

**Surgical Consensus Standards Endorsement Maintenance
NQF-Endorsed® Surgical Maintenance Standards (Phase I)**

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#0113: Participation in a Systematic Database for Cardiac Surgery The Society of Thoracic Surgeons
Description: Does the facility participate in a multicenter data collection and feedback program that provides benchmarking relative to peers and uses process and outcome measures?
Setting: Hospital Level of Analysis: Facility/Agency
Data Source: Electronic clinical data
Target Outcome (unadjusted numerator): Does the facility participate in a multicenter, data collection and feedback program that provides benchmarking relative to peers and uses process and outcome measures? (Yes/No)
Target Population (denominator): Not applicable
Target Population (denominator) Exclusions:
Methods/ Risk Adjustment:
Target Outcome (unadjusted numerator) Details:
Target Population (denominator) Details:
Target Population (denominator) Exclusion Details:
#0114: Post-operative Renal Failure The Society of Thoracic Surgeons
Description: Percent of patients undergoing isolated CABG (without pre-existing renal failure) who develop post-operative renal failure or require dialysis.
Setting: Hospital Level of Analysis: Facility/Agency
Data Source: Electronic clinical data
Target Outcome (unadjusted numerator): Number of procedures in which the patient had acute or worsening renal failure resulting in one or more of the following:1. increase of serum creatinine to > 2.0 and 2x most recent preoperative creatinine level2. A new requirement for dialysis postoperatively
Target Population (denominator): Number of Isolated CABG procedures excluding those with either or both of the following preoperative risk factors: Renal Failure (RenFail), Last Creatinine Level (CreatLst) > 2
Target Population (denominator) Exclusions: Age qualification: For patients < 20 years, the data are accepted into the database, but are not included in the national analysis and report Inclusions: Number of patients undergoing isolated CABG without pre-existing renal failure Exclusions: Patients with documented history of renal failure, baseline serum creatinine >2.0; prior renal transplants are not considered pre-operative renal failure unless since transplantation their Cr has been or is >2.0
Methods/ Risk Adjustment: risk adjustment: multivariate logistic regression and hierarchical modeling Risk adjustment: Multivariate logistic regression and hierarchical modeling
Target Outcome (unadjusted numerator) Details:
Target Population (denominator) Details:
Target Population (denominator) Exclusion Details:

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#0115: Surgical Re-exploration The Society of Thoracic Surgeons
Description: Percent of patients undergoing isolated CABG who require a return to the operating room for bleeding/tamponade, graft occlusion, or other cardiac reason.
Setting: Hospital Level of Analysis: Facility/Agency
Data Source: Electronic clinical data
Target Outcome (unadjusted numerator): Number of procedures of isolated CABG in which operative reintervention was required for any of the below reasons: bleeding/tamponade, graft occlusion, or other cardiac reasons.
Target Population (denominator): Total number of isolated CABG procedures
Target Population (denominator) Exclusions: Age qualification: For patients <20 years, the data are accepted into the database, but are not included in the national analysis and report Exclusions: Patients with surgical re-exploration for Other Non-Cardiac Reasons
Methods/ Risk Adjustment: risk adjustment: multivariate logistic regression and hierarchical modeling Risk adjustment: Multivariate logistic regression and hierarchical modeling
Target Outcome (unadjusted numerator) Details:
Target Population (denominator) Details:
Target Population (denominator) Exclusion Details:
#0116: Anti-Platelet Medication at Discharge The Society of Thoracic Surgeons
Description: Percent of patients undergoing isolated CABG who were discharged on aspirin/safety-coated aspirin or clopidogrel.
Setting: Hospital Level of Analysis: Facility/Agency
Data Source: Electronic clinical data
Target Outcome (unadjusted numerator): Number of procedures for which the patient was discharged from the facility on Aspirin, Ecotrin or ADP Inhibitors
Target Population (denominator): Number of Isolated CABG procedures excluding those that resulted in in-hospital mortalities based on the variables Mortality Discharge Status, Mortality Date, and Discharge Date
Target Population (denominator) Exclusions: Age qualification: •For patients <20 years, the data are accepted into the database, but are not included in the national analysis and report Exclusions: In-hospital mortalities
Methods/ Risk Adjustment:
Target Outcome (unadjusted numerator) Details:
Target Population (denominator) Details:
Target Population (denominator) Exclusion Details:

