March 2026

Diving Deep Into SSI Surveillance Case Studies

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CASE STUDY 1

Ms. Ima Starr presents to Enterprise Medical Center on 1/5/26 for an elective small bowel procedure. Intraoperatively, a colon perforation occurs, immediately recognized and repaired. The surgeon's op note indicates only a small amount of purulence escaped at the site of perforation. The surgical episode codes into SB and COLO procedure categories. The monthly reporting plan for this facility includes small bowel and colon procedure SSI surveillance.

Question 1: Is there language for PATOS (infection present at time of surgery)?

1. Yes - a perforation automatically qualifies as infection
2. No – a perforation is a complication of surgery not an infection
3. No – there is no language in the op note consistent with infection
4. Yes – the purulence documented in the op-note is gross anatomic evidence of infection

Question 1-1: Is there language for PATOS (infection present at time of surgery) in the op-note?

1. Yes, a perforation automatically qualifies as infection
2. No – a perforation is a complication of surgery not an infection
3. No – there is no language in the op note consistent with infection.
4. **Yes – the purulence documented in the op-note is gross anatomic evidence of infection.** 

Rationale: SSI Reporting Instruction # 3 - Infection present at time of surgery (PATOS): PATOS is a YES/NO field found on the SSI event form. PATOS denotes there was evidence of infection visualized (seen) during the surgical procedure to which a subsequent SSI is attributed. The evidence of infection must be noted intraoperatively and documented within the narrative portion of the operative note or report of surgery to be eligible for PATOS (SSI protocol pg. 9-18).
Key point for consideration: Only select PATOS = YES when it applies to the depth of the SSI that is being attributed to the procedure.

CASE STUDY 1

Ms. Ima Starr presents to Enterprise Medical Center on 1/5/26 for an elective small bowel procedure. The patient is discharged home 1/7. Office follow-up on 1/20 where surgeon documents a slight opening in the midline surgical incision with serous drainage. There's redness at the incision site, but the patient denies pain stating, 'my abdomen is just more tender since I've been home." The surgeon extends the opening in the midline incision for a better look at superficial tissues, decides all is well but prescribes a short 3-day course of antibiotics at the patient's insistence. This information is available through a common patient record system.

- 1/5: SB and COLO procedure
- 1/7: discharge home
- 1/20: Office visit – slight opening midline incision, serous drainage, redness, no pain, new worsening abdominal tenderness
- 1/20: Office visit – MD extends midline incision opening, antibiotics x 3 days

CASE STUDY 1

Ms. Ima Starr presents to Enterprise Medical Center on 1/5/26 for an elective small bowel procedure. The patient is discharged home 1/7. Office follow-up on 1/20 where surgeon documents a slight opening in the midline surgical incision with serous drainage. There's redness at the incision site, but the patient denies pain stating, 'my abdomen is just more tender since I've been home." The surgeon extends the opening in the midline incision for a better look at superficial tissues, decides all is well but prescribes a short 3-day course of antibiotics at the patient's insistence. This information is available through a common patient record system.

Question 1-2: Is an SSI criterion met 1/20 during the follow-up office visit?

1. Yes –superficial incisional SSI criteria 'a' is met
2. Yes – superficial incisional SSI criteria 'b' is met
3. Yes – superficial incisional SSI criteria 'c' is met
4. Yes – superficial incisional SSI criteria 'd' is met

Question 1-2: Is an SSI Criteria met on 1/20 office visit?

RATIONALE:

1. Yes – Superficial incisional SSI 'a' is met
2. Yes – superficial incisional SSI criteria 'b' is met
3. **Yes – superficial incisional SSI criteria 'c' is met**
4. Yes – superficial incisional SSI criteria 'd' is met

Rationale: SI-SSI criteria: Patient has at least one of the following:
c. a superficial incision that is **deliberately opened, re-accessed** or aspirated by surgeon, physician*, or physician designee **AND** the **physician initiates or continues antibiotic** or antifungal therapy on or in the **two calendar days following** the date of deliberate opening, re-access, aspiration with a **duration of two calendar days or longer AND** patient has at least one of the following signs or symptoms: new or **worsening localized** pain or **tenderness,** localized swelling, erythema, or heat

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CASE STUDY 1

Ms. Ima Starr presents to Enterprise Medical Center Hospital on 1/5/26 for an elective small bowel procedure. Intraoperatively, a colon perforation occurs, it's immediately recognized and repaired. The surgical episode is coded as an SB and COLO procedure. The monthly reporting plan for the facility includes small bowel and colon procedure SSI surveillance. A Superficial Incisional SSI is identified on 1/20/26.

Question 1-3: When reported into NHSN, which denominator procedure receives attribution?

1. The SB procedure because it was the planned procedure
2. The COLO procedure
3. We can't tell, attribute the SSI to both procedures.

Question 1-3: Which procedure receives attribution of this SIP?

1. The SB procedure because it was the planned procedure
2. **The COLO procedure** 
3. We can't tell, attribute the SSI to both procedures

Rationale: SSI Reporting Instruction #9. **SSI attribution after multiple categories of NHSN procedures are performed during a single trip to the OR**: When more than one NHSN operative procedure category is performed through a single incision/laparoscopic site(s) during a single trip to the operating room, attribute the SSI to the procedure associated to the infection. When **attribution is not clear,** use the NHSN Principal Operative Procedure Category Selection Lists **(Table 4)** to select the operative procedure to which the SSI should be attributed. (SSI protocol pg. 9-22; Table 4 pg. 9-24)

CASE STUDY 1

Ms. Ima Starr presents to Enterprise Medical Center Hospital on 1/5/26 for an elective small bowel procedure. Intraoperatively, a colon perforation occurs, it's immediately recognized and repaired. The surgical episode is coded as an SB and COLO procedure. The monthly reporting plan for the facility includes small bowel and colon procedure SSI surveillance. A Superficial Incisional SSI is identified on 1/20/26. The facility sends surgeon letters as part of their post-discharge surveillance. The surgeon letter is returned with no SSI identified.

Question 1-4: Does the surgeon opinion of no SSI change the SSI citation?

1. Yes – the surgeon opinion is highest priority in SSI surveillance
2. Yes – it's inappropriate to submit an SSI to NHSN if the MD doesn't agree
3. No – when an SSI criteria is met in the appropriate surveillance period following an NHSN operative procedure, an SSI is reported to NHSN

Question 1-4: Does the MD opinion of no SSI change the SSI citation?

1. Yes – the surgeon opinion is highest priority in SSI surveillance
2. Yes – it's inappropriate to submit an SSI to NHSN if the surgeon doesn't agree
3. **No – when an SSI criteria is met in the appropriate surveillance period following an NHSN operative procedure, an SSI is reported to NHSN** 

Rationale: SSI Reporting Instruction #11: Reporting instructions for post-operative infection scenarios: An SSI should be reported to NHSN without regard to …. other occurrences that may or may not be attributable to postoperative actions (extends to include surgeon opinion of an event). This instruction concerning various postoperative circumstances is necessary to reduce subjectivity and data collection burden. (SSI protocol, pg. 9-23).

- Surveillance definitions are intentionally standardized to minimize subjectivity and ensure consistency in reporting across all NHSN-participating facilities. While NHSN recognizes surveillance definitions may not always align with clinical judgment or perceived preventability, their purpose is to enable uniform data collection and meaningful comparison across institutions. These definitions are designed to capture the broadest scope of events within defined parameters and support consistent application across time and facilities.

CASE STUDY 2 – QUESTION 1

Mr. Scoobi Diver had a KPRO (Knee Prosthesis) NHSN operative procedure performed on 1/20/2026 and is then discharged 1/21/2026. On 2/1/2026 he presents to the provider's office with knee pain and swelling. No fever. Incision is healing well. Synovial fluid aspirate culture shows few MRSA (Methicillin-resistant Staphylococcus aureus) in enrichment broth only. CRP (C-reactive protein) 10 mg/dl, ESR (erythrocyte sedimentation rate) 10 mm/hr.

On 2/3/2026 the patient is taken to the OR for revision. Two periprosthetic cultures are collected, culture #1 showing MRSA, culture #2 showing no growth. No sinus tract is noted, no purulence. Synovial fluid alpha-defensin is positive. No other laboratory values are available.

Question 1: Does the patient have an SSI on 2/1/2026?

a. Yes. Scenario meets Superficial SSI definitions.
b. No. The MRSA in enrichment broth can't be used to meet SSI definitions.
c. Organ/space SSI b definitions are met, but PJI (Periprosthetic Joint Infection)definitions are not met.
d. Organ/space SSI definitions are not met, but PJI 3. definitions are met

Diver Q1: Does the patient have an SSI on 2/1/2026?

Mr. Scoobi Diver had a KPRO (Knee Prosthesis) NHSN operative procedure performed on 1/20/2026 and is then discharged 1/21/2026. On 2/1/2026 he presents to the provider's office with knee pain and swelling. No fever. Incision is healing well. Synovial fluid aspirate culture shows few MRSA in enrichment broth only. CRP 10 mg/dl, ESR 10 mm/hr.

On 2/3/2026 the patient is taken to the OR for revision. Two periprosthetic cultures are collected, culture #1 showing MRSA, culture #2 showing no growth. No sinus tract is noted, no purulence. Synovial fluid alpha-defensin is positive. No other laboratory values are available.

Question 1: Does the patient have an SSI on 2/1/2026?

a. Yes. Scenario meets Superficial SSI definitions.
b. No. The MRSA in enrichment broth can't be used to meet SSI definitions.
c. Organ/space SSI b definitions are met, but PJI definitions are not met.
d. Organ/space SSI definitions are not met, but PJI 3. definitions are met.

