2023 Pay for Performance Measure Specifications
Adult Cardiac Surgery

2023 Collaborative-wide Quality Initiative:
Multiple Arterial Grafting

Description
Percentage of patients undergoing isolated CAB who receive two or more distal anastomoses using an arterial conduit.

Rationale
Evidence has shown that multiple arterial grafting using the internal mammary and radial arteries during coronary artery bypass surgery improves long-term survival (1). Patients receiving arterial grafts experience lower rates of recurrent angina, lower rates of myocardial infarction, and lower rates for the need for repeat revascularization. Current guidelines from U.S. and European societies encourage the use of multiple arterial grafting in patients who have anticipated long-life expectancy (2-5).

Measurement Time Period
January 1, 2023 – December 31, 2023

Inclusion Criteria
All Isolated CAB cases

Exclusion Criteria
- Patients with previous CAB (#670)
- Patients with one bypass graft (#2770)
- Emergent and Emergent Salvage case status (#1975)
- IMA was not used for one of the following reasons: (#2629)
  - Subclavian stenosis
  - Previous cardiac or thoracic surgery
  - Previous mediastinal radiation
  - Emergent or Salvage procedure
  - No LAD disease
- Patients with total number of distal anastomoses with arterial conduits missing (#2631)

Variables used in Numerator
Total Number of Distal Anastomoses with Arterial Conduits (#2631)
2023 Value-Based Reimbursement Measurement Specifications
Adult Cardiac Surgery

2023 Value-Based Reimbursement Measure #1:
Multiple Arterial Grafting

Description
Percentage of patients undergoing isolated CAB who receive two or more distal anastomoses using an arterial conduit.

Rationale
Evidence has shown that multiple arterial grafting using the internal mammary and radial arteries during coronary artery bypass surgery improves long-term survival (1). Patients receiving arterial grafts experience lower rates of recurrent angina, lower rates of myocardial infarction, and lower rates for the need for repeat revascularization. Current guidelines from U.S. and European societies encourage the use of multiple arterial grafting in patients who have anticipated long-life expectancy (2-5).

Measurement Time Period
January 1, 2023 – September 30, 2023

Inclusion Criteria
All Isolated CAB cases

Exclusion Criteria
- Patients with previous CAB (#670)
- Patients with one bypass graft (#2770)
- Emergent and Emergent Salvage case status (#1975)
- IMA was not used for one of the following reasons: (#2629)
  - Subclavian stenosis
  - Previous cardiac or thoracic surgery
  - Previous mediastinal radiation
  - Emergent or Salvage procedure
  - No LAD disease
- Patients with total number of distal anastomoses with arterial conduits missing (#2631)

Variables used in Numerator
Total Number of Distal Anastomoses with Arterial Conduits (#2631)
2023 Value-Based Reimbursement Measure #2:
Intraoperative Glucose Management

Description
Percentage of isolated CAB patients whose highest intraoperative glucose is <180 mg/dl.

Rationale
Acute hyperglycemia in the perioperative period is known to increase the incidence of wound infections, overall mortality, length of stay, acute kidney injury, and delayed wound healing. Use of insulin to correct perioperative hyperglycemia decreases the risk of hospital complications and mortality in cardiac and general surgery patients. The American Association of Clinical Endocrinologists and American Diabetes Association recommend a treatment threshold of 180 mg/dL in critically ill hospitalized patients and a preprandial blood glucose goal of 140 mg/dL in non-critically hospitalized ill patients.

Measurement Time Period
January 1, 2023 – September 30, 2023

Inclusion Criteria
All Isolated CAB cases

Exclusion Criteria
- Patients with missing intraoperative highest glucose (#2320)

Variables used in Numerator
Highest Intra-Op Glucose (#2320)
2023 Value-Based Reimbursement Measure #3:
Antiplatelet Therapy at Discharge

Description
Percentage of isolated CAB patients who experience a myocardial infarction within 21 days prior to surgery who have two antiplatelet medications ordered at the time of hospital discharge.

Rationale
Dual antiplatelet therapy after coronary artery bypass grafting in patients with recent myocardial Infarction plays an important role in the prevention of adverse cardiovascular outcomes and is a Class I recommendation.17

Measurement Time Period
January 1, 2023 – September 30, 2023

Inclusion Criteria
• Isolated CAB
• Patients with MI within 21 Days prior to surgery (#890)

Exclusion Criteria
• Patients transferred to another acute care hospital after this procedure during same stay (#7003)
• Patients still in the acute care hospital setting (#7005)
• Patients who died during the index hospitalization (#7007)
• Patients discharged to Hospice or who left AMA (#7010)
• Patients with documented contraindication to antiplatelet medications (#7060, #7070 #7075)
• Patients discharged on an anticoagulant (#7081, #7085, #7095)

Variables used in Numerator
Aspirin at Discharge (#7060)
ADP Inhibitor at Discharge (#7070)
Other Antiplatelet at Discharge (#7075)
2023 Value-Based Reimbursement Measure #4: Tobacco Cessation Measure

Description
Percentage of adult cardiac surgery patients who are documented as current tobacco smokers and receive smoking cessation treatment and/or counseling.

Rationale
Tobacco use is the single greatest preventable cause of disease and premature death in America today. In addition, smoking is an established perioperative risk factor impacting up to 25% of surgical patients. According to the Centers for Disease Control (CDC), 70% of smokers report they would like to quit however, only 15% of smokers in Michigan receive smoking cessation treatment. Making every contact count (MECC) is an approach to behavior change that is clinically proven to help patients quit smoking and results in better health outcomes.

Measurement Time Period
January 1, 2023 – September 30, 2023

Inclusion Criteria
- All Adult Cardiac Surgical Patients
- Current Smokers (#400)

Exclusion Criteria
- Patients with Transcatheter Valve Procedures (#3400, #3501, #3610)

Variables used in Numerator
Submission of documentation that one of the following was provided to current smokers:
1. Pharmacologic cessation treatment
2. Referral to an inpatient or outpatient counselling program
3. Referral to 1-800-Quit-Now
REFERENCES


*Michigan Society of Thoracic and Cardiovascular Surgeons Quality Collaborative 2023 Pay for Performance (P4P) and Value-Based Reimbursement (VBR) Measure Specifications Society of Thoracic Surgeons Adult Cardiac Surgery Database version 4.2 sequence number in parenthesis if applicable.*
Michigan Society of Thoracic and Cardiovascular Surgeons Quality Collaborative
2023 Pay for Performance (P4P) and Value-Based Reimbursement (VBR) Measure Specifications


