
2015 PQRS OPTIONS FOR INDIVIDUAL MEASURES:
REGISTRY ONLY

DESCRIPTION:
Percentage of patients aged 18 years and older undergoing isolated CABG surgery who, within 30 days postoperatively, develop deep sternal wound infection involving muscle, bone, and/or mediastinum requiring operative intervention

INSTRUCTIONS:
This measure is to be reported each time an isolated CABG procedure is performed during the reporting period. It is anticipated that clinicians who provide services for isolated CABG will submit this measure. This measure is intended to reflect the quality of the surgical services provided for isolated CABG or isolated reoperation CABG patients. Isolated CABG refers to CABG using arterial and/or venous grafts only.

Measure Reporting via Registry:
CPT codes and patient demographics are used to identify patients who are included in the measure's denominator. The listed numerator options are used to report the numerator of the measure.

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data. There are no allowable performance exclusions for this measure.

DENOMINATOR:
All patients undergoing isolated CABG surgery

Denominator Criteria (Eligible Cases):
All patients aged ≥ 18 years on date of encounter
AND
Patient encounter during the reporting period (CPT): 33510, 33511, 33512, 33513, 33514, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536

OR

Patient encounter during the reporting period (CPT): 33510, 33511, 33512, 33513, 33514, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536
AND
Patient encounter during the reporting period (CPT): 33530

NUMERATOR:
Patients who, within 30 days post operatively, develop deep sternal wound infection involving muscle, bone, and/or mediastinum requiring operative intervention. Patient must have ALL of the following conditions: 1. wound opened with excision of tissue (incision and drainage) or re-exploration of mediastinum, 2. positive culture unless patient on antibiotics at time of culture or no culture obtained, and 3. treatment with antibiotics beyond perioperative prophylaxis.

Numerator Instructions: A lower calculated performance rate for this measure indicates better clinical care or control.

Numerator Options:
Performance Met: Development of deep sternal wound infection/mediastinitis within 30 days postoperatively (G8571)

OR

Performance Not Met: No deep sternal wound infection/mediastinitis (G8572)
RATIONALE:
The most serious hospital-acquired infection associated with coronary artery bypass graft (CABG) surgery is deep sternal wound or deep surgical site infection. The most common bacteria involved are *S. aureus* including increasingly more common methicillin resistant *Staph* (MRS). For CABG only outcomes 1997-1999 the STS dataset reported 0.63% deep sternal wound infection rate in 503,478 records. A report from an academic hospital reported 1.9% deep surgical site infections (Centers for Disease Control and Prevention National Nosocomial Infection Surveillance [CDC NNIS] criteria) in 1,980 patients undergoing isolated CABG or CABG+ procedures from 1996-1999. The Northern New England Cardiovascular Disease Study Group reported an incidence rate for mediastinitis of 1.25% and noted a marked increase in mortality during the first year post-CABG and a threefold increase during a 4-year follow-up period.

CLINICAL RECOMMENDATION STATEMENTS:
Several risk factors for sternal wound infection have been identified that can be optimized with good care practices: prophylactic antibiotics within 1 hour before incision time (odds ratio 5.3) [see antibiotic timing process measure] and avoiding elevated blood glucose levels (odds ratio 10.2). Surveillance for surgical site infections is a critical hospital function to monitor infection control practices and direct improvement activity.