Diver Q1: Does the patient have an SSI on 2/1/2026? (Cont.)

Question 1: Does the patient have an SSI on 2/1/2026?

a. Yes. Scenario meets Superficial SSI definitions.
b. No. The MRSA in enrichment broth can't be used to meet SSI definitions.
c. Organ/space SSI b definitions are met, but PJI definitions are not met.
d. Organ/space SSI definitions are not met, but PJI 3. definitions are met

- Although the scenario describes a symptom which is an element of Superficial SSI definitions, no Superficial SSI definitions are fully met.
- Organisms identified in enrichment broth qualify for use to meet SSI culture definitions.
- The MRSA culture finding meets O/S SSI b definitions, but PJI 1, 2, or 3 are NOT met.

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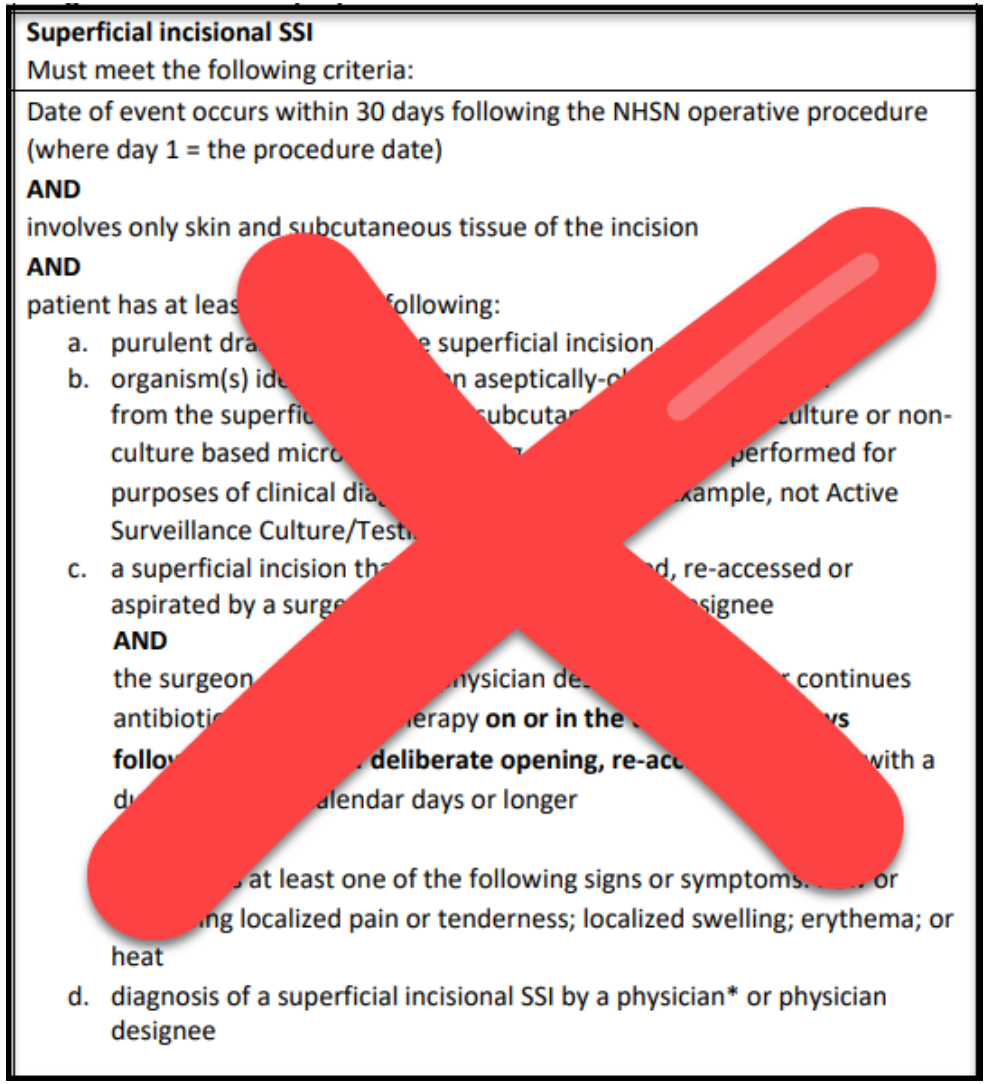
Diver Q 1: Does the patient have an SSI on 2/1/2026?



Superficial incisional SSI

Must meet the following criteria:

Date of event occurs within 30 days following the NHSN operative procedure (where day 1 = the procedure date)

AND

involves only skin and subcutaneous tissue of the incision

AND

patient has at leas… following:

a. purulent dra… superficial incision

b. organism(s) ide… n aseptically-o… from the superfic… subcutan… culture or non-culture based micro… performed for purposes of clinical dia… xample, not Active Surveillance Culture/Testi…

c. a superficial incision th… d, re-accessed or aspirated by a surge… signee

AND

the surgeon… hysician de… continues antibiotic… erapy **on or in the** … **ys follo… deliberate opening, re-acc…** with a d… alendar days or longer

… at least one of the following signs or symptoms: … or …ng localized pain or tenderness; localized swelling; erythema; or heat

d. diagnosis of a superficial incisional SSI by a physician* or physician designee

Organ/Space SSI

Must meet the following criteria:

Date of event occurs within 30 or 90 days following the NHSN operative procedure (where day 1 = the procedure date) according to the list in Table 2

AND

involves the organ/space tissues (deeper than the fascia/muscle)

AND

patient has at least ***one*** of the following:

a. purulent drainage from a drain placed into the organ/space (for example, closed suction drainage system, open drain, T-tube drain, CT-guided drainage)

b. organism(s) identified from fluid or tissue in the organ/space by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (for example, not Active Surveillance Culture/Testing [ASC/AST])

c. an abscess or other evidence of infection involving the organ/space detected on:
   - gross anatomical exam or
   - histopathologic exam or
   - imaging test evidence definitive or equivocal for infection

AND

meets at least ***one*** eligible [per Appendix A]criterion for a specific organ/space infection site listed in Table 3. These criteria are found in the Surveillance Definitions for Specific Types of Infections (Chapter 17).

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Diver Q1: Does the patient have an SSI on 2/1/2026? (Cont'd)

Organ/Space SSI

Must meet the following criteria:

Date of event occurs within 30 or 90 days following the NHSN operative procedure (where day 1 = the procedure date) according to the list in Table 2

AND

involves the organ/space tissues (deeper than the fascia/muscle)

AND

patient has at least ***one*** of the following:

a. purulent drainage from a drain placed into the organ/space (for example, closed suction drainage system, open drain, T-tube drain, CT-guided drainage)

b. organism(s) identified from fluid or tissue in the organ/space by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (for example, not Active Surveillance Culture/Testing [ASC/AST])

c. an abscess or other evidence of infection involving the organ/space detected on:
   - gross anatomical exam or
   - histopathologic exam or
   - imaging test evidence definitive or equivocal for infection

AND

meets at least ***one*** eligible [per Appendix A]criterion for a specific organ/space infection site listed in Table 3. These criteria are found in the Surveillance Definitions for Specific Types of Infections (Chapter 17).

PJI – Periprosthetic Joint Infection (for use as Organ/Space SSI following HPRO and KPRO only)

Periprosthetic joint or bursa infections must meet at least ***one*** of the following criteria:

1. ***Two*** positive periprosthetic specimens (*tissue or fluid*) with at least one matching organism, identified by culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis and treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).
2. A sinus tract* communicating with the joint, purulence, or other gross anatomic evidence of infection.
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. organism(s) identified from a single positive periprosthetic specimen (*tissue or fluid*) by culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis and treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).
   f. Synovial fluid alpha-defensin positive.
   g. Physician diagnosis of periprosthetic joint infection.

For PJI 3, three of the listed elements are needed to fully meet the definition.

CASE STUDY 2 – QUESTION 2

Mr. Scoobi Diver had a KPRO (Knee Prosthesis) NHSN operative procedure performed on 1/20/2026 and is then discharged 1/21/2026. On 2/1/2026 he presents to the provider's office with knee pain and swelling. No fever. Incision is healing well. Synovial fluid aspirate culture shows few MRSA in enrichment broth only. CRP 10 mg/dl, ESR 10 mm/hr.

On 2/3/2026 the patient is taken to the OR for revision. Two periprosthetic cultures are collected, culture #1 showing MRSA, culture #2 showing no growth. No sinus tract is noted, no purulence. Synovial fluid alpha-defensin is positive. No other laboratory values are available.

Question 2: Does the patient have an SSI on 2/3/2026?

a) No. No matching organisms from two periprosthetic cultures to meet PJI 1.

b) No. PJI 3. e. and f. are met, but the third required element is missing.

c) Yes. Organ/space SSI b, and PJI 1. are met.

d) Organ/space SSI b, and JNT 1 definitions are met.

Diver Q2: Does the patient have an SSI on 2/3/2026?

Mr. Scoobi Diver had a KPRO (Knee Prosthesis) NHSN operative procedure performed on 1/20/2026 and is then discharged 1/21/2026. On 2/1/2026 he presents to the provider's office with knee pain and swelling. No fever. Incision is healing well. Synovial fluid aspirate culture shows few MRSA in enrichment broth only. CRP 10 mg/dl, ESR 10 mm/hr.

On 2/3/2026 the patient is taken to the OR for revision. Two periprosthetic cultures are collected, culture #1 showing MRSA, culture #2 showing no growth. No sinus tract is noted, no purulence. Synovial fluid alpha-defensin is positive. No other laboratory values are available.