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#0117: Beta Blockade at Discharge The Society of Thoracic Surgeons
Description: Percent of patients undergoing isolated CABG who were discharged on beta blockers.
Setting: Hospital Level of Analysis: Facility/Agency
Data Source: Electronic clinical data
Target Outcome (unadjusted numerator): Number of procedures for which the patient was discharged from the facility on Beta Blockers
Target Population (denominator): Number of Isolated CABG procedures excluding those that resulted in in-hospital mortalities based on the variables Mortality Discharge Status, Mortality Date, and Discharge Date
Target Population (denominator) Exclusions: Age qualification: •For patients <20 years, the data are accepted into the database, but are not included in the national analysis and report Exclusions: In-hospital mortalities
Methods/ Risk Adjustment:
Target Outcome (unadjusted numerator) Details:
Target Population (denominator) Details:
Target Population (denominator) Exclusion Details:
#0118: Anti-Lipid Treatment Discharge The Society of Thoracic Surgeons
Description: Percent of patients undergoing isolated CABG who were discharged on a statin or other pharmacologic lipid-lowering regimen.
Setting: Hospital Level of Analysis: Facility/Agency
Data Source: Electronic clinical data
Target Outcome (unadjusted numerator): Number of procedures for which the patient was discharged from the facility on lipid lowering medication
Target Population (denominator): Number of Isolated CABG procedures excluding those that resulted in in-hospital mortalities based on the variables Mortality Discharge Status, Mortality Date, and Discharge Date
Target Population (denominator) Exclusions: Age qualification: •For patients <20 years, the data are accepted into the database, but are not included in the national analysis and report Exclusions: •In-hospital mortalities
Methods/ Risk Adjustment:
Target Outcome (unadjusted numerator) Details:
Target Population (denominator) Details:
Target Population (denominator) Exclusion Details:

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#0119: Risk-Adjusted Operative Mortality for CABG© The Society of Thoracic Surgeons
Description: Percent of patients undergoing isolated CABG who die during the hospitalization in which the CABG was performed or within 30 days of the procedure.
Setting: Hospital Level of Analysis: Facility/Agency
Data Source: Electronic clinical data
Target Outcome (unadjusted numerator): Number of patients undergoing isolated CABG who die, including both 1) all deaths occurring during the hospitalization in which the operation was performed, even if after 30 days, and 2) those deaths occurring after discharge from the hospital, but within 30 days of the procedure
Target Population (denominator): All patients undergoing isolated CABG procedures
Target Population (denominator) Exclusions: Patients <20 years
Methods/ Risk Adjustment: risk adjustment: multivariate logistic regression and hierarchical modeling risk adjustment variables afib age age function 1 max(age-50,0) age function 2 max(age-60,0) age x reop function age x status function bsa function 1 bsa function 2 chf but not nyh Risk Adjustment: Multivariate logistic regression and hierarchical modeling Risk Adjustment Variables Afib Age Age Function 1 max(age-50,0) Age Function 2 max(age-60,0) Age x Reop Function Age x Status Function BSA Function 1 BSA Function 2 chf but not nyha iv chf and nyha iv cld - mild cld - moderate cld - severe creatinine function 1 creatinine function 2 creatinine function 3 cvd without prior cva cvd and prior cva diabetes - noninsulin diabetes - insulin dialysis

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ejection fraction function female female x bsa function 1 female x bsa function 2 hypertension iabp or inotropes immunosuppressive treatment insufficiency - aortic insufficiency - mitral mi 1 to 21 days mi >6 and <24 hours mi = 6 hours no. diseased. vessel function pci = 6 hours pvd reop - 1 previous operation reop - =2 previous operations shock status - urgent status - emergent status - salvage unstable angina
Target Outcome (unadjusted numerator) Details:
Target Population (denominator) Details:
Target Population (denominator) Exclusion Details:

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#0120: Risk-Adjusted Operative Mortality for Aortic Valve Replacement (AVR)© The Society of Thoracic Surgeons
Description: Percent of patients undergoing AVR who die, including both 1) all deaths occurring during the hospitalization in which the [procedure] was performed, even if after 30 days, and 2) those deaths occurring after discharge from the hospital, but within 30 days of the procedure.
Setting: Hospital Level of Analysis: Facility/Agency
Data Source: Electronic clinical data
Target Outcome (unadjusted numerator): Number of patients undergoing AVR who die, including both 1) all deaths occurring during the hospitalization in which the operation was performed, even if after 30 days, and 2) those deaths occurring after discharge from the hospital, but within 30 days of the procedure.
Target Population (denominator): All patients undergoing isolated AVR surgery
Target Population (denominator) Exclusions: Patients <20 years Patients receiving CABG or other valve or cardiac surgery during this admission
Methods/ Risk Adjustment: risk adjustment: multivariate logistic regression and hierarchical modeling risk adjustment variables afib age function 1 max(age-50,0) age function 3 max(age-75,0) age x reop function age xstatus function age x mvr function age x mvrepair function bsaff Risk adjustment: Multivariate logistic regression and hierarchical modeling Risk Adjustment Variables Afib Age Function 1 max(age-50,0) Age Function 3 max(age-75,0) Age x Reop Function Age xStatus Function Age x MVR Function Age x MVRepair Function bsaffunction 1 (bsa function 2 chf but not nyha iv chf and nyha iv cld function cld x mvr function cld x mvrepair function creatinine function 1 diabetes - noninsulin diabetes - insulin diabetes x mvr function dialysis dialysis x mvr function dialysis x mvrepair function

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ejection fraction function endocarditis - active female female x mvr function female x mvrepair function female x bsa function 1 female x bsa function 2 hypertension iabp or inotropes immunosuppressive treatment left main disease mi <= 21 days mvr mvrepair pvd reop - 1 previous operation reop - >=2previous operations shock status - urgent status - emergent status - salvage status x mvr function status x mvrepair function stenosis - mitral unstable angina
Target Outcome (unadjusted numerator) Details:
Target Population (denominator) Details:
Target Population (denominator) Exclusion Details:

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#0121: Risk-Adjusted Operative Mortality for Mitral Valve Replacement/Repair (MVR) The Society of Thoracic Surgeons
Description: Percent of patients undergoing MVR who die, including both 1) all deaths occurring during the hospitalization in which the [procedures] was performed, even if after 30 days, and 2) those deaths occurring after discharge from the hospital, but within 30 days of the procedure.
Setting: Hospital Level of Analysis: Facility/Agency
Data Source: Electronic clinical data
Target Outcome (unadjusted numerator): Number of patients undergoing MVR who die, including both 1) all deaths occurring during the hospitalization in which the operation was performed, even if after 30 days, and 2) those deaths occurring after discharge from the hospital, but within 30 days of the procedure
Target Population (denominator): All patients undergoing isolated MVR surgery
Target Population (denominator) Exclusions: Age qualification: <ul style="list-style-type: none"> •For patients <20 years, the data are accepted into the database, but are not included in the national analysis and report Exclusions: <ul style="list-style-type: none"> •Patients receiving CABG or other valve or cardiac surgery during this admission
Methods/ Risk Adjustment: risk-adjustment: multivariate logistic regression and hierarchical modeling Risk-adjustment: Multivariate logistic regression and hierarchical modeling
Target Outcome (unadjusted numerator) Details:
Target Population (denominator) Details:
Target Population (denominator) Exclusion Details:

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#0122: Risk-Adjusted Operative Mortality MVR+CABG Surgery The Society of Thoracic Surgeons
Description: Percent of patients undergoing MVR and CABG who die, including both 1) all deaths occurring during the hospitalization in which the [procedure] was performed, even if after 30 days, and 2) those deaths occurring after discharge from the hospital, but within 30 days of the procedure.
Setting: Hospital Level of Analysis: Facility/Agency
Data Source: Electronic clinical data
Target Outcome (unadjusted numerator): Number of patients undergoing combined MVR and CABG who die, including both 1) all deaths occurring during the hospitalization in which the operation was performed, even if after 30 days, and 2) those deaths occurring after discharge from the hospital, but within 30 days of the procedure
Target Population (denominator): All patients undergoing combined MVR+CABG
Target Population (denominator) Exclusions: Age qualification: <ul style="list-style-type: none"> •For patients <20 years, the data are accepted into the database, but are not included in the national analysis and report Exclusions: <ul style="list-style-type: none"> •Patients receiving other valve or cardiac surgery during this admission
Methods/ Risk Adjustment: risk-adjustment: multivariate logistic regression and hierarchical modeling variables: age, gender, race, body surface area, bmi, diabetes, hypertension, hypercholesterolemia, past or present smoker, cld, cvd, pvd, cva, endocarditis, renal failure, renal function, immunosuppressive treatment, previous cab surgery, previous valve surgery, previous other cardiac surgery, number of previous cv surgeries, previous other cardiac surgery, prior pci, acuity status, preoperative cardiac status, myocardial infarction, angina, cardiogenic shock, arrhythmia, resuscitation, angina, preop iabp, nyha class, congestive heart failure, number of diseased coronary vessels, left main disease > 50%, ejection fraction (%), aortic/mitral/tricuspid/pulmonic stenosis, aortic/mitral/tricuspid/pulmonic insufficiency for complete risk adjustment model see: shahian, d et. al. "sts 2008 valve + cabg risk models." the annals of thoracic surgery. estimated publication date: may 2009.
Target Outcome (unadjusted numerator) Details:
Target Population (denominator) Details:
Target Population (denominator) Exclusion Details:

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#0123: Risk-Adjusted Operative Mortality for AVR+CABG The Society of Thoracic Surgeons
Description: Percent of patients undergoing AVR and CABG who die, including both 1) all deaths occurring during the hospitalization in which the [procedure] was performed, even if after 30 days, and 2) those deaths occurring after discharge from the hospital, but within 30 days of the procedure.
Setting: Hospital Level of Analysis: Facility/Agency
Data Source: Electronic clinical data
Target Outcome (unadjusted numerator): Number of patients undergoing combined AVR and CABG who die, including both 1) all deaths occurring during the hospitalization in which the operation was performed, even if after 30 days, and 2) those deaths occurring after discharge from the hospital, but within 30 days of the procedure.
Target Population (denominator): All patients undergoing combined AVR+CABG
Target Population (denominator) Exclusions: Age qualification: <ul style="list-style-type: none"> •For patients <20 years, the data are accepted into the database, but are not included in the national analysis and report Exclusions: <ul style="list-style-type: none"> •Patients receiving other valve or cardiac surgery during this admission
Methods/ Risk Adjustment: risk-adjustment: multivariate logistic regression and hierarchical modeling variables: age, gender, race, body surface area, bmi, diabetes, hypertension, hypercholesterolemia, past or present smoker, cld, cvd, pvd, cva, endocarditis, renal failure, renal function, immunosuppressive treatment, previous cab surgery, previous valve surgery, previous other cardiac surgery, number of previous cv surgeries, previous other cardiac surgery, prior pci, acuity status, preoperative cardiac status, myocardial infarction, angina, cardiogenic shock, arrhythmia, resuscitation, angina, preop iabp, nyha class, congestive heart failure, number of diseased coronary vessels, left main disease > 50%, ejection fraction (%), aortic/mitral/tricuspid/pulmonic stenosis, aortic/mitral/tricuspid/pulmonic insufficiency for complete risk adjustment model see: shahian, d et. al. "sts 2008 valve + cabg risk models." the annals of thoracic surgery. estimated publication date: may 2009.
Target Outcome (unadjusted numerator) Details:
Target Population (denominator) Details:
Target Population (denominator) Exclusion Details:

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#0124: Surgical Volume - a. Isolated Coronary Artery Bypass Graft (CABG) Surgery, b. Valve Surgery, c. CABG+Valve Surgery The Society of Thoracic Surgeons
Description: Annual procedural volume of three surgeries: isolated CABG surgery, valve surgery, and valve+CABG surgery.
Setting: Hospital Level of Analysis: Facility/Agency
Data Source: Electronic administrative data/claims
Target Outcome (unadjusted numerator): Number of patients undergoing isolated CABG surgery, Number of patients undergoing heart valve surgery, Number of patients undergoing valve+CABG surgery
Target Population (denominator): Not applicable
Target Population (denominator) Exclusions:
Methods/ Risk Adjustment:
Target Outcome (unadjusted numerator) Details:
Target Population (denominator) Details:
Target Population (denominator) Exclusion Details:

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#0125: Timing of Antibiotic Prophylaxis for Cardiac Surgery Patients The Society of Thoracic Surgeons
Description: Percent of patients undergoing cardiac surgery who received prophylactic antibiotics within one hour prior to of surgical incision (two hours if receiving vancomycin).
Setting: Hospital Level of Analysis: Facility/Agency
Data Source: Paper medical record/flow-sheet; Electronic administrative data/claims
Target Outcome (unadjusted numerator): Cardiac surgery patients who received prophylactic antibiotics within one hour of prior to surgical incision (two hours if vancomycin)
Target Population (denominator): Surgical patients with CABG or Other Cardiac Surgery ICD-9- CM procedure codes:36.10, 36.11, 36.12, 36.13, 36.14, 36.15, 36.16, 36.17, 36.19, 35.00, 35.01, 35.02, 35.03, 35.04, 35.10, 35.11, 35.12, 35.13, 35.14, 35.20, 35.21, 35.22, 35.23, 35.24, 35.25, 35.26, 35.27, 35.28, 35.31, 35.32, 35.33, 35.34, 35.35, 35.39, 35.41, 35.42, 35.50, 35.51, 35.53, 35.54, 35.60, 35.61, 35.62, 35.63, 35.70, 35.72, 35.73, 35.81, 35.82, 35.83, 35.84, 35.91, 35.92, 35.93, 35.94, 35.95, 35.98, 35.99
Target Population (denominator) Exclusions: Principal or admission diagnosis suggestive of pre-operative infectious disease (ICD-9 Code Table 5.09 for Infections from the Specifications Manual for the National Hospital Quality Measures. See Appendix A) Infectious diseases 001.0-139.8 Meningitis 320.0-326 Ear infection 380.0-380.23; 382.0-382.20 Endocarditis 421.0-422.9 Respiratory 460-466.19; 472-476.1; 480-487.8; 490-491.9; 510-511.9; 513-513.1 Digestive 540-542; 575.0 Renal 590-590.9; 595.0 Prostate 601.0-601.9 Gynecologic 614-614.9; 616-616.4 Skin 680-686.9 Musculo-skeletal 711.9-711.99; 730.0-730.99 Fever of unknown origin 780.6Septic shock 785.59 Bacteremia 790.7 Viremia 790.8 Medical records do not include antibiotic start date/time or incision date/time Patients who were receiving antibiotics within 24 hours prior to arrival (except colon surgery patients taking oral prophylactic antibiotics) at the time of admission Patients who were receiving antibiotics more than 24 hours prior to surgery (except colon surgery patients taking oral prophylactic antibiotics) Colon surgery patients who received oral prophylactic antibiotics only, as defined in the Data Dictionary for the data element Oral Antibiotics, and who received no antibiotics during stay Patients who are less than 18 years of age Patients with physician documented infection prior to surgical procedure of interest Patients who had other procesures requiring general or spinal anesthesia that occurred within 3 days (4 days for CABG and Other Cardiac Surgery) prior to or after the procedure of interest (during separate surgical episodes) during this hospital stay- Patients whose procedure of interest occurred prior to date of admission
Methods/ Risk Adjustment:
Target Outcome (unadjusted numerator) Details:
Target Population (denominator) Details:
Target Population (denominator) Exclusion Details:

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#0126: Selection of Antibiotic Prophylaxis for Cardiac Surgery Patients The Society of Thoracic Surgeons
Description: Percent of patients undergoing cardiac surgery who received prophylactic antibiotics recommended for the operation.
Setting: Hospital Level of Analysis: Facility/Agency
Data Source: Paper medical record/flow-sheet; Electronic administrative data/claims
Target Outcome (unadjusted numerator): Number of Cardiac surgery patients who received prophylactic antibiotics recommended for the specific surgical procedure or operation: cefazolin, or cefuroxime, cefamandole, or vancomycin* *Special consideration: For cardiac and vascular surgery, if patient is allergic to b-lactam, then vancomycin or clindamycin are acceptable substitutes
Target Population (denominator): CABG and Other Cardiac Surgery ICD-9: 36.10, 36.11, 36.12, 36.13, 36.14, 36.15, 36.16, 36.17, 36.19, 35.00, 35.01, 35.02, 35.03, 35.04, 35.10, 35.11, 35.12, 35.13, 35.14, 35.20, 35.21, 35.22, 35.23, 35.24, 35.25, 35.26, 35.27, 35.28, 35.31, 35.32, 35.33, 35.34, 35.35, 35.39, 35.41, 35.42, 35.50, 35.51, 35.53, 35.54, 35.60, 35.61, 35.62, 35.63, 35.70, 35.72, 35.73, 35.81, 35.82, 35.83, 35.84, 35.91, 35.92, 35.93, 35.94, 35.95, 35.98, 35.99 36.10-36.17, 36.19; and other cardiac surgery: ICD-9 35.0-35.95, 35.98, 35.99 (ICD-9 Code Table 5.01 and 5.02 from the Specifications Manual for the National Hospital Quality Measures. See Appendix A)
Target Population (denominator) Exclusions: Patients who had a Principal or admission diagnosis suggestive of pre-operative infectious disease (ICD-9 Code Table 5.09 for Infections. See Appendix A) (ICD-9 codes for Infection: oInfectious diseases 001.0-139.8 oMeningitis 320.0-326 oEar infection 380.0-380.23; 382.0-382.20 oEndocarditis 421.0-422.99 oRespiratory 460-466.19; 472-476.1; 480-487.1; 490-491.9; 510-511.9; 513-513.1 oDigestive 540-542; 575.0 oRenal 590-590.9; 595.0 oProstate 601.0-601.9 oGynecologic 614-614.9; 616-616.4 oSkin 680-686.9 oMusculo-skeletal 711.9-711.99; 730.0-730.99 oFever of unknown origin 780.6oSeptic shock 785.59oBacteremia 790.7o Viremia 790.8• Receiving antibiotics within 24 hours prior to arrival (except colon surgery patients taking oral prophylactic antibiotics at the time of admission Medical records do not include antibiotic start date/time or incision date/time • Patients who were Receiving antibiotics >24 hours prior to surgery (except colon surgery patients taking oral prophylactic antibiotics) Patients who did not receive anyNo antibiotics received during the hospitalization before or during surgery or within 24 hours after surgery end time (i.e., patient did not receive any prophylactic antibiotics)• Patients less than 18 years of age Patients with physician documented infection prior to surgical procedure of interest• Patients whose procedure of interest occurred prior to date of admission
Methods/ Risk Adjustment:
Target Outcome (unadjusted numerator) Details:
Target Population (denominator) Details:
Target Population (denominator) Exclusion Details:

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#0127: Pre-Operative Beta Blockade The Society of Thoracic Surgeons
Description: Percent of patients undergoing isolated CABG who received beta blockers within 24 hours preceding surgery.
Setting: Hospital Level of Analysis: Facility/Agency
Data Source: Electronic clinical data
Target Outcome (unadjusted numerator): Number of procedures for which the patient received Beta Blockers within 24 hours preceding surgery
Target Population (denominator): Total number of isolated CABG procedures
Target Population (denominator) Exclusions: Age qualification: For patients <20 years, the data are accepted into the database, but are not included in the national analysis and report
Methods/ Risk Adjustment:
Target Outcome (unadjusted numerator) Details:
Target Population (denominator) Details:
Target Population (denominator) Exclusion Details:

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#0128: Duration of Prophylaxis for Cardiac Surgery Patients The Society of Thoracic Surgeons
Description: Percent of patients undergoing cardiac surgery whose prophylactic antibiotics were discontinued within 24 hours after surgery end time.
Setting: Hospital Level of Analysis: Facility/Agency
Data Source: Electronic clinical data
Target Outcome (unadjusted numerator): Cardiac surgery patients whose prophylactic antibiotics were discontinued within 48 hours after surgery end time* *For other surgery patients, within 24 hours after surgery end time
Target Population (denominator): All selected surgical patients with no evidence of prior infection: CABG ICD-9: 36.10, 36.11, 36.12, 36.13 36.14, 36.15, 36.16, 36.17, 36.19; and other cardiac surgery: ICD-9 - 35.00, 35.01, 35.02, 35.03 35.04, 35.10, 35.11, 35.12, 35.13, 35.14, 35.20, 35.21, 35.22, 35.23, 35.24, 35.25, 35.26, 35.27, 35.28, 35.31, 35.32, 35.33, 35.34, 35.35, 35.39, 35.41, 35.42, 35.50, 35.51, 35.53, 35.54, 35.60, 35.61, 35.62, 35.63, 35.70, 35.72, 35.73, 35.81, 35.82, 35.83, 35.84, 35.91, 35.92, 35.93, 35.94, 35.95, 35.98, 35.99
Target Population (denominator) Exclusions: Exclusions: <ul style="list-style-type: none"> •Patients with a principal or admission diagnosis suggestive of pre-operative infectious disease (ICD-9 Code Table 5.09 for Infections from the Specifications Manual for the National Hospital Quality Measures. See Appendix A) •Patients who were receiving antibiotics within 24 hours prior to arrival (except colon surgery patients taking oral prophylactic antibiotics) at the time of admission •Receiving antibiotics >24 hours prior to surgery •Patients who were diagnosed with and treated for infections within two days (3 days for CABG and Other Cardiac Surgery) after surgery end date •Patients who did not receive any antibiotics during the hospitalization •Patients less than 18 years of age •Patients with physician documented infection prior to surgical procedure •Patients whose procedure of interest occurred prior to date of admission •Patients with had other procedures requiring general or spinal anesthesia that occurred 3 days (4 days for CABG and Other Cardiac Surgery) prior to or after the procedure of interest (during separate surgical episodes) during this hospital stay
Methods/ Risk Adjustment:
Target Outcome (unadjusted numerator) Details:
Target Population (denominator) Details:
Target Population (denominator) Exclusion Details:

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#0129: Prolonged Intubation (ventilation) The Society of Thoracic Surgeons
Description: Percent of patients undergoing isolated CABG (without pre-existing intubation/tracheostomy) who require intubation for more than 24 hours.
Setting: Hospital Level of Analysis: Facility/Agency
Data Source: Electronic clinical data
Target Outcome (unadjusted numerator): Number of procedures in which the patient had Pulmonary Insufficiency requiring ventilator > 24 hours postoperatively
Target Population (denominator): Total number of isolated CABG procedures
Target Population (denominator) Exclusions: Age qualification: <ul style="list-style-type: none"> • For patients <20 years, the data are accepted into the database, but are not included in the national analysis and report Inclusions: <ul style="list-style-type: none"> • Number of patients undergoing isolated CABG without pre-existing intubation/tracheostomy Exclusions: <ul style="list-style-type: none"> • Patients intubated prior to isolated CABG patients with tracheostomy prior to isolated CABG Risk adjustment: Multivariate logistic regression and hierarchical modeling
Methods/ Risk Adjustment:
Target Outcome (unadjusted numerator) Details:
Target Population (denominator) Details:
Target Population (denominator) Exclusion Details:

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#0130: Deep Sternal Wound Infection Rate The Society of Thoracic Surgeons
Description: Percent of patients undergoing isolated CABG who developed deep sternal wound infection within 30 days post-operatively.
Setting: Hospital Level of Analysis: Facility/Agency
Data Source: Electronic clinical data
Target Outcome (unadjusted numerator): Number of procedures in which the patient had a deep sternal infection involving muscle, bone, and/or mediastinum REQUIRING OPERATIVE INTERVENTION Must have ALL of the following conditions: 1. Wound opened with excision of tissue (I&D) or re-exploration of mediastinum 2. Positive culture 3. Treatment with antibiotics
Target Population (denominator): Total number of Isolated CABG procedures
Target Population (denominator) Exclusions: Age qualification: For patients <20 years, the data are accepted into the database, but are not included in the national analysis and report Exclusions: Pre-operative wound site infections, Complications occurring after discharge but within 30 days are not counted
Methods/ Risk Adjustment: risk adjustment: •multivariate logistic regression and hierarchical modeling Risk adjustment: •Multivariate logistic regression and hierarchical modeling
Target Outcome (unadjusted numerator) Details:
Target Population (denominator) Details:
Target Population (denominator) Exclusion Details:

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#0131: Stroke/Cerebrovascular Accident The Society of Thoracic Surgeons
Description: Percent of patients undergoing isolated CABG (without pre-existing neurologic deficit) who develop a post-operative neurologic deficit persisting greater than 72 hours.
Setting: Hospital Level of Analysis: Facility/Agency
Data Source: Electronic clinical data
Target Outcome (unadjusted numerator): Number of procedures in which the patient had a central neurologic deficit persisting postoperatively for >72 hours
Target Population (denominator): Number of Isolated CABG procedures excluding those with a prior CVA
Target Population (denominator) Exclusions: Age qualification: For patients <20 years, the data are accepted into the database, but are not included in the national analysis and report Exclusions: Patients with prior CVA
Methods/ Risk Adjustment: risk adjustment: multivariate logistic regression and hierarchical modeling Risk adjustment: Multivariate logistic regression and hierarchical modeling
Target Outcome (unadjusted numerator) Details:
Target Population (denominator) Details:
Target Population (denominator) Exclusion Details:

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#0134: Coronary artery bypass graft (CABG) using internal mammary artery (IMA) The Society of Thoracic Surgeons
Description: Percentage of coronary artery bypass graft (CABG) using internal mammary artery (IMA)
Setting: Hospital Level of Analysis: Facility/Agency
Data Source: Electronic administrative data/claims
Target Outcome (unadjusted numerator): Isolated CABG patients who received an IMA graft (ICD-9 procedure codes 36.15, 36.16) and Table 5.02 from Appendix A of the Specifications Manual for National Hospital Quality Measures)
Target Population (denominator): Number of patients undergoing isolated CABG (ICD-9 procedure codes 36.10-36.19) who were discharged.
Target Population (denominator) Exclusions: Exclusions: <ul style="list-style-type: none"> •Patients who are <18 years of age •Other heart procedures (ICD-9 procedure codes 35.01, 35.02, 35.03, 35.04 , 35.10, 35.11, 35.12, 35.13, 35.14, 35.20, 35.21, 35.22, 35.23, 35.24, 35.25, 35.26, 35.27, 35.28, 35.31, 35.32, 35.33, 35.34 , 35.35, 35.39, 35.41, 35.42, 35.50, 35.51, 35.53, 35.54, 35.60, 35.61, 35.62, 35.63, 35.70, 35.72, 35.73, 35.81, 35.82, 35.83, 35.84, 35.91, 35.92, 35.93, 35.94, 35.95, 35.98, 35.99) •Repeat CABG (ICD-9 status code V45.81, and ICD-9 Diagnosis codes 414.02, 414.03, 414.04, 414.05, 414.06, 414.07)
Methods/ Risk Adjustment:
Target Outcome (unadjusted numerator) Details:
Target Population (denominator) Details:
Target Population (denominator) Exclusion Details:

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#0284: Surgery patients on beta blocker therapy prior to admission who received a beta blocker during the perioperative period Centers for Medicare & Medicaid Services
Description: Percentage of patients on beta blocker therapy prior to admission who received a beta blocker during the perioperative period
Setting: Hospital Level of Analysis: Facility/Agency
Data Source: Electronic administrative data/claims
Target Outcome (unadjusted numerator): Surgery patients on beta blocker therapy prior to admission who receive a beta blocker during the perioperative period
Target Population (denominator): All surgery patients on beta blocker therapy prior to admission
Target Population (denominator) Exclusions: <ul style="list-style-type: none"> • Patients less than 18 years of age, • Patients who did not receive beta blockers due to contraindications as documented in the medical record, • Patients whose ICD-9-CM principal procedure occurred prior to the date of admission. • Patients whose ICD-9-CM principal procedure was performed entirely by laparoscope. • Patients who expired during the perioperative period. • Pregnant patients taking a beta-blocker prior to admission. • Patients involved
Methods/ Risk Adjustment:
Target Outcome (unadjusted numerator) Details:
Target Population (denominator) Details:
Target Population (denominator) Exclusion Details:

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#0300: Cardiac patients with controlled 6AM postoperative serum glucose The Joint Commission
Description: Percentage of cardiac surgery patients with controlled 6a.m. serum glucose (≤ 200 mg/dl) on postoperative day (POD) 1 and POD 2
Setting: Hospital Level of Analysis: Facility/Agency
Data Source: Paper medical record/flow-sheet; Electronic administrative data/claims
Target Outcome (unadjusted numerator): Surgery patients with controlled 6a.m. serum glucose (≤ 200 mg/dl) on postoperative day (POD) 1 and POD 2
Target Population (denominator): Cardiac surgery patients with no evidence of prior infection Include patients with an ICD-9-CM Principle Procedure code or ICD-9-CM Other Procedure codes of selected surgeries AND an ICD-9-CM for ICD-9-CM codes Principle Procedure code or ICD-9-CM Other Procedure codes of selected surgeries
Target Population (denominator) Exclusions: Exclude the following patients: <ul style="list-style-type: none"> • principle or admission diagnosis suggestive of preoperative infectious diseases; • less than 18 years of age; • physician documented infection prior to surgical procedure of interest; and • burn patients or transplant patients.
Methods/ Risk Adjustment:
Target Outcome (unadjusted numerator) Details:
Target Population (denominator) Details:
Target Population (denominator) Exclusion Details: