Quality ID #357: Surgical Site Infection (SSI) – National Quality Strategy Domain: Effective Clinical Care

2018 OPTIONS FOR INDIVIDUAL MEASURES:
REGISTRY ONLY

MEASURE TYPE:
Outcome

DESCRIPTION:
Percentage of patients aged 18 years and older who had a surgical site infection (SSI)

INSTRUCTIONS:
This measure is to be submitted **each time** a procedure for a surgical site infection is performed during the performance period ending November 30th. There is no diagnosis associated with this measure. This measure may be submitted by eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

Measure Submission:
The listed denominator criteria is used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions allowed by the measure. The quality-data codes listed do not need to be submitted for registry submissions; however, these codes may be submitted for those registries that utilize claims data.

DENOMINATOR:
Patients aged 18 years and older who have undergone a surgical procedure

Denominator Criteria (Eligible Cases):
All patients aged 18 years and older
AND
Patient procedure during the performance period (CPT): 11004, 11005, 11006, 11450, 11451, 11462, 11463, 11470, 11471, 11770, 11771, 11772, 15920, 15931, 15933, 15940, 15950, 19101, 19110, 19112, 19120, 19125, 19300, 19301, 19302, 19303, 19304, 19305, 19306, 19307, 20100, 20101, 20102, 20200, 20205, 21552, 21554, 21555, 21556, 21931, 21932, 21933, 22900, 22901, 22902, 22903, 22904, 22905, 23071, 23073, 23075, 24071, 24073, 24075, 25071, 27043, 27047, 27327, 27337, 36561, 36563, 36566, 36590, 36818, 36819, 36820, 36821, 36825, 36830, 38100, 38115, 38120, 38308, 38500, 38525, 38530, 38550, 38555, 38740, 38745, 38760, 38765, 39540, 39541, 43122, 43279, 43280, 43281, 43282, 43325, 43327, 43330, 43332, 43333, 43336, 43337, 43340, 43361, 43500, 43501, 43502, 43510, 43520, 43605, 43610, 43611, 43620, 43621, 43622, 43631, 43632, 43633, 43634, 43640, 43641, 43644, 43645, 43651, 43652, 43653, 43770, 43771, 43772, 43773, 43774, 43775, 43800, 43810, 43820, 43825, 43830, 43831, 43832, 43840, 43843, 43845, 43846, 43847, 43848, 43850, 43855, 43860, 43865, 43870, 43880, 43886, 43887, 43888, 44005, 44010, 44020, 44021, 44025, 44050, 44055, 44110, 44111, 44120, 44125, 44126, 44127, 44130, 44140, 44141, 44143, 44144, 44145, 44146, 44147, 44150, 44151, 44155, 44156, 44157, 44158, 44160, 44180, 44186, 44187, 44188, 44202, 44204, 44205, 44206, 44207, 44208, 44210, 44211, 44212, 44227, 44300, 44310, 44312, 44314, 44316, 44320, 44322, 44340, 44345, 44346, 44602, 44603, 44604, 44605, 44615, 44620, 44625, 44626, 44640, 44650, 44660, 44661, 44680, 44700, 44800, 44820, 44850, 44900, 44950, 44960, 44970, 45000, 45005, 45020, 45100, 45108, 45110, 45111, 45112, 45113, 45114, 45116, 45119, 45120, 45121, 45123, 45126, 45130, 45135, 45136, 45150, 45160, 45171, 45172, 45505, 45540, 45541, 45550, 45562, 45563, 45800, 45805, 45900, 45905, 46040, 46045, 46060, 46080, 46250, 46255, 46257, 46258, 46260, 46261, 46262, 46270, 46275, 46280, 46285, 46288, 47010, 47015, 47100, 47120, 47122, 47125, 47130, 47300, 47350, 47360, 47361, 47362, 47370, 47371, 47380, 47400,

CPT only copyright 2017 American Medical Association. All rights reserved.