Question 2: Does the patient have an SSI on 2/3/2026?

a) No. No matching organisms from two periprosthetic cultures to meet PJI 1.

b) No. PJI 3. e. and f. are met, but the third required element is missing.

c) Yes. Organ/space SSI b, and PJI 1. are met

d) Organ/space SSI b, and JNT 1 definitions are met

Diver Q 2: Does the patient have an SSI on 2/3/2026?

a) No. No matching organisms from two periprosthetic cultures to meet PJI 1.

b) No. PJI 3. e. and f. are met, but the third required element is missing.

c) Yes. Organ/space SSI b, and PJI 1 are met.

d) Organ/space SSI b, and JNT 1 definitions are met.

- The two periprosthetic cultures from 2/1/26 and 2/3/2026 are used to meet PJI 1.
- JNT definitions are not used during the surveillance period for KPRO and HPRO procedures. PJI is used.
- Remember that PJI 3 requires three of the listed elements to fully meet definitions.

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Diver Q 2: Does the patient have an SSI on 02/3/2026?

PJI – Periprosthetic Joint Infection (for use as Organ/Space SSI following HPRO and KPRO only)

Periprosthetic joint or bursa infections must meet at least ***one*** of the following criteria:

1. ***Two*** positive periprosthetic specimens (*tissue or fluid*) with at least one matching organism, identified by culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis and treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).
2. A sinus tract* communicating with the joint, purulence, or other gross anatomic evidence of infection.
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. organism(s) identified from a single positive periprosthetic specimen (*tissue or fluid*) by culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis and treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).
   f. Synovial fluid alpha-defensin positive.
   g. Physician diagnosis of periprosthetic joint infection.

JNT-Joint or bursa infection (not for use as Organ/Space SSI after HPRO or KPRO procedures)

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

1. Patient has organism(s) identified from joint fluid or synovial biopsy by culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis and treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).
2. Patient has evidence of joint or bursa infection on gross anatomic or histopathologic exam.
3. Patient has a suspected joint or bursa infection and at least two of the following signs or symptoms: swelling*, pain* or tenderness*, heat*, evidence of effusion*, or limitation of motion*.
   And at least *one* of the following:
   a. elevated joint fluid white blood cell count (per reporting laboratory's reference range) OR positive leukocyte esterase test strip of joint fluid.
   b. organism(s) and white blood cells seen on Gram stain of joint fluid.
   c. organism(s) identified from blood by culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis and treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).
   d. imaging test evidence definitive for infection (for example, x-ray, CT scan, MRI, radiolabel scan [gallium, technetium, etc.]), which if equivocal is supported by clinical correlation, specifically, physician or physician designee documentation of antimicrobial treatment for joint or bursa infection.

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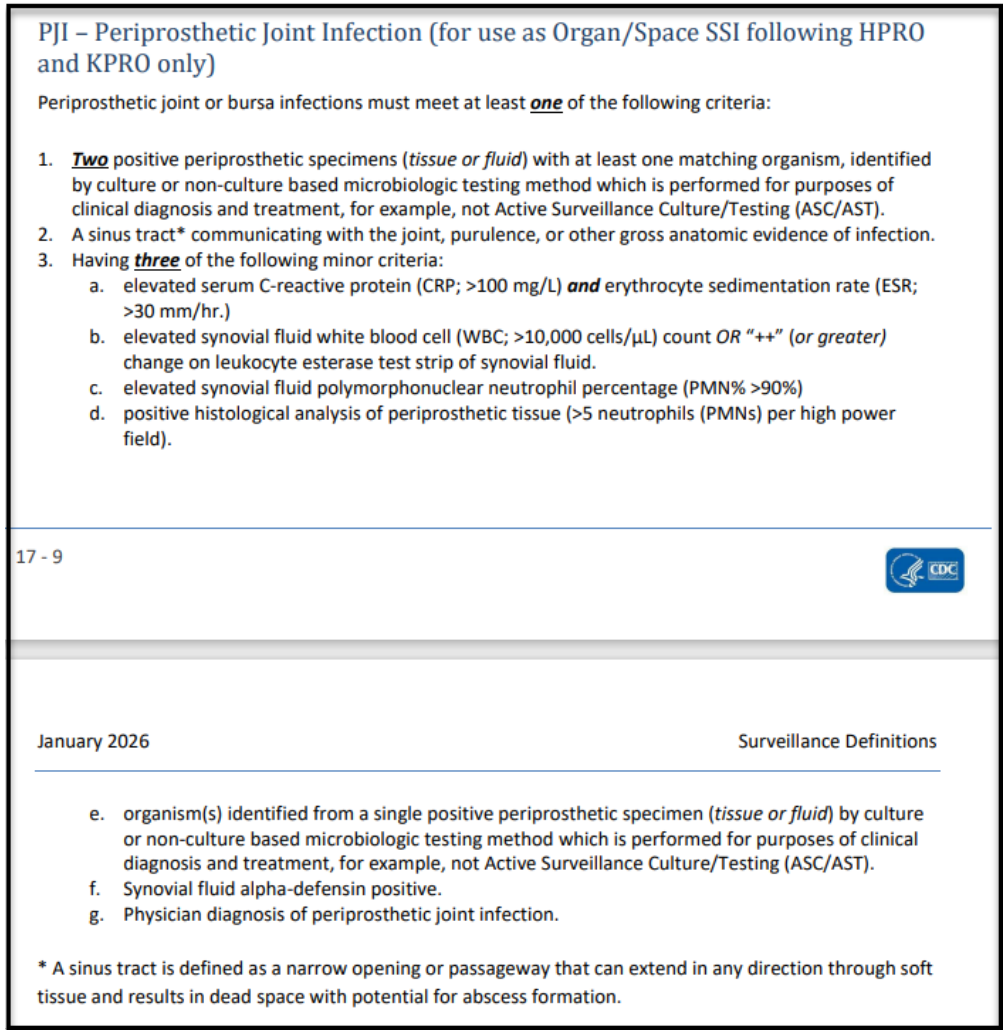
Diver Q 2: Does the patient have an SSI on 02/03/2026?



PJI – Periprosthetic Joint Infection (for use as Organ/Space SSI following HPRO and KPRO only)

Periprosthetic joint or bursa infections must meet at least ***one*** of the following criteria:

1. ***Two*** positive periprosthetic specimens (*tissue or fluid*) with at least one matching organism, identified by culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis and treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).
2. A sinus tract* communicating with the joint, purulence, or other gross anatomic evidence of infection.
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).

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   e. organism(s) identified from a single positive periprosthetic specimen (*tissue or fluid*) by culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis and treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).
   f. Synovial fluid alpha-defensin positive.
   g. Physician diagnosis of periprosthetic joint infection.

* A sinus tract is defined as a narrow opening or passageway that can extend in any direction through soft tissue and results in dead space with potential for abscess formation.

Reminders on PJI definitions:

- Two periprosthetic specimens to meet PJI 1 may be collected on two different dates within the surveillance period.
- Sinus tract may be mentioned in the procedure note or described. The organ/space tissue level must be involved in the communication channel of tissue levels. Exit through the skin is not required to meet sinus tract.
- Purulence or other gross anatomic evidence of infection meets PJI 2.
- Alpha-defensin is added to the definition for 2026.
- Physician diagnosis was added to the definition for 2026.
- JNT definitions are not used in HPRO and KPRO surveillance periods to meet site specific definitions.

CASE STUDY 3

Mr. Will Power presents to a Pittsburgh emergency department (which shall remain unnamed) 2300 on 3/1 with nausea/vomiting (N/V) & acute abdominal pain. The patient relates an uneventful planned appendix removal (APPY) 3/1 start time 0800 in the hospital main operating room (OR), d/c home 1600. Surgeon called/visits and takes the patient directly to OR for a second look (XLAP) procedure, start time 0200 3/2. An existing trocar site is used to open the abdomen where an inflamed pancreas covered with fibrous exudate is identified.

No other significant findings are noted; 0600, patient admitted and moved to the inpatient surgical unit. The surgical unit admission assessment notes the patient is 3 weeks post-op total hip replacement at an ambulatory surgery center (not part of the hospital). Review of hip incision is unremarkable, healing well, no infection suspected. The APPY and XLAP are performed at this same facility where SSI surveillance for all NHSN operative procedures is conducted.

Question 3-1: What type of SSI surveillance is conducted by the hospital?

3/1 0800 APPY – discharge home 1600
3/1 2300 – ED visit with N/V, acute abdominal pain
3/2 0200 XLAP – trocar incision extended, findings: inflamed pancreas with fibrinous exudate
3/2 0600 transfer to inpatient surgical unit
3/2 admission assessment – pt. 3 weeks post-op HPRO with hip incision healing, no s/sx infection

1. SSI surveillance for APPY
2. SSI surveillance for XLAP
3. SSI surveillance for APPY and XLAP
4. SSI surveillance for HPRO
5. No SSI surveillance is conducted

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Question 3-1: What type of SSI surveillance is conducted by the hospital?

1. **SSI surveillance for APPY** 
2. SSI surveillance for XLAP
3. SSI surveillance for APPY and XLAP
4. SSI surveillance for HPRO
5. No SSI surveillance is conducted

Rationale: Denominator Reporting Instruction #7 (SSI protocol pg. 9-25): **More than one operative procedure through same incision/surgical space within 24 hours**: When a patient has more than one operative procedure via the same incision or into the same surgical space, and the second procedure start time is within 24 hours of the first procedure finish time, **report one Denominator for Procedure form for the original procedure**, *combining the durations for both procedures* based on the procedure start times and finish times for both procedures.

**SSI surveillance is set by the denominator record submitted to NHSN – in this case, the APPY is the reported denominator and starts a 30-day surveillance period for monitoring of SSI event linked to this denominator.

