	Abdominal hysterectomy	58150, 58152, 58180, 58200, 58210, 58541, 58542, 58543, 58544, 58548, 58570, 58571, 58572, 58573, 58951, 58953, 58954, 58956	30 days	30 days
KPRO	Arthroplasty of knee	27438, 27440, 27441, 27442, 27443, 27445, 27446, 27447, 27486, 27487	90 days	30 days
LAM	Laminectomy	Under review	30 days	30 days
VHYS	Vaginal hysterectomy	Under review	30 days	30 days

For your convenience, an adapted version from the NHSN surgical site infection criteria is provided below that can be applied in ASCs who are not enrolled in NHSN SSI surveillance. The NHSN surgical site infection (SSI) criteria to be adopted for the Outpatient Procedure Component (OPC) are the same as those currently used for the NHSN, SSI Event chapter (Jan 2013 version). However, when ASCs are able to participate in the OPC (tentatively 2014), only the SSI criteria as specified in the actual release of the OPC should be used.

Table 2. Surgical Site Infection Criteria

Superficial Incisional SSI

Must meet the following criterion:

Infection occurs within 30 days after an operative procedure

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 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.

Deep Incisional SSI

Must meet the following criterion:

Infection occurs within 30 or 90 days after an operative procedure

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 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 found on direct examination, during invasive procedure, or by histopathologic examination or imaging test.
- d. diagnosis of a deep incisional SSI by a surgeon or attending physician.

Organ/Space SSI

Must meet the following criterion:

Infection occurs within 30 or 90 days after an operative procedure

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 found on direct examination, during invasive procedure, or by histopathologic examination or imaging test
- d. diagnosis of an organ/space SSI by a surgeon or attending physician

Surgical Site Infection Surveillance and Reporting

Step 1: When the ASC is notified of a possible infection, determine the date of the operative procedure.

Step 2: Determine what the primary CPT code is for this patient.

Step 3: Look at Table 2 and review the infection criteria to determine if the infection is Superficial Incisional SSI, Deep Incisional SSI, or Organ/Space SSI.

Step 4: Once the primary CPT code has been determine, review Table 1 to see if that specific CPT code is listed.

- If the CPT code is not listed, the ASC would monitor the infection for 30 days, and then proceed to Step 5.
- If the CPT code is listed, then proceed to Step 5.

Step 5: If the infection is determined to be a Superficial Incisional SSI, AND the primary CPT code of the patient is listed in Table 1, AND the infection occurred within 30 days of the procedure, the infection would need to be reported to NHSN, if you are in a state with mandatory reporting. If you are not in a state that reports to NHSN, you may want to track internally as part of your infection control program.

Step 6: If the infection is determined to be a Deep Incisional SSI or Organ/Space SSI, AND the primary CPT code of the patient is listed in Table 1, AND the infection occurred within 30 or 90 days, according to the procedure type, the infection would need to be reported to NHSN, if you are in a state with mandatory reporting. If you are not in a state that reports to NHSN, you may want to track internally as part of your infection control program.

No more 1 year monitoring of implants. The monitoring of the implant(s) is based on the type of procedure.

The Joint Commission recently announced that its surveyors have stopped citing organizations that are not currently in compliance with an element of performance (EP) of National Patient Safety Goal (NPSG.07.05.01) on surgical site infection prevention. NPSG.07.05.01, EP 5, currently requires ambulatory care organizations and office-based surgery practices to do the following:

Measure surgical site infection rates for the first 30 days following procedures that do not involve inserting implantable devices and for the first year following procedures involving implantable devices. The organization's measurement strategies follow evidence-based guidelines.

This moratorium was put in place because the Centers for Disease Control and Prevention (CDC) recently revised its surveillance requirements, including its long-standing requirement for organizations to conduct surgical site infection surveillance for one year after a device is surgically implanted in a patient. Instead, surveillance is now required for either 30 or 90 days following a procedure; the surveillance period is defined by National Healthcare Safety Network (NHSN) procedural codes.

Joint Commission Ambulatory or OBS customers should reference the July 2013 issue of ***Joint Commission Perspectives*** for information containing the revised NPSG on surgical site infections.

The Accreditation Association for Ambulatory Health Care (AAAHC) standards call for organizations to follow the organization's chosen nationally-recognized guidelines for its written Infection Prevention Program. If an AAAHC-accredited organization has chosen the CDC's guidelines, AAAHC surveyors will look for a 90 day post-implant follow-up unless the organization itself chooses a longer timeline, or unless the implant manufacturer instructs otherwise.