47420, 47425, 47460, 47480, 47562, 47563, 47564, 47570, 47600, 47605, 47610, 47612, 47620, 47711, 47712, 47715, 47720, 47721, 47740, 47741, 47760, 47765, 47780, 47785, 47800, 47900, 48000, 48001, 48020, 48100, 48105, 48120, 48140, 48145, 48146, 48148, 48150, 48152, 48153, 48154, 48155, 48500, 48510, 48520, 48540, 48545, 48547, 48548, 49000, 49002, 49010, 49020, 49040, 49060, 49062, 49203, 49204, 49205, 49255, 49320, 49321, 49322, 49323, 49324, 49325, 49402, 49421, 49422, 49425, 49426, 49429, 49436, 49505, 49507, 49520, 49521, 49525, 49540, 49550, 49553, 49555, 49557, 49560, 49561, 49565, 49566, 49570, 49572, 49585, 49587, 49590, 49650, 49651, 49652, 49653, 49654, 49655, 49656, 49657, 49900, 50205, 50500, 50740, 55520, 55540, 57305, 57307, 60200, 60210, 60212, 60220, 60225, 60240, 60252, 60254, 60260, 60270, 60271, 60500, 60502, 60520, 60540, 60545, 60650

NUMERATOR:
Number of patients with a surgical site infection

Numerator Instructions:
INVERSE MEASURE - A lower calculated performance rate for this measure indicates better clinical care or control. The "Performance Not Met" numerator option for this measure is the representation of the better clinical quality or control. Submitting that numerator option will produce a performance rate that trends closer to 0%, as quality increases. For inverse measures, a rate of 100% means all of the denominator eligible patients did not receive the appropriate care or were not in proper control.

Definitions:
Superficial Incisional SSI - Superficial incisional SSI is an infection that occurs within 30 days after the operation *and* infection involves only skin or subcutaneous tissue of the incision *and* at least *one* of the following:

- Purulent drainage, with or without laboratory confirmation, from the superficial incision
- Organisms isolated from an aseptically obtained culture of fluid or tissue from the superficial incision
- At least one of the following signs or symptoms of infection: pain or tenderness, localized swelling, redness, or heat AND superficial incision is deliberately opened by the surgeon, unless incision is culture-negative
- Diagnosis of superficial incisional SSI by the surgeon or attending physician

Deep Incisional SSI - Deep Incision SSI is an infection that occurs within 30 days after the operation and the infection appears to be related to the operation and infection involved deep soft tissues (for example, fascial and muscle layers) of the incision and at least one of the following:

- Purulent drainage from the deep incision but not from the organ/space component of the surgical site
- A deep incision spontaneously dehisces or is deliberately opened by a surgeon when the patient has at least one of the following signs or symptoms: fever (> 38 C), localized pain, or tenderness, unless site is culture-negative
- An abscess or other evidence of infection involving the deep incision is found on direct examination, during re-operation, or by histopathologic or radiologic examination
- Diagnosis of a deep incision SSI by a surgeon or attending physician

Organ/Space SSI - Organ/Space SSI is an infection that occurs within 30 days after the operation and the infection appears to be related to the operation and the infection involves any part of the anatomy (for example, organs or spaces), other than the incision, which was opened or manipulated during an operation and at least one of the following:

- Purulent drainage from a drain that is placed through a stab wound into the organ/space.
- Organisms isolated from an aseptically obtained culture of fluid or tissue in the organ/space
- An abscess or other evidence of infection involving the organ/space that is found on direct examination, during re-operation, or by histopathologic or radiologic examination
- Diagnosis of an organ/space SSI by a surgeon or attending physician

CPT only copyright 2017 American Medical Association. All rights reserved.

Numerator Options:

Performance Met: Surgical site infection **(G9312)**

OR

Performance Not Met: No surgical site infection **(G9311)**

RATIONALE:

This is an adverse surgical outcome, which is often a preventable cause of harm, thus it is important to measure and report. It is feasible to collect the data and produces reliable and valid results about the quality of care. It is useful and understandable to stakeholders. As highlighted earlier, this measure was developed in a collaborative effort by the American College of Surgeons and the American Board of Surgery. This measure addresses the National Quality Strategy Priorities, and was identified by an expert panel of physician providers to be a critical outcome for this procedure. This measure addresses a high-impact condition as it is one of the most common procedures performed in the U.S. The measure aligns well with the intended use. The care settings include Acute Care Facilities/Hospitals. Data are being collected in a clinical registry that has been in existence for over 5 years, with over 4000 current users. Thus, we are requesting consideration of this measure in the "Registry Reporting" option. The level of analysis is the clinician/individual. All populations are included, except children. The measure allows measurement across the person-centered episode of care out to 30 days after the procedure whether an inpatient, outpatient, or readmitted. The measure addresses disparities in care. The risk adjustment is performed with a parsimonious dataset and aims to allow efficient data collection resources and data reporting. Measures have been harmonized when possible.