Question 3-2: Is an SSI criteria met with the information provided?

1. Yes, Superficial Incisional SSI criteria 'c' is met.
2. Yes, Deep Incisional SSI criteria 'c' is met.
3. Yes, Organ/Space SSI criteria 'c' is met.
4. No, SSI criteria is not met given the information provided.

3/1 0800 APPY – discharge home 1600

3/1 2300 – ED visit with N/V, acute abdominal pain

3/2 0200 XLAP – OR findings: inflamed pancreas with fibrinous exudate

3/2 0600 transfer to inpatient surgical unit

3/2 admission assessment – pt. 3 weeks post-op HPRO with hip incision healing, no signs or symptoms of infection

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Question 3-2: Is an SSI criteria met with the information provided? (Cont.)

1. Yes, Superficial Incisional SSI criteria 'c' is met
2. Yes, Deep Incisional SSI criteria 'c' is met
3. Yes, Organ/Space SSI criteria 'c' is met
4. **No, SSI criteria is not met given the information provided** 

Rationale: The XLAP performed 3/2 becomes a part of the 3/1 APPY procedure as these procedures occur within 24 hours of each other. The symptoms noted between APPY and XLAP are not eligible for use in meeting an SSI criteria nor is the re-op itself eligible as an element in meeting criteria (does not qualify as a deliberate re-opening of the surgical space). Additionally, any evidence of infection noted at time of XLAP is not eligible for use in meeting SSI criteria. Evidence of infection noted at time of APPY or at time of XLAP is eligible for a PATOS determination if a subsequent SSI is identified.

Question 3-3: Is the denominator reported as an outpatient or inpatient procedure?

Let's revisit the case details:

3/1 0800 APPY – discharged home 1600

3/1 2300 ED with nausea/vomiting and acute abdominal pain

3/2 0200 XLAP – OR findings inflamed pancreas with fibrinous exudate

3/2 0600 Admit to inpatient unit

1. Report as an outpatient procedure.
2. Report as an inpatient procedure.
3. Report the 3/1 APPY as an outpatient procedure and the 3/2 XLAP as an inpatient procedure.
4. I'm Lost!! Why does it matter????

Question 3-3: Is the denominator reported as an outpatient or inpatient procedure?

1. **Report as an outpatient procedure.** 
2. **Report as an inpatient procedure.**
3. **Report the 3/1 APPY as an outpatient procedure and the 3/2 XLAP as an inpatient procedure.**
4. **I'm Lost!! Why does it matter????**

Rationale: SSI protocol pg. 9-8:

NHSN **Inpatient** Operative Procedure: An NHSN operative procedure performed on a patient whose date of admission to the healthcare facility and the date of discharge are different calendar days.

NHSN **Outpatient** Operative Procedure: An NHSN operative procedure performed on a patient whose date of admission to the healthcare facility and date of discharge are the same calendar day.

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CASE STUDY 4 – QUESTION 1

31-year-old patient Divey Shipwreck is admitted on 1/1/2026 and delivers a healthy baby boy via CSEC on 1/2/2026. The treating OB/GYN (obstetrician/gynecologist) mentions in the narrative of the operative note suspicion of chorioamnionitis, but no gross anatomic evidence of infection is documented. The patient is discharged after uneventful hospitalization.

On 1/20/2026, patient presents to the emergency department (ED) with severe abdominal pain. OB/GYN consult notes include suspicion of endometritis. Fever of 102.0 degrees Fahrenheit is noted in the ED. Antimicrobials are initiated. No imaging has been ordered. No cultures were collected. No description of purulence. Incision is healing well.

Question 1: Does this scenario meet any Organ/space SSI definitions? If so, which one?

a) No organ/space SSI definitions are met.

b) No imaging, so no need to continue surveillance.

c) Organ/space SSI c is met with abdominal pain, if OREP, EMET, or VCUF are met.

d) Organ/space SSI c) is met with fever (gross anatomic evidence of infection)

Shipwreck Q 1 – Does this scenario meet any Organ/space SSI definitions? If so, which one?

31-year-old patient Divey Shipwreck is admitted on 1/1/2026 and delivers a healthy baby boy via CSEC on 1/2/2026. The treating OB/GYN mentions in the narrative of the operative note suspicion of chorioamnionitis, but no gross anatomic evidence of infection is documented. The patient is discharged after uneventful hospitalization.

On 1/20/2026, patient presents to the emergency department (ED) with severe abdominal pain. OB/GYN consult notes include suspicion of endometritis. Fever of 102.0 degrees Fahrenheit is noted in the ED. Antimicrobials are initiated. No imaging has been ordered. No cultures were collected. No description of purulence. Incision is healing well.

a) No organ/space SSI definitions are met.

b) No imaging, so no need to continue surveillance.

c) Organ/space SSI c is met with abdominal pain, if OREP, EMET, or VCUF are met. ☑

d) Organ/space SSI c) is met with fever (gross anatomic evidence of infection)

CASE STUDY 4 – QUESTION 2

31-year-old patient Divey Shipwreck is admitted on 1/1/2026 and delivers a healthy baby boy via CSEC on 1/2/2026. The treating OB/GYN mentions in the narrative of the operative note suspicion of chorioamnionitis, but no gross anatomic evidence of infection is documented. The patient is discharged after uneventful hospitalization.

On 1/20/2026, patient presents to the emergency department (ED) with severe abdominal pain. OB/GYN consult notes include suspicion of endometritis. Fever of 102.0 degrees Fahrenheit is noted in the ED. Antimicrobials are initiated. No imaging has been ordered. No cultures were collected. No description of purulence. Incision is healing well.

Question 2: Which Chapter 17 site specific infection is applied here and met?

a) OREP

b) EMET

c) IAB

d) VCUF

Shipwreck Q 2 – Which Chapter 17 site specific infection is applied here and met?

Are there any possible answers we can rule out?

a) OREP

b) EMET

c) IAB

d) VCUF

CSEC - Cesarean section	DIP - Deep Incisional Primary EMET - Endometritis GIT - Gastrointestinal tract IAB - Intraabdominal, not specified elsewhere OREP - Deep pelvic tissue infection or other infection of the male or female reproductive tract SIP - Superficial Incisional Primary USI - Urinary System Infection

Abdominal, pelvic or uterine pain or tenderness **post Cesarean section (CSEC) or hysterectomy (HYST or VHYS)** is sufficient gross anatomic evidence of infection without an invasive procedure to meet general Organ/Space SSI criterion 'c' **when a Chapter 17 Reproductive Tract Infection criteria is met**. Allowing the documentation of abdominal pain or tenderness as gross anatomic evidence of infection to meet general Organ/Space SSI criterion 'c' enables the user to report an SSI-OREP, SSI-EMET or SSI-VCUF event.

Shipwreck Q 2 – Which Chapter 17 site specific infection is applied here and met? (Cont.)

OREP- Pelvic tissue/space infection or other infection of the male or female reproductive tract (for example, epididymis, testes, prostate, vagina, ovaries, uterus) including chorioamnionitis, but excluding vaginitis, endometritis or vaginal cuff infections

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

1. Patient has organism(s) identified from tissue or fluid from one of the specified OREP sites (excludes urine and vaginal swabs) by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).

2. Patient has an abscess or other evidence of infection of affected site on gross anatomic or histopathologic exam.
3. Patient has **suspected infection of** one of the listed OREP sites and ***two*** of the following localized signs or symptoms: fever (>38.0°C), nausea*, vomiting*, pain or tenderness*, or dysuria*
   And at least *one* of the following:
   a. organism(s) identified from blood by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment, for example, not Active Surveillance Culture/Testing (ASC/AST)
   b. physician or physician designee initiates antimicrobial therapy within ***two*** days of onset or worsening of symptoms.

** With no other recognized cause*

a) OREP
b) EMET ☑

EMET-Endometritis

Endometritis must meet at least ***one*** of the following criteria:

1. Patient has organism(s) identified from endometrial fluid or tissue by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).
2. Patient has **suspected endometritis** with at least ***two*** of the following signs or symptoms: fever (>38.0°C), pain or tenderness (uterine or abdominal) *, or purulent drainage from uterus.

** With no other recognized cause*

Reporting Instructions

- Do not report an HAI chorioamnionitis as EMET (see OREP).
- Do not report subsequent postpartum endometritis after a vaginal delivery as an HAI if a patient is admitted with POA chorioamnionitis (OREP). (See next bullet for endometritis following a C-section).
- Report as an organ space SSI-EMET if a C-section was performed on a patient with chorioamnionitis and the patient later develops endometritis.

First assess if EMET definitions are met. If they are not met, apply OREP definitions.

CASE STUDY 4– QUESTION 3

31-year-old patient Divey Shipwreck is admitted on 1/1/2026 and delivers a healthy baby boy via CSEC on 1/2/2026. The treating OB/GYN mentions in the narrative of the operative note suspicion of chorioamnionitis, but no gross anatomic evidence of infection is documented. The patient is discharged after uneventful hospitalization.

On 1/20/2026, patient presents to the emergency room with severe abdominal pain. OB/GYN consult notes include suspicion of endometritis. Fever of 102.0 degrees Fahrenheit is noted in the emergency department. Antimicrobials are initiated. No imaging has been ordered. No cultures were collected. No description of purulence. Incision is healing well.

Question 3: Is this SSI, O/S c, EMET 2, reported as PATOS?

a) Yes

b) No

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Shipwreck Q 3 – Is this SSI, O/S c, EMET 2, reported as PATOS?

a) Yes ☑
b) No

Suspected chorioamnionitis was documented in the narrative of the operative note.

See page 9-19 of the SSI protocol.

i) For C-Section [CSEC] procedures ONLY: chorioamnionitis including suspected chorioamnionitis documented in the operative narrative is eligible for use for PATOS at the organ/space tissue level.

