ACS Surgical Phase of Care (SPC) Measure 10 – ACS25: Surgical Site Infection (SSI)

National Quality Strategy (NQS) Domain: Effective Clinical Care

Meaningful Measure Area: Healthcare-associated Infections

Measure Type: Outcome

Inverse Measure: Yes

High-Priority Measure: Yes – Outcome

Risk-Adjusted: Yes

Number of Performance Rates: 1

Proportional Measure: Yes

Continuous Variable Measure: No

Ratio Measure: No

2019 QPP MIPS QUALITY OPTIONS FOR INDIVIDUAL MEASURES:
REGISTRY ONLY

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

INSTRUCTIONS:
This measure is to be reported 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 reported by eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

Measure Reporting via Registry:
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.

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
Patients who have undergone a surgical procedure
AND
One of the following CPT codes for the patient encounter during the reporting period: (see appendix 1)

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. Reporting 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

Numerator Quality-Data Coding Options for Reporting Satisfactorily:

Surgical site infection.

Performance Met: Surgical site infection.

OR

No surgical site infection.

Performance Not Met: No surgical site infection.

RISK ADJUSTMENT:

Risk adjusted in-hospital surgical site infection (SSI) rates will be calculated by adjusting for the variables listed in the following table. Thus, these patient characteristics must be reported.

Age
ASA Class
Emergent/Urgent Operation
Functional Status
Wound Class
Preoperative Sepsis
Dyspnea
Ascites
Surgical Approach

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.

SUPPORTING EVIDENCE:

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).