CLINICAL RECOMMENDATION STATEMENTS:

A modified-Delphi methodology using an expert panel of surgeons who are Directors of the American Board of Surgery identified this to be a critical outcome for this surgical procedure (Surgeon Specific Registry Report on Project for ABS MOC Part IV. Unpublished study by the American College of Surgeons in conjunction with the American Board of Surgery, 2011).

COPYRIGHT:

© 2013 American College of Surgeons. All rights reserved.

Physician Performance Measures and related data specifications (Measures), developed by the American College of Surgeons (ACS), are intended to facilitate quality improvement activities by physicians.

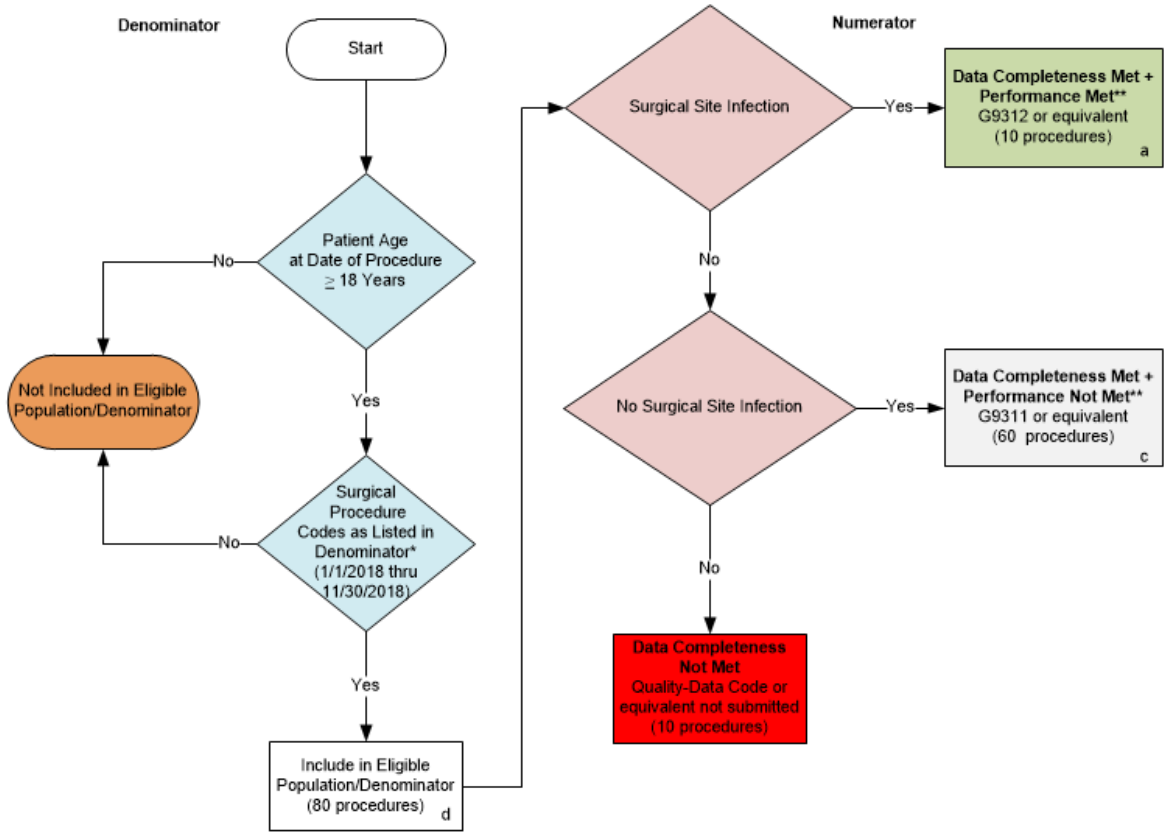
The Measures are not clinical guidelines. They do not establish a standard of medical care and have not been tested for all potential applications. The Measures are provided "AS-IS" without warranty of any kind, either express or implied, including the warranties of merchantability, fitness for a particular purpose or non-infringement. ACS makes no representations, warranties, or endorsement about the quality of any organization or physician that uses or reports performance measures. ACS disclaims responsibility, and shall not be liable, for damages or claims of any kind whatsoever related to or based upon use or reliance on the Measures.

The Measures are subject to review and may be revised or rescinded at any time by the ACS. The Measures may not be altered without the prior written approval of the ACS.

CPT® contained in the Measures specifications is copyright 2004-2016 American Medical Association.

CPT only copyright 2017 American Medical Association. All rights reserved.

2018 Registry Flow for Quality ID #357: Surgical Site Infection (SSI)



SAMPLE CALCULATIONS:

Data Completeness=

Performance Met (a=10 procedures) + Performance Not Met (c=60 procedures) = 70 procedures = **87.50%**
Eligible Population / Denominator (d=80 procedures) = 80 procedures

Performance Rate=**

Performance Met (a=10 procedures) = 10 procedures = **14.28%**
Data Completeness Numerator (70 procedures) = 70 procedures

* See the posted Measure Specification for specific coding and instructions to submit this measure.
**A lower calculated performance rate for this measure indicates better clinical care or control.

NOTE: Submission Frequency: Procedure

CPT only copyright 2017 American Medical Association. All rights reserved.
The measure diagrams were developed by CMS as a supplemental resource to be used in conjunction with the measure specifications. They should not be used alone or as a substitution for the measure specification.

v2

CPT only copyright 2017 American Medical Association. All rights reserved.

2018 Registry Flow for Quality ID #357: Surgical Site Infection (SSI)

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in submitting this Individual Specification. This flow is for registry-data submission.

1. Start with Denominator
2. Check Patient Age:
    a. If the Age is greater than or equal to 18 years of age on Date of Service and equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.
    b. If the Age is greater than or equal to 18 years of age on Date of Service and equals Yes during the measurement period, proceed to check Surgical Procedure.
3. Check Surgical Procedure:
    a. If Surgical Procedure as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
    b. If Surgical Procedure as Listed in the Denominator equals Yes, include in the Eligible Population.
4. Denominator Population:
    a. Denominator population is all Eligible Patients in the denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d equals 80 procedures in the Sample Calculation.
5. Start Numerator
6. Check Surgical Site Infection:
    a. If Surgical Site Infection equals Yes, include in Data Completeness Met and Performance Met.
    b. Data Completeness Met and Performance Met is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter a equals 10 procedures in Sample Calculation.
    c. If Surgical Site Infection equals No, proceed to check No Surgical Site Infection.
7. Check No Surgical Site Infection:
    a. If No Surgical Site Infection equals Yes, include in Data Completeness Met and Performance Not Met.
    b. Data Completeness Met and Performance Not Met is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter c equals 60 procedures in the Sample Calculation.
    c. If No Surgical Site Infection equals No, proceed to Data Completeness Not Met.
8. Check Data Completeness Not Met:
    a. If Data Completeness Not Met equals No, the Quality Data Code or equivalent was not submitted. 10 procedures have been subtracted from the Data Completeness Numerator in the Sample Calculation.

CPT only copyright 2017 American Medical Association. All rights reserved.

SAMPLE CALCULATIONS:

Data Completeness=

Performance Met (a=10 procedures) + Performance Not Met (c=60 procedures) = 70 procedures = **87.50%**
Eligible Population / Denominator (d=80 procedures) = 80 procedures

Performance Rate=**

Performance Met (a=10 procedures) = 10 procedures = **14.28%**
Data Completeness Numerator (70 procedures) = 70 procedures

CPT only copyright 2017 American Medical Association. All rights reserved.