CASE STUDY 5 – QUESTION 1

62-year-old patient Coral Reef is admitted for a hysterectomy procedure and tumor debulking (ICD-10 code 0UT94ZL) on 2/1/2026. Hospitalization includes initiation of chemotherapy. Patient is discharged on 2/10/2026.

On 2/18/2026 patient is readmitted with abdominal pain, fever of 102.6 degrees Fahrenheit, generalized weakness. CT of the abdomen shows possible pelvic abscess on 2/18/2026. Antimicrobials are initiated. Patient undergoes CT guided abscess drainage attempt on 2/19/2026, but it is unsuccessful. Return to OR on 2/20/2026 where a pelvic abscess is drained (non-NHSN operative procedure). A culture of the abscess was collected but is lost in transit to the laboratory and is never processed. On 2/22/2026 a deep tissue culture shows *Acinetobacter baumanii*.

Question 1: Is this a VHYS or HYST NHSN operative procedure?

a) VHYS

b) HYST

c) It's not an NHSN operative procedure.

d) How would I know?

Reef Q 1 – Is this a VHYS, or HYST NHSN operative procedure??

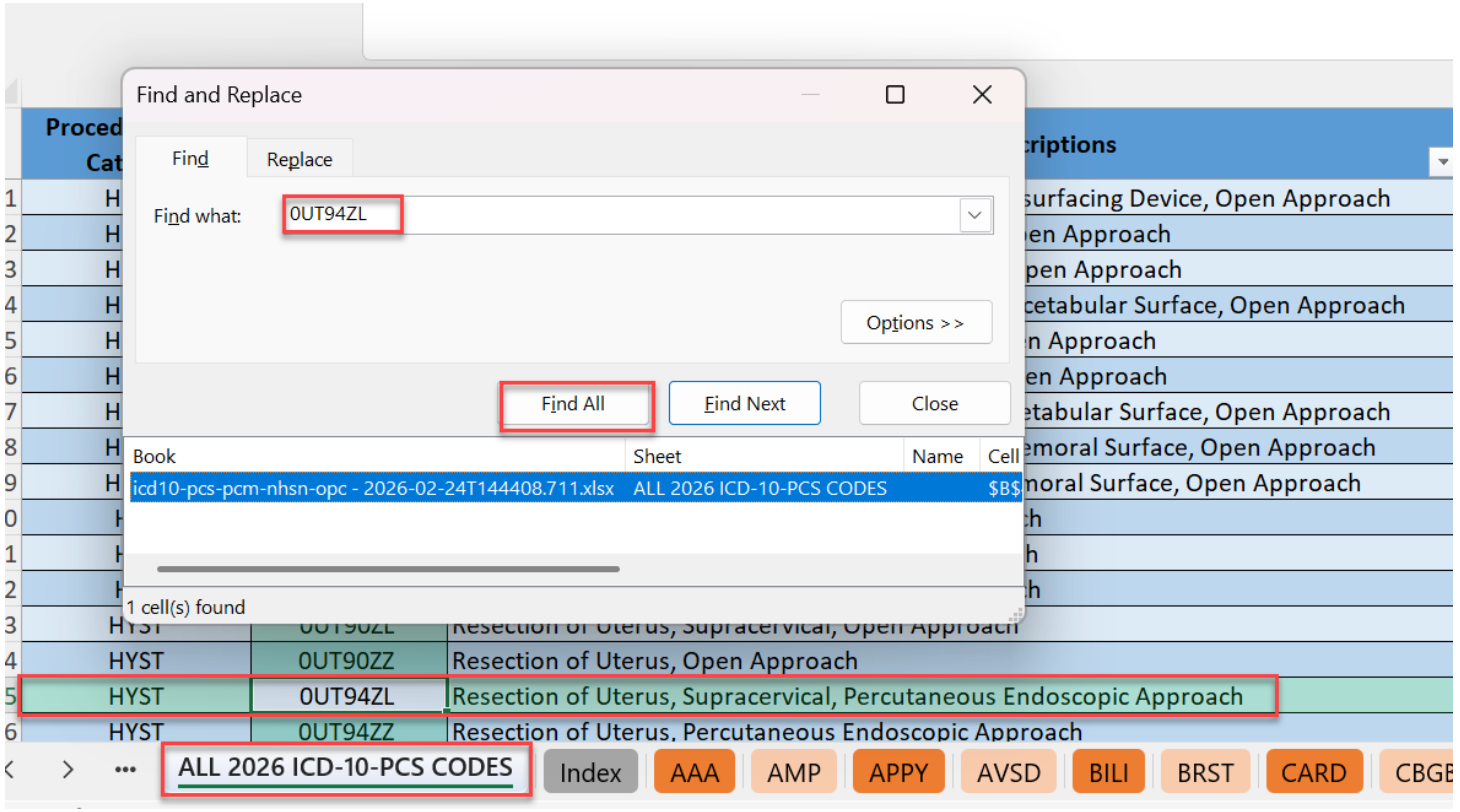
a) VHYS

b) HYST ☑

c) It's not an NHSN operative procedure.

d) How would I know?

- Find the operative procedure code assigned by your coding department
- Enter code in search option of NHSN Excel spreadsheet.
- Code, procedure type, and description will appear.
- If the code is not found, it is not an NHSN operative procedure.



- ICD-10-PCS Procedure Code Mapping to NHSN Operative Procedure Codes – January 2026 [XLS – 787 KB]
- Current Procedural Terminology (CPT) Procedure Code Mapping to NHSN Operative Procedure Codes – January 2026 [XLS – 346 KB]

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CASE STUDY 5 – QUESTION 2

62-year-old patient Coral Reef is admitted for a hysterectomy procedure and tumor debulking (ICD-10 code 0UT94ZL) on 2/1/2026. Hospitalization includes initiation of chemotherapy. Patient is discharged on 2/10/2026.

On 2/18/2026 patient is readmitted with abdominal pain, fever of 102.6 degrees Fahrenheit, generalized weakness. CT of the abdomen shows possible pelvic abscess on 2/18/2026. Antimicrobials are initiated. Patient undergoes CT guided abscess drainage attempt on 2/19/2026, but it is unsuccessful. Return to OR on 2/20/2026 where a pelvic abscess is drained (non-NHSN operative procedure). A culture of the abscess was collected but is lost in transit to the laboratory and is never processed. On 2/22/2026 a deep tissue culture shows *Acinetobacter baumanii*.

Question 2: Does the unsuccessful attempt to drain the abscess meet Invasive Manipulation definitions to stop the surveillance period?

a) Yes

b) No

c) It was not performed in the OR, so the abscess drainage stops the surveillance period.

Reef Q 2 – Does the unsuccessful attempt to drain the abscess meet Invasive Manipulation definitions to stop the surveillance period?

a) Yes

b) No ☑

c) It was not performed in the OR, so the abscess drainage stops the surveillance period.

There was suspicion of infection present at time of abscess drainage attempt. The 3 criteria of invasive manipulation are not met. Surveillance continues.

SSI Reporting Instruction #10:

10. **SSI following invasive manipulation or accession of the operative site:** An SSI will **NOT** be attributed when the following 3 criteria are ALL met:

- during the post-operative period there is no suspicion or evidence of infection related to the surgical site/space.

And

- an invasive manipulation or accession of the site/space is performed for diagnostic or therapeutic purposes (for example, needle aspiration, accession of ventricular shunts, accession of breast expanders).

And

- an infection subsequently develops in a tissue level which was entered during the manipulation/accession.

CASE STUDY 5 – QUESTION 3

62-year-old patient Coral Reef is admitted for a hysterectomy procedure and tumor debulking (0UT94ZL) on 2/1/2026. Hospitalization includes initiation of chemotherapy. Patient is discharged on 2/10/2026.

On 2/18/2026 patient is readmitted with abdominal pain, fever of 102.6 degrees Fahrenheit, generalized weakness. CT of the abdomen shows possible pelvic abscess on 2/18/2026. Antimicrobials are initiated. Patient undergoes CT guided abscess drainage attempt on 2/19/2026, but it is unsuccessful. Return to OR on 2/20/2026 where a pelvic abscess is drained (non-NHSN operative procedure). A culture of the abscess was collected but is lost in transit to the laboratory and is never processed. On 2/22/2026 a deep tissue culture shows *Acinetobacter baumanii*.

Question 3: Are any SSI definitions met in this scenario?

a) Yes. Deep SSI b) is met with Acinetobacter isolated from the culture on 2/22/2026.

b) No. Patients on chemotherapy are excluded from reporting.

c) Organ/space SSI c) is met, and IAB 1., date of event 2/22/2026.

d) Organ/space SSI c) is met, and OREP 3.b) with date of event 2/18/2026.

Reef Q 3 – Are any SSI definitions met in this scenario?

a) Yes. Deep SSI b) is met with Acinetobacter isolated from the culture on 2/22/2026.

b) No. Patients on chemotherapy are excluded from reporting.

c) Organ/space SSI c) is met, and IAB 1., date of event 2/22/2026.

d) Organ/space SSI c) is met, and OREP 3.b) with date of event 2/18/2026. 

Reef Q 3 – Are any SSI definitions met in this scenario?(Cont'd)

a) Yes. Deep SSI b) is met with Acinetobacter isolated from the culture on 2/22/2026.
b) No. Patients on chemotherapy are excluded from reporting.
c) Organ/space SSI c) is met, and IAB 1., date of event 2/22/2026.
d) Organ/space SSI c) is met, and OREP 3.b) with date of event 2/18/2026.

Each trip to the OR for an NHSN operative procedure sets an SSI surveillance period for the surgical site.

- If a patient returns to the OR for an **NHSN operative procedure** and the same surgical space is entered, the surveillance period for the prior NHSN operative procedure ends and a new SSI surveillance period begins at the conclusion of the procedure.
- If within the surveillance period following an NHSN operative procedure a **non-NHSN operative procedure** is performed, and all three tissue levels are entered, the SSI surveillance period for the NHSN operative procedure ends at the conclusion of the non-NHSN operative procedure. The SSI surveillance period continues for the tissue levels not entered during the non-NHSN operative procedure. No new surveillance period is set following a non-NHSN operative procedure.

a) Is not correct.

The non-NHSN operative procedure on 2/20/2026 where all tissue levels were entered ended the surveillance period for all tissue levels. The surveillance period for the NHSN operative procedure has ended. The culture may be important for clinical and treatment applications, but it is not used to meet SSI surveillance definitions.

Reef Q 3 - Are any SSI definitions met in this scenario? (Cont.)

a) Yes. Deep SSI b) is met with Acinetobacter isolated from the culture on 2/22/2026.

b) No. Patients on chemotherapy are excluded from reporting.

c) Organ/space SSI c) is met, and IAB 1., date of event 2/22/2026.

d) Organ/space SSI c) is met, and OREP 3.b) with date of event 2/18/2026. 

b) Is not correct.

Oncology patients or patients on chemotherapy are not excluded from surveillance.

Reef Q 3– Are any SSI definitions met in this scenario? (Cont'd)

a) Yes. Deep SSI b) is met with Acinetobacter isolated from the culture on 2/22/2026.
b) No. Patients on chemotherapy are excluded from reporting.
c) Organ/space SSI c) is met, and IAB 1., date of event 2/22/2026.
d) Organ/space SSI c) is met, and OREP 3.b) with date of event 2/18/2026.

IAB or OREP?
Either one may be used for attribution to HYST procedures. (See appendix to the SSI protocol)

HYST - Abdominal hysterectomy	DIP - Deep Incisional Primary
	IAB - Intraabdominal, not specified elsewhere
	OREP - Deep pelvic tissue infection or other infection of the male or female reproductive tract
	SIP - Superficial Incisional Primary
	VCUF - Vaginal cuff infection

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Reef Q 3 – Are any SSI definitions met in this scenario? (Continued)

d) Organ/space SSI c) is met, and IAB 1., date of event 2/22/2026.
e) Organ/space SSI c) is met, and OREP 3.b) with date of event 2/18/2026. ☑

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

Intraabdominal infections must meet at least ***one*** of the following criteria:

1. Patient has organism(s) identified from an abscess or from purulent material from intraabdominal space by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).
2. Patient has at least one of the following:
   a. abscess or other evidence of intraabdominal infection on gross anatomic or histopathologic exam.
   b. abscess or other evidence of intraabdominal infection on gross anatomic or histopathologic exam. (See Reporting Instructions)
   AND
   organism(s) identified from blood by a culture or non-culture based microbiologic testing method, which is performed for purposes of clinical diagnosis or treatment, for example, not Active Surveillance Culture/Testing (ASC/AST). The organism(s) identified in the blood must contain at least one MBI organism from the NHSN Terminology Browser.
3. Patient has at least ***two*** of the following signs or symptoms: fever (>38.0°C), hypotension, nausea*, vomiting*, abdominal pain or tenderness*, elevated transaminase level(s)*, or jaundice*
   And at least *one* of the following:
   a. organism(s) seen on Gram stain and/or identified from intraabdominal fluid or tissue obtained during invasive procedure or from an aseptically-placed drain in the intraabdominal space (for example, closed suction drainage system, open drain, T-tube drain, CT guided drainage) by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).
   b. organism(s) identified from blood by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment, for example, not Active Surveillance Culture/Testing (ASC/AST). The organism(s) identified in the blood must contain at least one MBI organism from the NHSN Terminology Browser.
   AND
   imaging test evidence definitive for infection (for example, ultrasound, CT scan, MRI, ERCP, radiolabel scans [gallium, technetium, etc.] or on abdominal x-ray), which if equivocal is supported by clinical correlation, specifically, physician or physician designee documentation of antimicrobial treatment for intraabdominal infection.†

OREP- Pelvic tissue/space infection or other infection of the male or female reproductive tract (for example, epididymis, testes, prostate, vagina, ovaries, uterus) including chorioamnionitis, but excluding vaginitis, endometritis or vaginal cuff infections

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

1. Patient has organism(s) identified from tissue or fluid from one of the specified OREP sites (excludes urine and vaginal swabs) by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).

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January 2026 Surveillance Definitions

2. Patient has an abscess or other evidence of infection of affected site on gross anatomic or histopathologic exam.
3. Patient has **suspected infection of** one of the listed OREP sites and ***two*** of the following localized signs or symptoms: fever (>38.0°C), nausea*, vomiting*, pain or tenderness*, or dysuria*
   And at least *one* of the following:
   a. organism(s) identified from blood by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment, for example, not Active Surveillance Culture/Testing (ASC/AST)
   b. physician or physician designee initiates antimicrobial therapy within ***two*** days of onset or worsening of symptoms.

** With no other recognized cause*

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CASE STUDY 6

2/15/26: Candy Land is admitted to Olympic Hospital with sudden onset chest pain. History includes aortic valve replacement (AVR) 2020 secondary to known IV drug use. Echocardiogram (ECHO) on admit shows valvular stenosis; on 2/16 undergoes CABG with re-do AVR.

The patient has a rocky recovery and on 2/22, fever is recorded at 102.4°F Blood cultures (BCs) are drawn 0600 & 0615. 2/23 Patient oxygen saturation drops, placed on Bi-PAP. Post-op pneumonia is diagnosed, fever noted, new BCs are collected 0800 & 0805 and patient's surgical incision documented as inflamed with purulent drainage. ECHO is performed with moderate valvular regurgitation noted.

The patient is returned to OR 2/26 where the surgical incision is reopened to sternum with thick, green exudate throughout and covering the sternum. BC from 2/22 0600 & 0615 identify *Stenotrophomonas*; the 2/23 0800 BC also identifies *Stenotrophomonas*, 0805 BC is final no growth.

Question 6-1: Is an SSI criteria met in this case?

Let's break down the case details:

2/15/26: Admitted with h/o prosthetic heart valve/ IV drug use, ECHO = valvular stenosis

2/16/26: CABG/AVR (NHSN operative procedures with 90-day surveillance period)

2/22/26: Pneumonia, Temp 102.4°F, BC (blood culture) x 2 *Stenotrophomonas*

2/23/26: Fever, BC x1 *Stenotrophomonas* BC x1 no growth, surgical incision inflamed w/purulent drainage, ECHO = moderate valvular regurgitation

2/26/26: Return to OR, incision re-opened with thick, green exudate documented to/on the sternum.

1. No – the patient's issues are not related to a surgery.
2. Yes – Superficial Incisional SSI criteria 'a' is met on 2/23.
3. Yes – Deep Incisional SSI criteria 'a' is met on 2/24.
4. Yes – but I'm not sure which one.

Question 6-1: Is an SSI criteria met in this case?

1. **No – the patient's issues are not related to a surgery.**
2. **Yes – Superficial Incisional SSI criteria 'a' is met on 2/23.** 
3. **Yes – Deep Incisional SSI criteria 'a' is met on 2/26.**
4. **Yes – but not sure which one.**

Rationale: SSI protocol pg. 9-11/13: Superficial Incisional SSI 'a' purulent drainage from the superficial incision. **Deep Incisional SSI 'd'** an abscess, or other evidence of infection involving the deep incision detected on gross anatomical exam

Rationale: SSI FAQ #1: Purulence is acceptable gross anatomic evidence of infection when documented in the patient record. When the terms 'pus' or 'purulence' are not written in the medical record, NHSN has allowed determinations for purulence based off descriptors. Documentation that uses a color descriptor and a consistency descriptor (from the list below) in combination is acceptable to indicate 'purulence'. **ONLY the following descriptors are eligible for use to meet the definition of purulence: COLOR: Green or Yellow** and **CONSISTENCY**: **Milky, Thick, Creamy, Opaque, Viscous** (SSI FAQ1)

Question 6-1: Is an SSI criteria met in this case?

Let's break down the case details:

2/15/26: Admitted with h/o prosthetic heart valve/IV drug use; ECHO = valvular stenosis

2/16/26: CABG/AVR

2/22/26: Pneumonia, Temp 102.4°F, BC x 2 *Stenotrophomonas*

2/24/26: Fever, BC x1 *Stenotrophomonas*, x1 no growth, sternal wound inflamed w/purulent drainage, ECHO = moderate valvular regurgitation

2/26/26: Return to OR, incision re-opened with thick, green exudate documented to/on the sternum.

<u>WAIT!!!</u> - I've established both SI and DI criteria are met. Am I done with SSI surveillance? What about the +BC? Are they part of the SSI determination?

SSI rules for secondary BSI determinations

Secondary BSI Scenarios for SSI: (SSI protocol pg. 9-6)
For a bloodstream infection to be determined secondary to an SSI, one of the following scenarios must be met:

Scenario 1 (All levels of SSI): At least one organism from the blood specimen matches an organism identified from the site-specific specimen that is used as an element to meet the NHSN SSI criterion AND the blood specimen is collected during the secondary BSI attribution period. The secondary BSI attribution period for SSI is a 17-day period that includes the SSI DOE, 3 days prior, and 13 days after.

OR

Scenario 2 (Organ/Space SSI Only): An organism identified in the blood specimen is an element that is used to meet the NHSN Organ/Space SSI site-specific infection criterion and is collected during the timeframe for SSI elements.

Case 6

Let's break down the case details:

2/15/26: Admitted with h/o prosthetic heart valve/ IV drug use; ECHO = valvular stenosis

2/16/26: CABG/AVR

2/22/26: Pneumonia, Temp 102.4°F, BC x 2 *Stenotrophomonas*

2/23/26: Fever, BC x1 *Stenotrophomonas*, x1 no growth, sternal wound inflamed w/purulent drainage,

ECHO = moderate valvular regurgitation

2/26/26: Return to OR, incision re-opened with thick, green exudate documented to/on the sternum

Rationale: SSI surveillance should continue for the full surveillance period. NHSN recommends reporting an SSI at the deepest tissue level where SSI criterion is met. Even if an SIP or DIP is identified, it's appropriate to continue surveillance for an Organ/Space SSI. IF an O/S SSI criteria can be met, secondary BSI guidance may be applied to determine if the +BC represent a secondary BSI or a primary BSI. **NOTE**: A general O/S SSI criteria AND a specific O/S site infection criteria must be met to fully satisfy O/S SSI criteria. Refer to Appendix A to identify eligible specific O/S site infection criteria to investigate.

Case 6 – (Cont.)

Let's break down the case details:

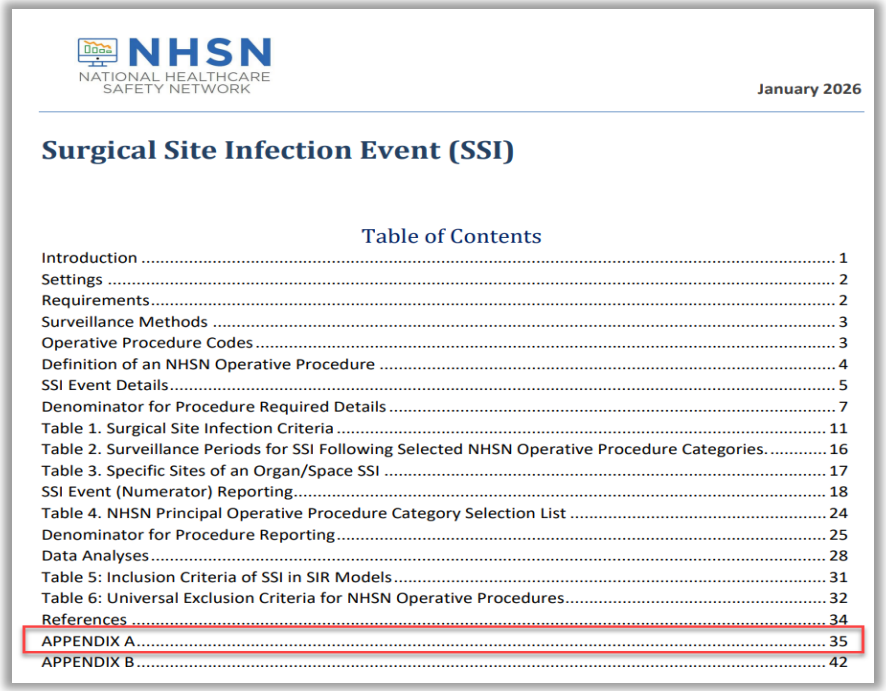
2/15/26: Admitted with h/o prosthetic heart valve/ IV drug use; ECHO = valvular stenosis

2/16/26: CABG/AVR

2/22/26: Pneumonia, Temp 102.4^F, BC x 2 *Stenotrophomonas*

2/23/26: Temp elevated, BC x1 *Stenotrophomonas*, x1 no growth, sternal wound inflamed w/purulent drainage, ECHO = moderate valvular regurgitation

2/26/26: Return to OR, incision re-opened with thick, green exudate documented to/on the sternum



NHSN
NATIONAL HEALTHCARE SAFETY NETWORK

January 2026

Surgical Site Infection Event (SSI)

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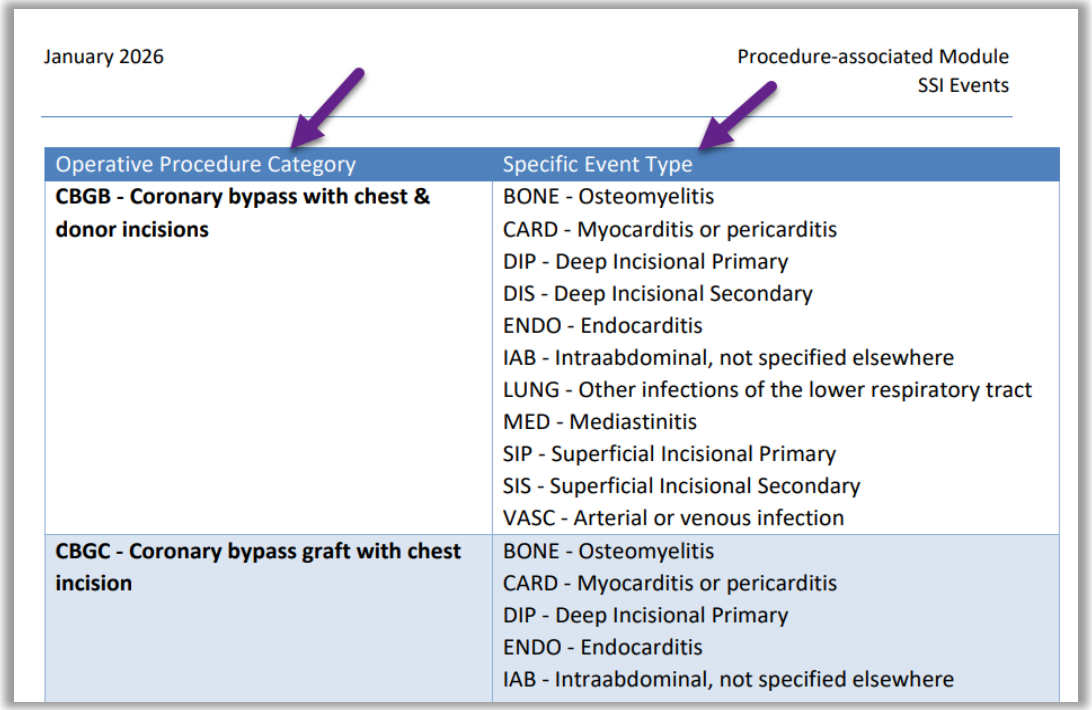

January 2026 — Procedure-associated Module SSI Events

Operative Procedure Category	Specific Event Type
CBGB - Coronary bypass with chest & donor incisions	BONE - Osteomyelitis CARD - Myocarditis or pericarditis DIP - Deep Incisional Primary DIS - Deep Incisional Secondary ENDO - Endocarditis IAB - Intraabdominal, not specified elsewhere LUNG - Other infections of the lower respiratory tract MED - Mediastinitis SIP - Superficial Incisional Primary SIS - Superficial Incisional Secondary VASC - Arterial or venous infection
CBGC - Coronary bypass graft with chest incision	BONE - Osteomyelitis CARD - Myocarditis or pericarditis DIP - Deep Incisional Primary ENDO - Endocarditis IAB - Intraabdominal, not specified elsewhere

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Question 6-2: Can a general OS SSI criteria be met?

Let's break down the case details:

2/15/26: Admitted with h/o prosthetic heart valve/ IV drug use; ECHO = valvular stenosis

2/16/26: CABG/AVR

2/22/26: Pneumonia, Temp 102.4°F, BC x 2 *Stenotrophomonas*

2/23/26: Fever, BC x1 *Stenotrophomonas*, x1 no growth, sternal wound inflamed w/purulent drainage, ECHO = moderate valvular regurgitation

2/26/26: Return to OR, incision re-opened with thick, green exudate documented to/on the sternum

1. **Yes – General O/S SSI criteria 'a' is met.**
2. **Yes – General O/S SSI criteria 'b' is met.**
3. **Yes – General O/S SSI criteria 'c' is met.**
4. **No – I don't think so – where is this criteria anyway?**

Question 6-2: Can a general OS SSI criteria be met? (Cont.)

Let's break down the case details:

2/15/26: Admitted with h/o prosthetic heart valve/IV drug use; ECHO = valvular stenosis

2/16/26: CABG/AVR

2/22/26: Pneumonia, Temp 102.4°F, BC x 2 *Stenotrophomonas*,

2/23/26: Fever, BC x1 *Stenotrophomonas*, x1 no growth, sternal wound inflamed w/purulent drainage, ECHO = moderate valvular regurgitation

2/24/26: Return to OR, incision re-opened with thick, green exudate documented to/on the sternum

1. **Yes – General O/S SSI criteria 'a' is met.**
2. **Yes – General O/S SSI criteria 'b' is met.**
3. **Yes – General O/S SSI criteria 'c' is met.**
4. **No – I don't think so – where is this criteria anyway? (Hint: SSI protocol, pg. 9-15)**

Question 6-2: Can a general OS SSI criteria be met? (Cont'd)

Let's break down the case details:

2/15/26: Admitted with h/o prosthetic heart valve/IV drug use; ECHO = valvular stenosis

2/16/26: CABG/AVR

2/22/26: Pneumonia, Temp 102.4°F, BC x 2 *Stenotrophomonas*

2/23/26: Fever, BC x1 *Stenotrophomonas*, x1 no growth, sternal wound inflamed w/purulent drainage, ECHO = moderate valvular regurgitation

2/24/26: Return to OR, incision re-opened with thick, green exudate documented to/on the sternum

1. Yes – General O/S SSI criteria 'a' is met.
2. Yes – General O/S SSI criteria 'b' is met.
3. **Yes – General O/S SSI criteria 'c' is met.**
4. No – I don't think so – where is this criteria anyway?

Rationale: General O/S SSI criteria (SSI protocol, pg. 9-18)- c. an abscess or other evidence of infection involving the organ/space detected on: gross anatomical exam (thick, green descriptors = Purulence)

Question 6-3: Can a specific OS site infection criteria be met?

Let's break down the case details:

2/15/26: Admitted with h/o prosthetic heart valve/ IV drug use; ECHO = valvular stenosis

2/16/26: CABG/AVR

2/22/26: Pneumonia, Temp 102.4°F, BC x 2 *Stenotrophomonas*

2/23/26: Fever, BC x1 *Stenotrophomonas*, x1 no growth, sternal wound inflamed w/purulent drainage, ECHO = moderate valvular regurgitation

2/24/26: Return to OR, incision re-opened with thick, green exudate documented to/on the sternum

1. Yes - BONE 2
2. Yes - ENDO 4
3. Yes - ENDO 5
4. Yes - ENDO 6
5. Yes - ENDO 7

Question 6-3: Can a specific OS site infection criteria be met? (Cont.)

Let's break down the case details:

2/15/26: Admitted with h/o prosthetic heart valve/IV drug use; ECHO = valvular stenosis

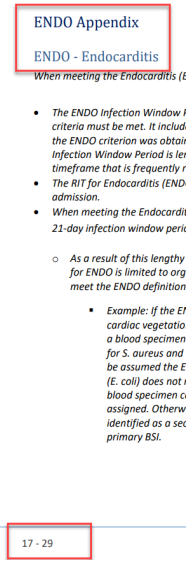
2/16/26: CABG/AVR

2/22/26: Pneumonia, Temp 102.4°F, BC x 2 *Stenotrophomonas*

2/23/26: Fever, BC x1 *Stenotrophomonas*, x1 no growth, sternal wound inflamed w/purulent drainage, ECHO = moderate valvular regurgitation

2/24/26: Return to OR, incision re-opened with thick, green exudate documented to/on the sternum.

1. **BONE 2** = Patient has evidence of osteomyelitis on gross anatomic or histopathologic exam **(pg. 17- 7)**
2. **ENDO 4**
3. **ENDO 5**
4. **ENDO 6**
5. **ENDO 7**



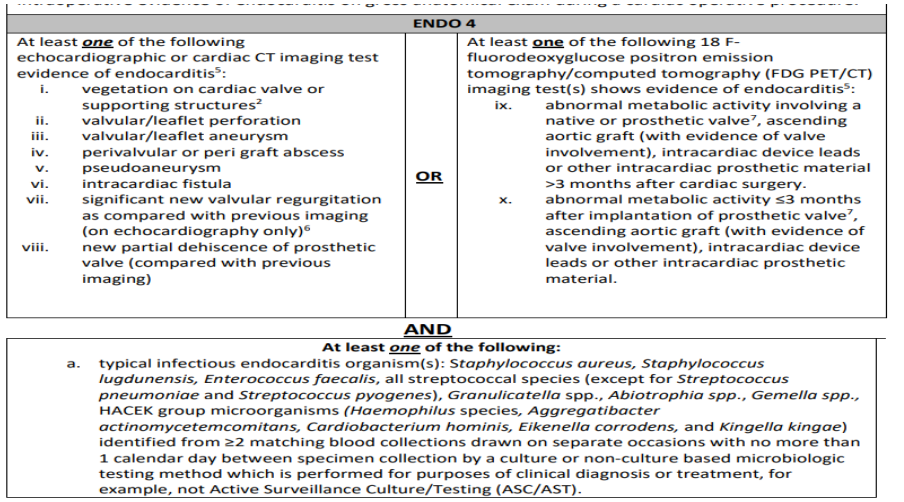
ENDO Appendix

ENDO - Endocarditis

When meeting the Endocarditis (E

- *The ENDO Infection Window P criteria must be met. It includ the ENDO criterion was obtai Infection Window Period is le timeframe that is frequently r*
- *The RIT for Endocarditis (END admission.*
- *When meeting the Endocardi 21-day infection window peri*
  - *As a result of this lengthy for ENDO is limited to org meet the ENDO definition*
    - *Example: If the EI cardiac vegetatio a blood specimen for S. aureus and be assumed the E (E. coli) does not blood specimen c assigned. Otherw identified as a sec primary BSI.*

17 - 29



ENDO 4		
At least **one** of the following echocardiographic or cardiac CT imaging test evidence of endocarditis[5]: i. vegetation on cardiac valve or supporting structures[2] ii. valvular/leaflet perforation iii. valvular/leaflet aneurysm iv. perivalvular or peri graft abscess v. pseudoaneurysm vi. intracardiac fistula vii. significant new valvular regurgitation as compared with previous imaging (on echocardiography only)[6] viii. new partial dehiscence of prosthetic valve (compared with previous imaging)	**OR**	At least **one** of the following 18 F-fluorodeoxyglucose positron emission tomography/computed tomography (FDG PET/CT) imaging test(s) shows evidence of endocarditis[5]: ix. abnormal metabolic activity involving a native or prosthetic valve[7], ascending aortic graft (with evidence of valve involvement), intracardiac device leads or other intracardiac prosthetic material >3 months after cardiac surgery. x. abnormal metabolic activity ≤3 months after implantation of prosthetic valve[7], ascending aortic graft (with evidence of valve involvement), intracardiac device leads or other intracardiac prosthetic material.

AND

At least *one* of the following:

a. typical infectious endocarditis organism(s): *Staphylococcus aureus, Staphylococcus lugdunensis, Enterococcus faecalis*, all streptococcal species (except for *Streptococcus pneumoniae* and *Streptococcus pyogenes*), *Granulicatella* spp., *Abiotrophia spp., Gemella spp.*, HACEK group microorganisms (*Haemophilus* species, *Aggregatibacter actinomycetemcomitans, Cardiobacterium hominis, Eikenella corrodens,* and *Kingella kingae*) identified from ≥2 matching blood collections drawn on separate occasions with no more than 1 calendar day between specimen collection by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).

17 - 30

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Question 6- 3: Can a specific OS site infection criteria be met?

ENDO 4

At least ***one*** of the following echocardiographic or cardiac CT imaging test evidence of endocarditis[5]: i. vegetation on cardiac valve or supporting structures[2] ii. valvular/leaflet perforation iii. valvular/leaflet aneurysm iv. perivalvular or peri graft abscess v. pseudoaneurysm vi. intracardiac fistula vii. significant new valvular regurgitation as compared with previous imaging (on echocardiography only)[6] viii. new partial dehiscence of prosthetic valve (compared with previous imaging)	**OR**	At least **c** fluorode tomogra imaging t ix. x.

AND

At least *one* of the followi

b. typical infectious endocarditis organism(s) in the presence of prosthetic material: *coagulase-negative Staphylococci, Corynebacterium striatum, Corynebacterium jeikeium, Serratia marcescens, Pseudomonas aeruginosa, Cutibacterium acnes,* non-tuberculous mycobacteria, and *Candida* spp. identified from ≥2 matching blood collections drawn on separate occasions with no more than 1 calendar day between specimen collection by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).

c. non-typical infectious endocarditis organism(s) identified from ≥3 matching blood collections drawn on separate occasions with no more than 1 calendar day between specimen collection by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).

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Question 6-3: What specific OS site infection criteria is met?

Let's break down the case details:

2/15/26: Admitted with h/o prosthetic heart valve/ IV drug use; ECHO = valvular stenosis

2/16/26: CABG/AVR

2/22/26: Temp 102.4°F, BC x 2 *Stenotrophomonas*

2/23/26: Temp elevated, BC x1 *Stenotrophomonas*, x1 no growth, sternal wound inflamed w/purulent drainage, ECHO – moderate valvular regurgitation

2/24/26: Return to OR, incision re-opened with thick, green exudate documented to/on the sternum

1. **BONE 2 (no mention of Osteomyelitis in case details)**

2. **ENDO 4 iv (c)**

- **iv. Significant new valvular regurgitation (ENDO footnote 6:** "Significant new valvular regurgitation" is defined as moderate or severe valvular regurgitation. This imaging finding is valve-specific and cannot be pre-existing**)**
- **c -Atypical ENDO organism match in 3 blood cultures drawn on separate occasions no more than 1 calendar day apart (use the NHSN Terminology Browser to define the organism)**
- **Final determination: SSI-ENDO with secondary BSI, *Stenotrophomonas*, DOE 2/22**

Resources

- NHSN Surgical Site Infection (SSI) Events webpage: https://www.cdc.gov/nhsn/psc/ssi/index.html
- Patient Safety Component Manual, Chapter 9 Surgical Site Infection Event (SSI) Protocol: https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscssicurrent.pdf
- Patient Safety Component Manual Chapter 17: CDC/NHSN Surveillance Definitions for Specific Types of Infections: https://www.cdc.gov/nhsn/pdfs/pscmanual/17pscnosinfdef_current.pdf
- FAQs:
  - Surgical Site Infections (SSI) Events: https://www.cdc.gov/nhsn/faqs/faq-ssi.html
  - Surgical Site Procedure Codes: https://www.cdc.gov/nhsn/faqs/faq-ssi-proc-codes.html

Thank you for joining us today.

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Thank you.

For any questions or concerns, contact the NHSN Helpdesk

- **NHSN-ServiceNow** to submit questions to the NHSN Help Desk.
- Access new portal at **https://servicedesk.cdc.gov/nhsncsp**.
- If you do not have a SAMS login, or are unable to access ServiceNow, you can still email the NHSN Help Desk at nhsn@cdc.gov.

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 https://www.cdc.gov/
Follow us on social **@CDCgov**

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

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