

**STS CABG Composite Quality Rating**

**Participant 99999  
STS Period Ending 12/31/2016**

<b>Quality Domain</b>	<b>Participant Score (98% CI)</b>	<b>STS Mean Participant Score</b>	<b>Participant Rating<sup>1</sup></b>	<b>Distribution of Participant Scores ● = STS Mean</b>
<b>Jan 2016 - Dec 2016 Overall</b>				
Jan 2016 - Dec 2016 Absence of Mortality				
Jan 2016 - Dec 2016 Absence of Morbidity <sup>2</sup>				
Jan 2016 - Dec 2016 Use of IMA <sup>2</sup>				
Jan 2016 - Dec 2016 Medications <sup>2</sup>				

<sup>1</sup>\* = Participant performance is significantly lower than the STS mean based on 99% Bayesian probability

<sup>1</sup>\*\* = Participant performance is not significantly different than the STS mean based on 99% Bayesian probability

<sup>1</sup>\*\*\* = Participant performance is significantly higher than the STS mean based on 99% Bayesian probability

<sup>2</sup>Please refer to Report Overview - STS Composite Quality Rating and NQF-Endorsed Measures for full details

**STS CABG Composite Quality Rating  
Domain Details**

**Participant 99999  
STS Period Ending 12/31/2016**

Quality Domain	Eligible Procedures	Detail	Count	Percent of Morbidity/Failure <sup>1</sup>
<b>Jan 2016 - Dec 2016 Absence of Mortality</b>		Mortality		
<b>Jan 2016 - Dec 2016 Absence of Morbidity<sup>2</sup></b>		Any Morbidity  Reoperation only <sup>3</sup> ..... Renal Failure only <sup>4</sup> ..... Deep Sternal Infection/Mediastinitis only ..... Prolonged Ventilation only ..... Cerebrovascular Accident only ..... Multiple Morbidities .....		
<b>Jan 2016 - Dec 2016 Use of IMA<sup>5</sup></b>		IMA Failures		
<b>Jan 2016 - Dec 2016 Medications<sup>6</sup></b>		Failed to Prescribe all eligible NQF-Endorsed Medications  Only Failed to Prescribe Preoperative Beta Blockade Only Failed to Prescribe Discharge Beta Blockade <sup>7</sup> ..... Only Failed to Prescribe Discharge Anti-Lipids <sup>7</sup> ..... Only Failed to Prescribe Discharge Anti-Platelets <sup>8</sup> ..... Failed to Prescribe Multiple Medications .....		

<sup>1</sup>Percentages represent the proportion that the specific morbidity or process non-compliance contributed to the total number of patients for whom credit was not received for these 'all/any or none' bundles. This information is intended to facilitate and focus process and quality improvement initiatives by providers.

<sup>2</sup>Includes Reoperations, Renal Failure, Deep Sternal Infection/Mediastinitis, Prolonged Ventilation, and CVA

<sup>3</sup>Includes Reoperations for Bleeding/Tamponade, Valvular Dysfunction, Graft Occlusion, and Other Cardiac Problems

<sup>4</sup>Excludes patients with preop Renal Failure or Last Creatinine >= 4.

<sup>5</sup>Excludes patients with prior CABG surgery and contraindications for IMA. Refer to Report Overview for definitions.

<sup>6</sup>Includes Preoperative Beta Blockade, Discharge Beta Blockade, Discharge Anti-Lipids, and Discharge Anti-Platelets. Excludes contraindicated / not indicated records.

<sup>7</sup>Excludes in-hospital mortalities

<sup>8</sup>Anti-platelet use includes Aspirin, ADP Inhibitors, P2Y12 Antagonists and any other anti-platelet medications, and excludes in-hospital mortalities

**STS CABG Composite Quality Rating  
Rating Trend**

**Participant 99999  
STS Period Ending 12/31/2016**

Quality Domain	Participant Rating <sup>1</sup>			
	Jul 2014 - Jun 2015	Jan 2015 - Dec 2015	Jul 2015 - Jun 2016	Jan 2016 - Dec 2016
<b>Overall</b>				
Absence of Mortality				
Absence of Morbidity <sup>2</sup>				
Use of IMA <sup>2</sup>				
Medications <sup>2</sup>				

<sup>1</sup>\* = Participant performance is significantly lower than the STS mean based on 99% Bayesian probability

\*\* = Participant performance is not significantly different than the STS mean based on 99% Bayesian probability

\*\*\* = Participant performance is significantly higher than the STS mean based on 99% Bayesian probability

<sup>2</sup>Please refer to Report Overview - STS Composite Quality Rating and NQF-Endorsed Measures for full details

Note: Star ratings for previous time periods reflect the results obtained at that time. Star ratings were not regenerated for those time periods using newer data

**STS AVR Composite Quality Rating**

**Participant 99999  
STS Period Ending 12/31/2016**

<b>Quality Domain</b>	<b>Participant Score (95% CI)</b>	<b>STS Mean Participant Score</b>	<b>Participant Rating<sup>1</sup></b>	<b>Distribution of Participant Scores ● = STS Mean</b>
<b>Jan 2014 - Dec 2016 Overall</b>				
Jan 2014 - Dec 2016 Absence of Mortality				
Jan 2014 - Dec 2016 Absence of Morbidity <sup>2</sup>				

<sup>1</sup>\* = Participant performance is significantly lower than the STS mean based on 97.5% Bayesian probability  
<sup>2</sup>\*\* = Participant performance is not significantly different than the STS mean based on 97.5% Bayesian probability  
<sup>3</sup>\*\*\* = Participant performance is significantly higher than the STS mean based on 97.5% Bayesian probability  
<sup>2</sup>Please refer to Report Overview - STS Composite Quality Rating and NQF-Endorsed Measures for full details

**STS AVR Composite Quality Rating  
Domain Details**

**Participant 99999  
STS Period Ending 12/31/2016**

Quality Domain	Eligible Procedures	Detail	Count	Percent of Morbidity/Failure <sup>1</sup>
<b>Jan 2014 - Dec 2016 Absence of Mortality</b>		Mortality		
<b>Jan 2014 - Dec 2016 Absence of Morbidity<sup>2</sup></b>		Any Morbidity  Reoperation only <sup>3</sup> ..... Renal Failure only <sup>4</sup> ..... Deep Sternal Infection/Mediastinitis only ..... Prolonged Ventilation only ..... Cerebrovascular Accident only ..... Multiple Morbidities .....		

<sup>1</sup>Percentages represent the proportion that the specific morbidity or process non-compliance contributed to the total number of patients for whom credit was not received for these 'all/any or none' bundles. This information is intended to facilitate and focus process and quality improvement initiatives by providers.

<sup>2</sup>Includes Reoperations, Renal Failure, Deep Sternal Infection/Mediastinitis, Prolonged Ventilation, and CVA

<sup>3</sup>Includes Reoperations for Bleeding/Tamponade, Valvular Dysfunction, Graft Occlusion, and Other Cardiac Problems

<sup>4</sup>Excludes patients with preop Renal Failure or Last Creatinine >=4.

**STS AVR + CABG Composite Quality Rating**

**Participant 99999  
STS Period Ending 12/31/2016**

<b>Quality Domain</b>	<b>Participant Score (95% CI)</b>	<b>STS Mean Participant Score</b>	<b>Participant Rating<sup>1</sup></b>	<b>Distribution of Participant Scores ● = STS Mean</b>
<b>Jan 2014 - Dec 2016 Overall</b>				
Jan 2014 - Dec 2016 Absence of Mortality				
Jan 2014 - Dec 2016 Absence of Morbidity <sup>2</sup>				

<sup>1</sup>\* = Participant performance is significantly lower than the STS mean based on 97.5% Bayesian probability

\*\* = Participant performance is not significantly different than the STS mean based on 97.5% Bayesian probability

\*\*\* = Participant performance is significantly higher than the STS mean based on 97.5% Bayesian probability

<sup>2</sup>Please refer to Report Overview - STS Composite Quality Rating and NQF-Endorsed Measures for full details

**STS AVR + CABG Composite Quality Rating  
Domain Details**

**Participant 99999  
STS Period Ending 12/31/2016**

Quality Domain	Eligible Procedures	Detail	Count	Percent of Morbidity/Failure <sup>1</sup>
<b>Jan 2014 - Dec 2016 Absence of Mortality</b>		Mortality		
<b>Jan 2014 - Dec 2016 Absence of Morbidity<sup>2</sup></b>		Any Morbidity Reoperation only <sup>3</sup> ..... Renal Failure only <sup>4</sup> ..... Deep Sternal Infection/Mediastinitis only ..... Prolonged Ventilation only ..... Cerebrovascular Accident only ..... Multiple Morbidities .....		

<sup>1</sup>Percentages represent the proportion that the specific morbidity or process non-compliance contributed to the total number of patients for whom credit was not received for these 'all/any or none' bundles. This information is intended to facilitate and focus process and quality improvement initiatives by providers.

<sup>2</sup>Includes Reoperations, Renal Failure, Deep Sternal Infection/Mediastinitis, Prolonged Ventilation, and CVA

<sup>3</sup>Includes Reoperations for Bleeding/Tamponade, Valvular Dysfunction, Graft Occlusion, and Other Cardiac Problems

<sup>4</sup>Excludes patients with preop Renal Failure or Last Creatinine >=4.

**NQF-Endorsed Measures - CABG  
Process Measures**

**Participant 99999  
STS Period Ending 12/31/2016**

NQF-Endorsed Measure	Eligible Procedures	Participant Usage (95% CI)	Participant Percentile	Overall STS Usage	Distribution of Participant Values ● = Overall STS Usage
Jan 2016 - Dec 2016 Preoperative Beta Blockade Therapy <sup>1</sup>					
Jan 2016 - Dec 2016 Use of IMA <sup>2</sup>					
Jan 2016 - Dec 2016 Discharge Anti-Platelet Medication <sup>3</sup>					
Jan 2016 - Dec 2016 Discharge Beta Blockade Therapy <sup>4</sup>					
Jan 2016 - Dec 2016 Discharge Anti-Lipid Treatment <sup>4</sup>					

<sup>1</sup>Excludes contraindicated / not indicated records.

<sup>2</sup>Excludes patients with prior CABG surgery and contraindications for IMA. Refer to Report Overview for definitions.

<sup>3</sup>Anti-platelet use includes Aspirin and ADP Inhibitors, and excludes in-hospital mortalities. Excludes contraindicated / not indicated records.

<sup>4</sup>Excludes in-hospital mortalities.



**NQF-Endorsed Measures - CABG  
Outcomes Measures**

**Participant 99999  
STS Period Ending 12/31/2016**

NQF-Endorsed Measure	Eligible Procedures	Participant Estimated Odds Ratio (95% CI)	Participant Percentile	Participant Observed Rate	Distribution of Participant Values ● = STS Estimated Odds Ratio
Jan 2016 - Dec 2016 Deep Sternal Infection / Mediastinitis					
Jan 2016 - Dec 2016 Post-Op Renal Insufficiency (Failure) <sup>1</sup>					
Jan 2016 - Dec 2016 Surgical Re-exploration <sup>2</sup>					
Jan 2016 - Dec 2016 Stroke/ Cerebrovascular Accident					
Jan 2016 - Dec 2016 Prolonged Intubation (Ventilation)					

<sup>1</sup>Excludes patients with preoperative dialysis or last creatinine >=4

<sup>2</sup>Includes Reoperations for Bleeding/Tamponade, Valvular Dysfunction, Graft Occlusion, and Other Cardiac Problems

**NQF-Endorsed Measures - All Cardiac Surgeries  
Process Measures**

**Participant 99999  
STS Period Ending 12/31/2016**

NQF-Endorsed Measure	Eligible Procedures	Participant Usage (95% CI)	Participant Percentile	Overall STS Usage	Distribution of Participant Values ● = Overall STS Usage
Jan 2016 - Dec 2016 Duration of Antibiotic Prophylaxis <sup>1</sup>					
Jan 2016 - Dec 2016 Selection of Antibiotic Prophylaxis <sup>2</sup>					
Jan 2016 - Dec 2016 Timing of Antibiotic Prophylaxis <sup>3</sup>					

<sup>1</sup>Prophylactic antibiotics discontinued within 48 hours

<sup>2</sup>First or second generation cephalosporin prescribed/given prophylactically

<sup>3</sup>Appropriate timing of prophylactic antibiotics

Note: Includes all cardiac surgeries. Refer to Report Overview for definitions.

Note: All measures are among patients without exclusions.

**NQF-Endorsed Measures  
Mortality Measures**

**Participant 99999  
STS Period Ending 12/31/2016**

NQF-Endorsed Measure	Eligible Procedures	Participant Estimated Odds Ratio (95% CI)	Participant Percentile	Participant Observed Rate	Distribution of Participant Values ● = STS Estimated Odds Ratio
Jan 2016 - Dec 2016 CABG Inpatient Mortality					
Jan 2016 - Dec 2016 CABG Operative Mortality					
Jan 2014 - Dec 2016 AVR Operative Mortality					
Jan 2014 - Dec 2016 MVR Operative Mortality					
Jan 2014 - Dec 2016 MV Repair Operative Mortality					

**NQF-Endorsed Measures  
Mortality Measures**

**Participant 99999  
STS Period Ending 12/31/2016**

NQF-Endorsed Measure	Eligible Procedures	Participant Estimated Odds Ratio (95% CI)	Participant Percentile	Participant Observed Rate	Distribution of Participant Values ● = STS Estimated Odds Ratio
Jan 2014 - Dec 2016 AVR+CABG Operative Mortality					
Jan 2014 - Dec 2016 MVR+CABG Operative Mortality					
Jan 2014 - Dec 2016 MV Repair+CABG Operative Mortality					

**Executive Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

**Executive Summary**

**Participant 99999**  
**STS Period Ending 12/31/2016**

**Executive Summary**

**Participant 9999  
STS Period Ending 12/31/2016**

**Executive Summary**

**Participant 99999  
STS Period Ending 12/31/2016**



Executive Summary

Participant 99999  
 STS Period Ending 12/31/2016

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Yearly Number of Sites in Analysis</b>										
<b>Yearly Overall Procedure Count</b>										
<b>Major Procedures</b>										
Isolated CABG .....										
Isolated Aortic Valve Replacement .....										
Isolated Mitral Valve Replacement .....										
Aortic Valve Replacement + CABG .....										
Mitral Valve Replacement + CABG .....										
Aortic + Mitral Valve Replacements .....										
Mitral Valve Repair .....										
Mitral Valve Repair + CABG .....										
Not Classified Above .....										
<b>Incidence of Other Procedures</b>										
Pulmonic Valve .....										
Tricuspid Valve .....										
Ventricular Assist Device .....										
LVA - Left Ventricular Aneurysm Repair .....										
VSD - Ventricular Septal Defect Repair .....										
ASD - Atrial Septal Defect Repair .....										
Batista .....										
Surgical Ventricular Restoration .....										
Congenital Defect Repair .....										
Transmyocardial Laser Revascularization .....										
Cardiac Trauma .....										
Cardiac Transplant .....										
Arrhythmia Correction Surgery .....										
Atrial Fibrillation Correction Surgery .....										
Aortic Aneurysm .....										
Ascending Aorta .....										
Aortic Arch .....										
Descending Aorta .....										
Thoracoabdominal Aorta .....										
Carotid Endarterectomy .....										
Other Vascular .....										
Other Thoracic .....										



**Major Procedures Mortality  
CABG, Valve, and Valve+CABG Procedures Combined<sup>1</sup>**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Number of Cases</b>					
<b>Mortality Summary</b>					
In-hospital Mortality .....					
Operative Mortality .....					
<b>Mortality Risk-Adjustment<sup>2</sup></b>					
In-hospital Mortality					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					
Operative Mortality					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					

<sup>1</sup>Includes all 7 Major Procedure Categories (CABG, AVR, AVR+CABG, MVR, MVR+CABG, MVP, MVP+CABG)

<sup>2</sup>Refer to the Report Overview for information on risk-adjustment methodology

Risk-adjustment is not performed on time periods of less than 6 months



**Isolated CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Number of Cases</b>					
<b>Demographics</b>					
Age (years)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Age >= 65 years old .....					
Gender, Female .....					
Missing .....					
Race <sup>1</sup>					
Caucasian .....					
Black .....					
Asian .....					
Native American .....					
Native Hawaiian/Pacific Islander .....					
Other .....					
Multiple Races .....					
Missing / Not Documented .....					
Pt. Declined to Disclose <sup>2</sup> .....					
Hispanic or Latino or Spanish Ethnicity ....					
Missing/ Not Documented .....					
Body Mass Index <sup>3</sup>					
Underweight (BMI < 18.5) .....					
Normal (BMI 18.5 - 24.9) .....					
Overweight (BMI 25.0 - 29.9) .....					
Obese I (BMI 30.0 - 34.9) .....					
Obese II (BMI 35.0 - 39.9) .....					
Morbid Obesity (BMI 40.0+) .....					
Missing Height .....					
Missing Weight .....					

<sup>1</sup>Data presented in the report represent the individual response rates for each race category shown; summing the individual non-caucasian categories will not result in the same rates as shown in the graph since non-caucasian, as defined for the graph, does not include races or ethnicities reported in combination with caucasian

<sup>2</sup>Option added in v2.81

<sup>3</sup>BMI = Weight(kg) / Height(m)<sup>2</sup>

**Isolated CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
<b>Comorbidities</b>					
Diabetes Mellitus .....					
Diet Control .....					
Oral Control .....					
Insulin Control .....					
Other SQ Medication Control <sup>1</sup> .....					
Other Control .....					
Missing Control .....					
Missing .....					
Hypertension .....					
Missing .....					
Dyslipidemia .....					
Missing .....					
Family History of CAD .....					
Missing .....					
Current/Recent Cigarette Smoker .....					
Smoker, Current Status Unknown <sup>1</sup> .....					
Missing .....					
Chronic Lung Disease					
Mild .....					
Moderate .....					
Severe .....					
Unknown Severity <sup>1</sup> .....					
Missing .....					
Congestive Heart Failure .....					
CHF / NYHA Class I <sup>2</sup> .....					
CHF / NYHA Class II .....					
CHF / NYHA Class III .....					
CHF / NYHA Class IV .....					
CHF / Missing Class .....					
Missing .....					
Peripheral Arterial Disease .....					
Missing .....					

<sup>1</sup>Option added in v2.81

<sup>2</sup>NYHA Class is only collected for patients with CHF

% represents proportion of cases that had both CHF and the indicated NYHA class

**Isolated CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
Cerebrovascular Disease .....					
<i>Missing</i> .....					
Coma/Nonresponsive State .....					
<i>Missing</i> .....					
CVD TIA .....					
<i>Missing</i> .....					
Carotid Stenosis <sup>1</sup>					
None .....					
50-79% <sup>2</sup> .....					
80-100% .....					
<i>Missing/Not Documented</i> .....					
CVD Prior Carotid Surgery .....					
<i>Missing</i> .....					
Cerebrovascular Accident .....					
<i>Missing</i> .....					
Renal Failure, Dialysis-Dependent .....					
<i>Missing</i> .....					
Last Creatinine Preop .....					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Missing .....					
Value >= 4.0 mg/dL .....					
Immunosuppressive Treatment .....					
<i>Missing</i> .....					
<b>Previous Interventions</b>					
Previous Cardiac Surgery <sup>3</sup> .....					
First reoperation .....					
Previous CABG .....					

<sup>1</sup>Defined as highest level of occlusion in either carotid.

<sup>2</sup>Option added in v2.81

<sup>3</sup>Previous cardiac surgery reflects any prior CABG, valve, or other cardiac surgery

Isolated CABG Procedures  
Data Summary

Participant 99999  
STS Period Ending 12/31/2016

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
Previous AICD .....					
Previous Pacemaker .....					
Previous PCI .....					
<= 6 hours prior to surgery .....					
> 6 hours prior to surgery .....					
<i>Missing timing</i> .....					
Previous PCI Stent .....					
<b>Status</b>					
Surgery Status					
Elective .....					
Urgent .....					
Emergent .....					
Emergent Salvage .....					
<i>Missing</i> .....					
MI .....					
<= 7 days prior to surgery .....					
8-21 days prior to surgery .....					
>21 days prior to surgery .....					
<i>Missing timing</i> .....					
<i>Missing</i> .....					
Cardiogenic Shock					
At the time of surgery .....					
Within 24 hrs of surgery <sup>1</sup> .....					
<i>Missing</i> .....					
Resuscitation					
<= 1 hr prior to surgery .....					
1-24 hrs prior to surgery <sup>1</sup> .....					
<i>Missing</i> .....					

<sup>1</sup>Option added in v2.81



**Isolated CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Cardiac Pres. on Admission					
No Symptoms or Angina .....					
Symptoms Unlikely to be Ischemia <sup>1</sup> .....					
Stable Angina .....					
Unstable Angina .....					
Non-ST Elevation MI (Non-STEMI) .....					
ST Elevation MI (STEMI) .....					
Angina Equivalent <sup>2</sup> .....					
Other <sup>2</sup> .....					
Missing .....					
Any Arrhythmia <sup>3</sup> .....					
Recent .....					
Remote .....					
Missing .....					
Ventricular Tachycardia/Fibrillation <sup>4</sup> .....					
Missing .....					
3 <sup>rd</sup> degree Heart Block <sup>4</sup> .....					
Missing .....					
Atrial Fibrillation/Flutter <sup>5</sup> .....					
Missing .....					
Atrial Fibrillation <sup>4, 5</sup> .....					
Missing .....					
Atrial Flutter <sup>4, 5</sup> .....					
Missing .....					
<b>Hemodynamics and Catheterization</b>					
Number of Diseased Coronary Vessels					
One .....					
Two .....					
Three .....					
Missing .....					
Left Main Disease (>=50% Stenosis) .....					
Missing .....					

<sup>1</sup>Option dropped in v2.81

<sup>2</sup>Option added in v2.81

<sup>3</sup>Includes VTach/VFib, 2<sup>nd</sup> and 3<sup>rd</sup> degree HB, Sick Sinus Syndrome, AFib, and AFlutter

<sup>4</sup>For v2.81 data, includes recent or remote arrhythmias

<sup>5</sup> For v2.81 data, AFib and AFlutter were separated.

**Isolated CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
Ejection Fraction					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
<i>EF missing or not measured</i> .....					
EF <40% <sup>1</sup> .....					
Pulmonary Hypertension <sup>2</sup> .....					
<i>PA mean/systolic pressure missing   or not measured</i> .....					
Aortic Stenosis .....					
<i>Missing</i> .....					
Mitral Insufficiency					
Trivial .....					
Mild .....					
Moderate .....					
Severe .....					
<i>Missing/Not Documented</i> .....					
<b>Preoperative Medications</b>					
Aspirin .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>3</sup> .....					
<i>Missing</i> .....					
Inotropics .....					
<i>Missing</i> .....					
Beta Blockers .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
<i>Missing</i> .....					

<sup>1</sup>Among patients with measured EF

<sup>2</sup>PA systolic pressure > 35mmHg

<sup>3</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

**Isolated CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
Steroids .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
Nitrates IV .....					
Missing .....					
ACE Inhibitors .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Anticoagulants .....					
Missing .....					
Coumadin .....					
Missing .....					
Lipid-Lowering agents .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
Glycoprotein IIb/IIIa Inhibitor .....					
Missing .....					
ADP Inhibitors within 5 Days .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
ADP Inhibitor Discontinuation <sup>2</sup>					
< 1 Day .....					
1 Day .....					
2 Days .....					
3 Days .....					
4 Days .....					
5 Days .....					
Missing .....					

<sup>1</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

<sup>2</sup>Excludes patients not on ADP Inhibitors within 5 Days

**Isolated CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
Antiplatelets within 5 Days .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
<b>Operative Information</b>					
Blood Products Used .....					
Number of Blood Product Units Used					
1 Red Blood Cell Unit .....					
2 Red Blood Cell Units .....					
3 Red Blood Cell Units .....					
4+ Red Blood Cell Units .....					
1+ Fresh Frozen Plasma Units .....					
1+ Cryoprecipitate Units .....					
1+ Platelet Units .....					
Missing .....					
Number of Distal Anastamoses, Total					
1 .....					
2 .....					
3 .....					
4 .....					
5+ .....					
Missing <sup>2</sup> .....					
Vein Harvest Technique <sup>3</sup>					
Endovascular/Endoscopic .....					
Direct Vision .....					
Both .....					
Cryopreserved .....					
Missing .....					
Internal Mammary Artery Used <sup>4</sup>					
Any .....					
Left .....					
Right .....					
Both .....					
Missing .....					

<sup>1</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted  
<sup>2</sup>Where number of arterial conduits and number of vein grafts both missing  
<sup>3</sup>Where at least 1 vein was harvested  
<sup>4</sup>Excludes patients with prior CABG surgery

**Isolated CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Radial Artery Used .....					
Missing .....					
Radial Artery Harvest Technique .....					
Endovascular/Endoscopic .....					
Direct Vision .....					
Both .....					
Missing .....					
IABP Used .....					
Preop .....					
Intraop .....					
Postop .....					
Missing Timing .....					
Missing .....					
Robotic Technology Assisted .....					
Missing .....					
Off-pump Procedure (see following section for detail) .....					
Cross-Clamp Time (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Cardiopulmonary Bypass Time (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					

**Isolated CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Circulatory Arrest .....					
<i>Missing</i> .....					
Circulatory Arrest Time (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Skin Incision Duration (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
OR Duration (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Antibiotic Selection <sup>1,2</sup> .....					
Exclusions .....					
<i>Missing</i> .....					
Antibiotic Timing <sup>1,3</sup> .....					
Exclusions .....					
<i>Missing</i> .....					
Antibiotics Discontinued <sup>1,4</sup> .....					
Exclusions .....					
<i>Missing</i> .....					
Clotting Agents <sup>5</sup> .....					
<i>Missing</i> .....					

<sup>1</sup>All antibiotic measures are calculated among patients without exclusions  
<sup>2</sup>First or second generation cephalosporin prescribed/given prophylactically  
<sup>3</sup>Appropriate timing of prophylactic antibiotics  
<sup>4</sup>Prophylactic antibiotics discontinued within 48 hours  
<sup>5</sup>Includes one or more of the following: Aprotinin, Epsilon Amino-Caproic Acid, Desmopressin, or Tranexamic Acid

**Isolated CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
<b>Postoperative Information</b>					
Blood Products Used .....					
Number of Blood Product Units Used					
1 Red Blood Cell Unit .....					
2 Red Blood Cell Units .....					
3 Red Blood Cell Units .....					
4+ Red Blood Cell Units .....					
1+ Fresh Frozen Plasma Units .....					
1+ Cryoprecipitate Units .....					
1+ Platelet Units .....					
Missing .....					
Intraop/Postop Products Used .....					
Total Number of Blood Product Units					
1 Red Blood Cell Unit .....					
2 Red Blood Cell Units .....					
3 Red Blood Cell Units .....					
4+ Red Blood Cell Units .....					
1+ Fresh Frozen Plasma Units .....					
1+ Cryoprecipitate Units .....					
1+ Platelet Units .....					
Missing .....					
Ventilation					
Total Ventilation Hours					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Initial Ventilation Hours					
Mean .....					
Median .....					
Initial Ventilation <6 hours <sup>1</sup> .....					
Extubated in OR .....					
Missing .....					
Reintubation .....					
Missing .....					

<sup>1</sup>Excludes patients extubated in the OR

**Isolated CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Additional Ventilation Hours<sup>1</sup></b>					
Mean .....					
Median .....					
<b>ICU Stay</b>					
<b>Total ICU Hours</b>					
Mean .....					
Median .....					
75 <sup>th</sup> Percentile .....					
25 <sup>th</sup> Percentile .....					
<b>Initial ICU Hours</b>					
Mean .....					
Median .....					
Readmitted to ICU .....					
<b>Additional ICU Hours<sup>2</sup></b>					
Mean .....					
Median .....					
<b>Mortality Summary</b>					
In-hospital Mortality .....					
Operative Mortality .....					
<b>Mortality Risk-Adjustment<sup>3</sup></b>					
In-hospital Mortality					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					

<sup>1</sup>Among patients reintubated

<sup>2</sup>Among patients readmitted to the ICU

<sup>3</sup>Refer to the Report Overview for information on risk-adjustment methodology  
Risk-adjustment is not performed on time periods of less than 6 months



**Isolated CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Operative Mortality					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					
<b>Complications Summary</b>					
Any Complications .....					
Any Major Complications / Operative Mortality .....					
Operative Complications					
Any Reoperation .....					
Any Reoperation (NQF Definition) <sup>1</sup> .....					
Reoperation for Bleeding .....					
Reoperation for Valvular Dysfunction <sup>2</sup> .....					
Reoperation for Graft Occlusion <sup>2</sup> .....					
Reoperation for Other Cardiac .....					
Reoperation for Other Non-Cardiac .....					
Infection Complications					
Any Infection .....					
Deep Sternal Infection/Mediastinitis .....					
Septicemia/Sepsis .....					
Conduit Harvest or Cannulation Site <sup>3</sup> .....					
Neurological Complications					
Any Neurological .....					
Coma/Encephalopathy .....					
Permanent Stroke .....					
Transient Ischemic Attack .....					
Paralysis .....					

<sup>1</sup>Includes reoperations for bleeding/tamponade, valvular dysfunction, graft occlusion, and other cardiac problems.

<sup>2</sup>Includes surgical and PCI/Transcatheter interventions

<sup>3</sup>Excludes patients with zero vein grafts

**Isolated CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Pulmonary Complications					
Any Pulmonary .....					
Prolonged Ventilation .....					
Pneumonia .....					
Pulmonary Embolism .....					
Pleural Effusion Requiring Drainage .....					
Renal Complications					
Renal Failure <sup>1</sup> .....					
Vascular Complications					
Any Vascular .....					
Acute Limb Ischemia .....					
Other Complications					
Any Other .....					
New Onset Atrial Fibrillation <sup>2</sup> .....					
Recent Recurrent Atrial Fibrillation <sup>3</sup> .....					
Cardiac Arrest .....					
Anticoagulant Complication .....					
Tamponade .....					
Gastro-Intestinal Complication .....					
Multi-System Failure .....					
<b>Complications Risk-Adjustment<sup>4</sup></b>					
Major Complications or Op. Mortality					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					

<sup>1</sup>Excludes patients with preoperative dialysis or last creatinine >=4

<sup>2</sup>New Onset AFib is only among patients with no history of arrhythmias

<sup>3</sup>Recent Recurrent AFib is among patients with history of recent AFib

<sup>4</sup>Refer to the Report Overview for information on risk-adjustment methodology  
Risk-adjustment is not performed on time periods of less than 6 months

**Isolated CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Any Reoperation					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					
Deep Sternal Infection/Mediastinitis					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					
Permanent Stroke					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					
Renal Failure					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					

**Isolated CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
Prolonged Ventilation					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					
<b>Discharge Location<sup>1</sup></b>					
Home .....					
Extended Care/TCU .....					
Other Acute Care Hospital .....					
Nursing Home .....					
Hospice .....					
Left AMA <sup>2</sup> .....					
Other .....					
Missing .....					
<b>Discharge Medications<sup>1</sup></b>					
Aspirin .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
ACE inhibitors .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Beta Blockers .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Any Lipid-Lowering Agents <sup>3</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					

<sup>1</sup>Excludes in-hospital mortalities

<sup>2</sup>Option added in v2.81

<sup>3</sup>Variable dropped in v2.81

**Isolated CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
Statin Lipid-Lowering Agents <sup>1</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Non-Statin Lipid-Lowering Agents <sup>1</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
ADP Inhibitors .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>2</sup> .....					
Missing .....					
P2Y12 Antagonists <sup>1</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Other Antiplatelets <sup>1</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Antiarrhythmics <sup>3</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>2</sup> .....					
Missing .....					
Amiodarone <sup>1</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Coumadin .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>2</sup> .....					
Missing .....					

<sup>1</sup>Variable added in v2.81

<sup>2</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

<sup>3</sup>Variable dropped in v2.81

**Isolated CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Discharge Referrals/Counseling<sup>1</sup></b>					
Cardiac Rehabilitation Referral .....					
<i>Missing</i> .....					
Smoking Cessation Counseling .....					
<i>Missing</i> .....					
<b>Readmission and Reason<sup>2</sup></b>					
Readmitted within 30 Days <sup>3</sup> .....					
Anticoagulation Complication					
Valvular .....					
Pharmacological .....					
Arrhythmias/Heart Block .....					
Congestive Heart Failure .....					
MI and/or Recurrent Angina .....					
Pericardial Effusion / Tamponade .....					
Pneumonia or Other					
Respiratory Complication <sup>4</sup> .....					
Pneumonia <sup>5</sup> .....					
Respiratory Complications, Other <sup>5</sup> .....					
Pleural Effusion req. Intervention <sup>5</sup> .....					
Coronary Artery Dysfunction .....					
Valve Dysfunction .....					
Infection - Deep Sternum .....					
Infection - Conduit Harvest Site .....					
Renal Failure .....					
TIA / Permanent CVA .....					
Acute Vascular Complication .....					
Subacute Endocarditis .....					
VAD Complication .....					
Other .....					
Other - Planned readmission <sup>5</sup> .....					
<i>Missing/Unknown</i> .....					

<sup>1</sup>Excludes in-hospital mortalities and Not Applicable Records

<sup>2</sup>Excludes in-hospital mortalities

<sup>3</sup>Timed from procedure for v2.73, from discharge for v2.81

<sup>4</sup>Option dropped in v2.81

<sup>5</sup>Option added in v2.81

**Isolated CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
<b>Length of Stay Summary</b>					
Total Length of Stay (days)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Post-Procedure Length of Stay (days)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
PLOS <6 days .....					
PLOS >14 days .....					
<b>Length of Stay Risk-Adjustment<sup>1</sup></b>					
Short stay: PLOS <6 days					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					
Long stay: PLOS >14 days					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					

<sup>1</sup>Refer to the Report Overview for information on risk-adjustment methodology  
Risk-adjustment is not performed on time periods of less than 6 months

**Isolated CABG Procedures  
Subset: On-pump procedures**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Number of On-Pump Procedures</b>					
<b>Demographics</b>					
Age (years), median .....					
Gender, Female .....					
Race, Non-caucasian .....					
Multiple Races .....					
Obesity (BMI 30.0+) .....					
<b>Comorbidities</b>					
Diabetes Mellitus .....					
Insulin-Dependent .....					
Hypertension .....					
Dyslipidemia .....					
Current/Recent Cigarette Smoker .....					
Chronic Lung Disease, Mild+ .....					
Congestive Heart Failure .....					
CHF / NYHA class IV <sup>1</sup> .....					
Peripheral Arterial Disease .....					
Cerebrovascular Disease .....					
CVA .....					
Renal failure, Dialysis-Dependent .....					
Last Creatinine Preop >= 4.0 mg/dl .....					
Immunosuppressive Treatment .....					
<b>Previous Interventions</b>					
Previous Cardiac Surgery <sup>2</sup> .....					
Previous CAB .....					
Previous PCI .....					
<b>Status</b>					
Surgery status, Emergent or Salvage ....					
MI .....					
<= 7 days Prior to Surgery .....					
Cardiogenic Shock .....					
Resuscitation .....					

<sup>1</sup>NYHA Class is only collected for patients with CHF  
 % represents proportion of cases that had both CHF and the indicated NYHA class  
<sup>2</sup>Previous cardiac surgery reflects any prior CABG, valve, or other cardiac surgery



**Isolated CABG Procedures  
Subset: On-pump procedures**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Hemodynamics and Catheterization</b>					
Triple Vessel Disease .....					
Left Main Disease (>=50% stenosis) .....					
Ejection Fraction < 40% <sup>1</sup> .....					
Aortic Stenosis .....					
Mitral Insufficiency, Mild+ .....					
<b>Operative Information</b>					
IABP, Preoperative .....					
Cross-Clamp Time (min)					
Mean .....					
Median .....					
Cardiopulmonary Bypass Time (min)					
Mean .....					
Median .....					
<b>Postoperative Information</b>					
Ventilation hours, total					
Mean .....					
Median .....					
ICU hours, total					
Mean .....					
Median .....					
<b>Mortality Summary &amp; Risk-Adjustment<sup>2</sup></b>					
In-hospital Mortality					
Observed rate .....					
Risk-adjusted rate .....					
Operative Mortality					
Observed rate .....					
Risk-adjusted rate .....					

<sup>1</sup>Among patients with measured EF

<sup>2</sup>Refer to the Report Overview for information on risk-adjustment methodology  
Risk-adjustment is not performed on time periods of less than 6 months

Isolated CABG Procedures  
Subset: On-pump procedures

Participant 99999  
STS Period Ending 12/31/2016

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Complications Summary &amp; Risk-Adjustment<sup>1</sup></b>					
Major Complications or Op. Mortality					
Observed Rate .....					
Risk-adjusted Rate .....					
Any Reoperation					
Observed Rate .....					
Risk-adjusted Rate .....					
Deep Sternal Infection/Mediastinitis					
Observed Rate .....					
Risk-adjusted Rate .....					
Permanent Stroke					
Observed Rate .....					
Risk-adjusted Rate .....					
Renal Failure <sup>2</sup>					
Observed Rate .....					
Risk-adjusted Rate .....					
Prolonged Ventilation					
Observed Rate .....					
Risk-adjusted Rate .....					
<b>Readmission<sup>3</sup></b>					
Readmitted within 30 days <sup>4</sup> .....					
<b>Length of Stay Summary</b>					
Total length of stay (days)					
Mean .....					
Median .....					
Post-procedure Length of Stay (days)					
Mean .....					
Median .....					

<sup>1</sup>Refer to the Report Overview for information on risk-adjustment methodology

Risk-adjustment is not performed on time periods of less than 6 months

<sup>2</sup>Excludes patients with preoperative dialysis or last creatinine >=4

<sup>3</sup>Excludes in-hospital mortalities

<sup>4</sup>Timed from procedure for v2.73, from discharge for v2.81



**Isolated CABG Procedures  
Subset: Off-pump procedures**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Number of Off-Pump Procedures</b>					
<b>Demographics</b>					
Age (years), median .....					
Gender, Female .....					
Race, Non-caucasian .....					
Multiple Races .....					
Obesity (BMI 30.0+) .....					
<b>Comorbidities</b>					
Diabetes Mellitus .....					
Insulin-Dependent .....					
Hypertension .....					
Dyslipidemia .....					
Current/Recent Cigarette Smoker .....					
Chronic Lung Disease, Mild+ .....					
Congestive Heart Failure .....					
CHF / NYHA class IV <sup>1</sup> .....					
Peripheral Arterial Disease .....					
Cerebrovascular Disease .....					
CVA .....					
Renal failure, Dialysis-Dependent .....					
Last Creatinine Preop >= 4.0 mg/dl .....					
Immunosuppressive Treatment .....					
<b>Previous Interventions</b>					
Previous Cardiac Surgery <sup>2</sup> .....					
Previous CAB .....					
Previous PCI .....					
<b>Status</b>					
Surgery status, Emergent or Salvage ....					
MI .....					
<= 7 days Prior to Surgery .....					
Cardiogenic Shock .....					
Resuscitation .....					

<sup>1</sup>NYHA Class is only collected for patients with CHF  
 % represents proportion of cases that had both CHF and the indicated NYHA class  
<sup>2</sup>Previous cardiac surgery reflects any prior CABG, valve, or other cardiac surgery

Isolated CABG Procedures  
Subset: Off-pump procedures

Participant 99999  
STS Period Ending 12/31/2016

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Hemodynamics and Catheterization</b>					
Triple Vessel Disease .....					
Left Main Disease (>=50% stenosis) .....					
Ejection Fraction < 40% <sup>1</sup> .....					
Aortic Stenosis .....					
Mitral Insufficiency, Mild+ .....					
<b>Operative Information</b>					
IABP, Preoperative .....					
Cross-Clamp Time (min)					
Mean .....	--	--	--	--	--
Median .....	--	--	--	--	--
Cardiopulmonary Bypass Time (min)					
Mean .....	--	--	--	--	--
Median .....	--	--	--	--	--
<b>Postoperative Information</b>					
Ventilation hours, total					
Mean .....					
Median .....					
ICU hours, total					
Mean .....					
Median .....					
<b>Mortality Summary &amp; Risk-Adjustment<sup>2</sup></b>					
In-hospital Mortality					
Observed rate .....					
Risk-adjusted rate .....					
Operative Mortality					
Observed rate .....					
Risk-adjusted rate .....					

<sup>1</sup>Among patients with measured EF

<sup>2</sup>Refer to the Report Overview for information on risk-adjustment methodology  
Risk-adjustment is not performed on time periods of less than 6 months

Isolated CABG Procedures  
Subset: Off-pump procedures

Participant 99999  
STS Period Ending 12/31/2016

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Complications Summary &amp; Risk-Adjustment<sup>1</sup></b>					
Major Complications or Op. Mortality					
Observed Rate .....					
Risk-adjusted Rate .....					
Any Reoperation					
Observed Rate .....					
Risk-adjusted Rate .....					
Deep Sternal Infection/Mediastinitis					
Observed Rate .....					
Risk-adjusted Rate .....					
Permanent Stroke					
Observed Rate .....					
Risk-adjusted Rate .....					
Renal Failure <sup>2</sup>					
Observed Rate .....					
Risk-adjusted Rate .....					
Prolonged Ventilation					
Observed Rate .....					
Risk-adjusted Rate .....					
<b>Readmission<sup>3</sup></b>					
Readmitted within 30 days <sup>4</sup> .....					
<b>Length of Stay Summary</b>					
Total length of stay (days)					
Mean .....					
Median .....					
Post-procedure Length of Stay (days)					
Mean .....					
Median .....					

<sup>1</sup>Refer to the Report Overview for information on risk-adjustment methodology

Risk-adjustment is not performed on time periods of less than 6 months

<sup>2</sup>Excludes patients with preoperative dialysis or last creatinine >=4

<sup>3</sup>Excludes in-hospital mortalities

<sup>4</sup>Timed from procedure for v2.73, from discharge for v2.81



**Isolated CABG Procedures  
Subset: First Operations**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
<b>Number of First Operations</b>					
<b>Demographics</b>					
Age (years), median .....					
Gender, Female .....					
Race, Non-caucasian .....					
Multiple Races .....					
Obesity (BMI 30.0+) .....					
<b>Comorbidities</b>					
Diabetes Mellitus .....					
Insulin-Dependent .....					
Hypertension .....					
Dyslipidemia .....					
Current/Recent Cigarette Smoker .....					
Chronic Lung Disease, Mild+ .....					
Congestive Heart Failure .....					
CHF / NYHA class IV <sup>1</sup> .....					
Peripheral Arterial Disease .....					
Cerebrovascular Disease .....					
CVA .....					
Renal failure, Dialysis-Dependent .....					
Last Creatinine Preop >= 4.0 mg/dl .....					
Immunosuppressive Treatment .....					
<b>Previous Interventions</b>					
Previous Cardiac Surgery <sup>2</sup> .....					
Previous CAB .....					
Previous PCI .....					
<b>Status</b>					
Surgery status, Emergent or Salvage ....					
MI .....					
<= 7 days Prior to Surgery .....					
Cardiogenic Shock .....					
Resuscitation .....					

<sup>1</sup>NYHA Class is only collected for patients with CHF  
% represents proportion of cases that had both CHF and the indicated NYHA class  
<sup>2</sup>Previous cardiac surgery reflects any prior CABG, valve, or other cardiac surgery



Isolated CABG Procedures  
Subset: First Operations

Participant 99999  
STS Period Ending 12/31/2016

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Hemodynamics and Catheterization</b>					
Triple Vessel Disease .....					
Left Main Disease (>=50% stenosis) .....					
Ejection Fraction < 40% <sup>1</sup> .....					
Aortic Stenosis .....					
Mitral Insufficiency, Mild+ .....					
<b>Operative Information</b>					
IABP, Preoperative .....					
Cross-Clamp Time (min)					
Mean .....					
Median .....					
Cardiopulmonary Bypass Time (min)					
Mean .....					
Median .....					
<b>Postoperative Information</b>					
Ventilation hours, total					
Mean .....					
Median .....					
ICU hours, total					
Mean .....					
Median .....					
<b>Mortality Summary &amp; Risk-Adjustment<sup>2</sup></b>					
In-hospital Mortality					
Observed rate .....					
Risk-adjusted rate .....					
Operative Mortality					
Observed rate .....					
Risk-adjusted rate .....					

<sup>1</sup>Among patients with measured EF

<sup>2</sup>Refer to the Report Overview for information on risk-adjustment methodology  
Risk-adjustment is not performed on time periods of less than 6 months

Isolated CABG Procedures  
Subset: First Operations

Participant 99999  
STS Period Ending 12/31/2016

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Complications Summary &amp; Risk-Adjustment<sup>1</sup></b>					
Major Complications or Op. Mortality					
Observed Rate .....					
Risk-adjusted Rate .....					
Any Reoperation					
Observed Rate .....					
Risk-adjusted Rate .....					
Deep Sternal Infection/Mediastinitis					
Observed Rate .....					
Risk-adjusted Rate .....					
Permanent Stroke					
Observed Rate .....					
Risk-adjusted Rate .....					
Renal Failure <sup>2</sup>					
Observed Rate .....					
Risk-adjusted Rate .....					
Prolonged Ventilation					
Observed Rate .....					
Risk-adjusted Rate .....					
<b>Readmission<sup>3</sup></b>					
Readmitted within 30 days <sup>4</sup> .....					
<b>Length of Stay Summary</b>					
Total length of stay (days)					
Mean .....					
Median .....					
Post-procedure Length of Stay (days)					
Mean .....					
Median .....					

<sup>1</sup>Refer to the Report Overview for information on risk-adjustment methodology

Risk-adjustment is not performed on time periods of less than 6 months

<sup>2</sup>Excludes patients with preoperative dialysis or last creatinine >=4

<sup>3</sup>Excludes in-hospital mortalities

<sup>4</sup>Timed from procedure for v2.73, from discharge for v2.81



**Isolated CABG Procedures  
Subset: Reoperations**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
<b>Number of Reoperations</b>					
<b>Demographics</b>					
Age (years), median .....					
Gender, Female .....					
Race, Non-caucasian .....					
Multiple Races .....					
Obesity (BMI 30.0+) .....					
<b>Comorbidities</b>					
Diabetes Mellitus .....					
Insulin-Dependent .....					
Hypertension .....					
Dyslipidemia .....					
Current/Recent Cigarette Smoker .....					
Chronic Lung Disease, Mild+ .....					
Congestive Heart Failure .....					
CHF / NYHA class IV <sup>1</sup> .....					
Peripheral Arterial Disease .....					
Cerebrovascular Disease .....					
CVA .....					
Renal failure, Dialysis-Dependent .....					
Last Creatinine Preop >= 4.0 mg/dl .....					
Immunosuppressive Treatment .....					
<b>Previous Interventions</b>					
Previous Cardiac Surgery <sup>2</sup> .....					
Previous CAB .....					
Previous PCI .....					
<b>Status</b>					
Surgery status, Emergent or Salvage ....					
MI .....					
<= 7 days Prior to Surgery .....					
Cardiogenic Shock .....					
Resuscitation .....					

<sup>1</sup>NYHA Class is only collected for patients with CHF  
 % represents proportion of cases that had both CHF and the indicated NYHA class  
<sup>2</sup>Previous cardiac surgery reflects any prior CABG, valve, or other cardiac surgery

**Isolated CABG Procedures  
Subset: Reoperations**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Hemodynamics and Catheterization</b>					
Triple Vessel Disease .....					
Left Main Disease (>=50% stenosis) .....					
Ejection Fraction < 40% <sup>1</sup> .....					
Aortic Stenosis .....					
Mitral Insufficiency, Mild+ .....					
<b>Operative Information</b>					
IABP, Preoperative .....					
Cross-Clamp Time (min)					
Mean .....					
Median .....					
Cardiopulmonary Bypass Time (min)					
Mean .....					
Median .....					
<b>Postoperative Information</b>					
Ventilation hours, total					
Mean .....					
Median .....					
ICU hours, total					
Mean .....					
Median .....					
<b>Mortality Summary &amp; Risk-Adjustment<sup>2</sup></b>					
In-hospital Mortality					
Observed rate .....					
Risk-adjusted rate .....					
Operative Mortality					
Observed rate .....					
Risk-adjusted rate .....					

<sup>1</sup>Among patients with measured EF

<sup>2</sup>Refer to the Report Overview for information on risk-adjustment methodology  
Risk-adjustment is not performed on time periods of less than 6 months

**Isolated CABG Procedures  
Subset: Reoperations**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Complications Summary &amp; Risk-Adjustment<sup>1</sup></b>					
Major Complications or Op. Mortality					
Observed Rate .....					
Risk-adjusted Rate .....					
Any Reoperation					
Observed Rate .....					
Risk-adjusted Rate .....					
Deep Sternal Infection/Mediastinitis					
Observed Rate .....					
Risk-adjusted Rate .....					
Permanent Stroke					
Observed Rate .....					
Risk-adjusted Rate .....					
Renal Failure <sup>2</sup>					
Observed Rate .....					
Risk-adjusted Rate .....					
Prolonged Ventilation					
Observed Rate .....					
Risk-adjusted Rate .....					
<b>Readmission<sup>3</sup></b>					
Readmitted within 30 days <sup>4</sup> .....					
<b>Length of Stay Summary</b>					
Total length of stay (days)					
Mean .....					
Median .....					
Post-procedure Length of Stay (days)					
Mean .....					
Median .....					

<sup>1</sup>Refer to the Report Overview for information on risk-adjustment methodology

Risk-adjustment is not performed on time periods of less than 6 months

<sup>2</sup>Excludes patients with preoperative dialysis or last creatinine >=4

<sup>3</sup>Excludes in-hospital mortalities

<sup>4</sup>Timed from procedure for v2.73, from discharge for v2.81



**Isolated Aortic Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Number of Cases</b>					
<b>Demographics</b>					
Age (years)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Age >= 65 years old .....					
Gender, Female .....					
Missing .....					
Race <sup>1</sup>					
Caucasian .....					
Black .....					
Asian .....					
Native American .....					
Native Hawaiian/Pacific Islander .....					
Other .....					
Multiple Races .....					
Missing / Not Documented .....					
Pt. Declined to Disclose <sup>2</sup> .....					
Hispanic or Latino Ethnicity .....					
Missing/ Not Documented .....					
Body Mass Index <sup>3</sup>					
Underweight (BMI < 18.5) .....					
Normal (BMI 18.5 - 24.9) .....					
Overweight (BMI 25.0 - 29.9) .....					
Obese I (BMI 30.0 - 34.9) .....					
Obese II (BMI 35.0 - 39.9) .....					
Morbid Obesity (BMI 40.0+) .....					
Missing Height .....					
Missing Weight .....					

<sup>1</sup>Data presented in the report represent the individual response rates for each race category shown; summing the individual non-caucasian categories will not result in the same rates as shown in the graph since non-caucasian, as defined for the graph, does not include races or ethnicities reported in combination with caucasian

<sup>2</sup>Option added in v2.81

<sup>3</sup>BMI = Weight(kg) / Height(m)<sup>2</sup>



**Isolated Aortic Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
<b>Comorbidities</b>					
Diabetes Mellitus .....					
Diet Control .....					
Oral Control .....					
Insulin Control .....					
Other SQ Medication Control <sup>1</sup> .....					
Other Control .....					
Missing Control .....					
Missing .....					
Hypertension .....					
Missing .....					
Current/Recent Cigarette Smoker .....					
Smoker, Current Status Unknown <sup>1</sup> .....					
Missing .....					
Chronic Lung Disease					
Mild .....					
Moderate .....					
Severe .....					
Unknown Severity <sup>1</sup> .....					
Missing .....					
Congestive Heart Failure .....					
CHF / NYHA Class I <sup>2</sup> .....					
CHF / NYHA Class II .....					
CHF / NYHA Class III .....					
CHF / NYHA Class IV .....					
CHF / Missing Class .....					
Missing .....					
Peripheral Arterial Disease .....					
Missing .....					
Cerebrovascular Disease .....					
Missing .....					
Coma/Nonresponsive State .....					
Missing .....					

<sup>1</sup>Option added in v2.81

<sup>2</sup>NYHA Class is only collected for patients with CHF

% represents proportion of cases that had both CHF and the indicated NYHA class

**Isolated Aortic Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
CVD TIA .....					
Missing .....					
Carotid Stenosis <sup>1</sup>					
None .....					
50-79% <sup>2</sup> .....					
80-100% .....					
Missing/Not Documented .....					
CVD Prior Carotid Surgery .....					
Missing .....					
Cerebrovascular Accident .....					
Missing .....					
Renal Failure, Dialysis-Dependent .....					
Missing .....					
Last Creatinine Preop					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Missing .....					
Value >= 4.0 mg/dL .....					
Immunosuppressive Treatment .....					
Missing .....					
Infectious Endocarditis .....					
Missing .....					
<b>Previous Interventions</b>					
Previous Cardiac Surgery <sup>3</sup> .....					
First reoperation .....					
Previous CABG .....					
Previous Valve .....					
Previous AICD .....					

<sup>1</sup>Defined as highest level of occlusion in either carotid.

<sup>2</sup>Option added in v2.81

<sup>3</sup>Previous cardiac surgery reflects any prior CABG, valve, or other cardiac surgery

**Isolated Aortic Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
Previous Pacemaker .....					
<b>Status</b>					
Surgery Status					
Elective .....					
Urgent .....					
Emergent .....					
Emergent Salvage .....					
Missing .....					
MI .....					
Missing .....					
Cardiogenic Shock					
At the time of surgery .....					
Within 24 hrs of surgery <sup>1</sup> .....					
Missing .....					
<b>Hemodynamics and Catheterization</b>					
Ejection Fraction					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
EF missing or not measured .....					
EF <40% <sup>2</sup> .....					
Pulmonary Hypertension <sup>3</sup> .....					
PA mean/systolic pressure missing or not measured .....					
Aortic Stenosis .....					
Missing .....					
Aortic Insufficiency					
Trivial .....					
Mild .....					
Moderate .....					
Severe .....					
Missing/Not Documented .....					

<sup>1</sup>Option added in v2.81

<sup>2</sup>Among patients with measured EF

<sup>3</sup>PA systolic pressure > 35mmHg

**Isolated Aortic Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Preoperative Medications</b>					
Aspirin .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
Inotropics .....					
Missing .....					
Beta Blockers .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Steroids .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
Nitrates IV .....					
Missing .....					
ACE Inhibitors .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
Anticoagulants .....					
Missing .....					
Coumadin .....					
Missing .....					

<sup>1</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

**Isolated Aortic Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Lipid-Lowering agents .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
Glycoprotein IIb/IIIa Inhibitor .....					
Missing .....					
ADP Inhibitors within 5 Days .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
ADP Inhibitor Discontinuation <sup>2</sup>					
< 1 Day .....					
1 Day .....					
2 Days .....					
3 Days .....					
4 Days .....					
5 Days .....					
Missing .....					
Antiplatelets within 5 Days .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
<b>Operative Information</b>					
Blood Products Used .....					
Number of Blood Product Units Used					
1 Red Blood Cell Unit .....					
2 Red Blood Cell Units .....					
3 Red Blood Cell Units .....					
4+ Red Blood Cell Units .....					
1+ Fresh Frozen Plasma Units .....					
1+ Cryoprecipitate Units .....					
1+ Platelet Units .....					
Missing .....					

<sup>1</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

<sup>2</sup>Excludes patients not on ADP Inhibitors within 5 Days

**Isolated Aortic Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
IABP .....					
Preop .....					
Intraop .....					
Postop .....					
<i>Missing timing</i> .....					
<i>Missing</i> .....					
Robotic Technology Assisted .....					
<i>Missing</i> .....					
Cross-Clamp Time (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Cardiopulmonary Bypass Time (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Circulatory Arrest .....					
<i>Missing</i> .....					
Circulatory Arrest Time (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Skin Incision Duration (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					

**Isolated Aortic Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
OR Duration (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
<b>Valve Surgery</b>					
Aortic Annular Enlargement .....					
Missing .....					
Valve Replacement Type					
Mechanical .....					
Bioprosthetic .....					
Homograft .....					
Autograft .....					
Missing .....					
Antibiotic Selection <sup>1,2</sup> .....					
Exclusions .....					
Missing .....					
Antibiotic Timing <sup>1,3</sup> .....					
Exclusions .....					
Missing .....					
Antibiotics Discontinued <sup>1,4</sup> .....					
Exclusions .....					
Missing .....					
<b>Postoperative Information</b>					
Blood Products Used .....					
Number of Blood Product Units Used					
1 Red Blood Cell Unit .....					
2 Red Blood Cell Units .....					
3 Red Blood Cell Units .....					
4+ Red Blood Cell Units .....					
1+ Fresh Frozen Plasma Units .....					
1+ Cryoprecipitate Units .....					
1+ Platelet Units .....					
Missing .....					

<sup>1</sup>All antibiotic measures are calculated among patients without exclusions  
<sup>2</sup>First or second generation cephalosporin prescribed/given prophylactically  
<sup>3</sup>Appropriate timing of prophylactic antibiotics  
<sup>4</sup>Prophylactic antibiotics discontinued within 48 hours

**Isolated Aortic Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Intraop/Postop Blood Products Used .....</b>					
<b>Total Number of Blood Product Units</b>					
1 Red Blood Cell Unit .....					
2 Red Blood Cell Units .....					
3 Red Blood Cell Units .....					
4+ Red Blood Cell Units .....					
1+ Fresh Frozen Plasma Units .....					
1+ Cryoprecipitate Units .....					
1+ Platelet Units .....					
<i>Missing</i> .....					
<b>Ventilation</b>					
<b>Total Ventilation Hours</b>					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
<b>Initial Ventilation Hours</b>					
Mean .....					
Median .....					
Initial Ventilation <6 hours <sup>1</sup> .....					
Extubated in OR .....					
<i>Missing</i> .....					
Reintubation .....					
<i>Missing</i> .....					
Additional Ventilation Hours <sup>2</sup>					
Mean .....					
Median .....					
<b>ICU Stay</b>					
<b>Total ICU Hours</b>					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					

<sup>1</sup>Excludes patients extubated in the OR

<sup>2</sup>Among patients reintubated



**Isolated Aortic Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Initial ICU Hours					
Mean .....					
Median .....					
Readmitted to ICU .....					
Additional ICU Hours <sup>1</sup>					
Mean .....					
Median .....					
<b>Mortality Summary</b>					
In-hospital Mortality .....					
Operative Mortality .....					
<b>Mortality Risk-Adjustment<sup>2</sup></b>					
In-hospital Mortality					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					
Operative Mortality					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					

<sup>1</sup>Among patients readmitted to the ICU

<sup>2</sup>Refer to the Report Overview for information on risk-adjustment methodology  
Risk-adjustment is not performed on time periods of less than 6 months

**Isolated Aortic Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Complications Summary</b>					
Any Complications .....					
Any Major Complications / Operative Mortality .....					
<b>Operative Complications</b>					
Any Reoperation .....					
Reoperation for Bleeding .....					
Reoperation for Valvular Dysfunction <sup>1</sup> .....					
Reoperation for Graft Occlusion <sup>1</sup> .....					
Reoperation for Other Cardiac .....					
Reoperation for Other Non-Cardiac .....					
<b>Infection Complications</b>					
Any Infection .....					
Deep Sternal Infection/Mediastinitis .....					
Septicemia/Sepsis .....					
<b>Neurological Complications</b>					
Any Neurological .....					
Coma/Encephalopathy .....					
Permanent Stroke .....					
Transient Ischemic Attack .....					
Paralysis .....					
<b>Pulmonary Complications</b>					
Any Pulmonary .....					
Prolonged Ventilation .....					
Pneumonia .....					
Pulmonary Embolism .....					
Pleural Effusion Requiring Drainage .....					
<b>Renal Complications</b>					
Renal Failure <sup>2</sup> .....					
<b>Vascular Complications</b>					
Any Vascular .....					
Acute Limb Ischemia .....					

<sup>1</sup>Includes surgical and PCI/Transcatheter interventions

<sup>2</sup>Excludes patients with preoperative dialysis or last creatinine >=4

**Isolated Aortic Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Other Complications					
Any Other .....					
New Onset Atrial Fibrillation <sup>1</sup> .....					
Recurrent Recent Atrial Fibrillation <sup>2</sup> .....					
Cardiac Arrest .....					
Anticoagulant Complication .....					
Tamponade .....					
Gastro-Intestinal Complication .....					
Multi-System Failure .....					
<b>Discharge Location<sup>3</sup></b>					
Home .....					
Extended Care/TCU .....					
Other Acute Care Hospital .....					
Nursing Home .....					
Hospice .....					
Left AMA <sup>4</sup> .....					
Missing .....					
Other .....					
<b>Discharge Medications<sup>3</sup></b>					
Aspirin .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
ACE Inhibitors .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Beta Blockers .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					

<sup>1</sup>New Onset AFib is only among patients with no history of arrhythmias

<sup>2</sup>Recent Recurrent AFib is among patients with history of recent Afib

<sup>3</sup>Excludes in-hospital mortalities

<sup>4</sup>Option added in v2.81

**Isolated Aortic Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
Any Lipid-Lowering Agents <sup>1</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Statin Lipid-Lowering Agents <sup>2</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Non-Statin Lipid-Lowering Agents <sup>2</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
ADP Inhibitors .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>3</sup> .....					
Missing .....					
P2Y12 Antagonists <sup>2</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Other Antiplatelets <sup>2</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Antiarrhythmics <sup>1</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>3</sup> .....					
Missing .....					
Amiodarone <sup>2</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					

<sup>1</sup>Variable dropped in v2.81

<sup>2</sup>Variable added in v2.81

**Isolated Aortic Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
Coumadin .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
<b>Discharge Referrals/Counseling<sup>2</sup></b>					
Cardiac Rehabilitation Referral .....					
Missing .....					
Smoking Cessation Counseling .....					
Missing .....					
<b>Readmission and Reason<sup>3</sup></b>					
Readmitted within 30 days <sup>4</sup> .....					
Anticoagulation Complication					
Valvular .....					
Pharmacological .....					
Arrhythmia/Heart Block .....					
Congestive Heart Failure .....					
MI and/or Recurrent Angina .....					
Pericardial Effusion / Tamponade .....					
Pneumonia or other					
Respiratory Complication <sup>5</sup> .....					
Pneumonia <sup>6</sup> .....					
Respiratory Complications, Other <sup>6</sup> .....					
Pleural Effusion req. Intervention <sup>6</sup> .....					
Coronary Artery Dysfunction .....					
Valve Dysfunction .....					
Infection - Deep Sternum .....					
Infection - Conduit Harvest Site .....					
Renal failure .....					
TIA / Permanent CVA .....					
Acute Vascular Complication .....					
Subacute Endocarditis .....					
VAD Complication .....					
Other .....					
Other - Planned readmission <sup>6</sup> .....					
Missing/Unknown .....					

<sup>1</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

<sup>2</sup>Excludes in-hospital mortalities and Not Applicable Records

<sup>3</sup>Excludes in-hospital mortalities

<sup>4</sup>Timed from procedure for v2.73, from discharge for v2.81

<sup>5</sup>Option dropped in v2.81

<sup>6</sup>Option added in v2.81

**Isolated Aortic Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Length of Stay Summary</b>					
Total Length of Stay (days)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Post-Procedure Length of Stay (days)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
PLOS <6 days .....					
PLOS >14 days .....					

**Isolated Aortic Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Number of Cases</b>					
<b>Demographics</b>					
Age (years)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Age >= 65 years old .....					
Gender, Female .....					
Missing .....					
Race <sup>1</sup>					
Caucasian .....					
Black .....					
Asian .....					
Native American .....					
Native Hawaiian/Pacific Islander .....					
Other .....					
Multiple Races .....					
Missing / Not Documented .....					
Pt. Declined to Disclose <sup>2</sup> .....					
Hispanic or Latino Ethnicity .....					
Missing/ Not Documented .....					
Body Mass Index <sup>3</sup>					
Underweight (BMI < 18.5) .....					
Normal (BMI 18.5 - 24.9) .....					
Overweight (BMI 25.0 - 29.9) .....					
Obese I (BMI 30.0 - 34.9) .....					
Obese II (BMI 35.0 - 39.9) .....					
Morbid Obesity (BMI 40.0+) .....					
Missing Height .....					
Missing Weight .....					

<sup>1</sup>Data presented in the report represent the individual response rates for each race category shown; summing the individual non-caucasian categories will not result in the same rates as shown in the graph since non-caucasian, as defined for the graph, does not include races or ethnicities reported in combination with caucasian

<sup>2</sup>Option added in v2.81

<sup>3</sup>BMI = Weight(kg) / Height(m)<sup>2</sup>

**Isolated Aortic Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
<b>Comorbidities</b>					
Diabetes Mellitus .....					
Diet Control .....					
Oral Control .....					
Insulin Control .....					
Other SQ Medication Control <sup>1</sup> .....					
<i>Other Control</i> .....					
<i>Missing Control</i> .....					
Missing					
Hypertension .....					
<i>Missing</i> .....					
Dyslipidemia .....					
<i>Missing</i> .....					
Family History of CAD .....					
<i>Missing</i> .....					
Current/Recent Cigarette Smoker .....					
Smoker, Current Status Unknown <sup>1</sup> .....					
<i>Missing</i> .....					
Chronic Lung Disease					
Mild .....					
Moderate .....					
Severe .....					
Unknown Severity <sup>1</sup> .....					
<i>Missing</i> .....					
Congestive Heart Failure .....					
CHF / NYHA Class I <sup>2</sup> .....					
CHF / NYHA Class II .....					
CHF / NYHA Class III .....					
CHF / NYHA Class IV .....					
<i>CHF / Missing Class</i> .....					
<i>Missing</i> .....					
Peripheral Arterial Disease .....					
<i>Missing</i> .....					

<sup>1</sup>Option added in v2.81

<sup>2</sup>NYHA Class is only collected for patients with CHF

% represents proportion of cases that had both CHF and the indicated NYHA class



**Isolated Aortic Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Cerebrovascular Disease .....					
Missing .....					
Coma/Nonresponsive State .....					
Missing .....					
CVD TIA .....					
Missing .....					
Carotid Stenosis <sup>1</sup>					
None .....					
50-79% <sup>2</sup> .....					
80-100% .....					
Missing/Not Documented .....					
CVD Prior Carotid Surgery .....					
Missing .....					
Cerebrovascular Accident .....					
Missing .....					
Renal Failure, Dialysis-Dependent .....					
Missing .....					
Last Creatinine Preop					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Missing .....					
Value >= 4.0 mg/dL .....					
Immunosuppressive Treatment .....					
Missing .....					
Infectious Endocarditis .....					
Missing .....					
<b>Previous Interventions</b>					
Previous Cardiac Surgery <sup>3</sup> .....					
First reoperation .....					

<sup>1</sup>Defined as highest level of occlusion in either carotid.

<sup>2</sup>Option added in v2.81

<sup>3</sup>Previous cardiac surgery reflects any prior CABG, valve, or other cardiac surgery

**Isolated Aortic Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Previous CABG .....					
Previous AICD .....					
Previous Valve .....					
Previous Pacemaker .....					
<b>Status</b>					
Surgery Status					
Elective .....					
Urgent .....					
Emergent .....					
Emergent Salvage .....					
Missing .....					
MI .....					
<= 7 days Prior to Surgery .....					
8-21 days Prior to Surgery .....					
>21 days Prior to Surgery .....					
Missing Timing .....					
Missing .....					
Cardiogenic Shock					
At the time of surgery .....					
Within 24 hrs of surgery <sup>1</sup> .....					
Missing .....					
Cardiac Pres. on Admission					
No Symptoms or Angina .....					
Symptoms Unlikely to be Ischemia <sup>2</sup> .....					
Stable Angina .....					
Unstable Angina .....					
Non-ST Elevation MI (Non-STEMI) .....					
ST Elevation MI (STEMI) .....					
Angina Equivalent <sup>1</sup> .....					
Other <sup>1</sup> .....					
Missing .....					

<sup>1</sup>Option added in v2.81  
<sup>2</sup>Option dropped in v2.81

**Isolated Aortic Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Hemodynamics and Catheterization</b>					
Number of Diseased Coronary Vessels					
One .....					
Two .....					
Three .....					
Missing .....					
Left Main Disease (>=50% Stenosis) .....					
Missing .....					
Ejection Fraction					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
EF missing or not measured .....					
EF <40% <sup>1</sup> .....					
Pulmonary Hypertension <sup>2</sup> .....					
PA mean/systolic pressure missing or not measured .....					
Aortic Stenosis .....					
Missing .....					
Aortic Insufficiency					
Trivial .....					
Mild .....					
Moderate .....					
Severe .....					
Missing/Not Documented .....					
<b>Preoperative Medications</b>					
Aspirin .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>3</sup> .....					
Missing .....					

<sup>1</sup>Among patients with measured EF

<sup>2</sup>PA systolic pressure > 35mmHg

<sup>3</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

**Isolated Aortic Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Inotropics .....					
Missing .....					
Beta Blockers .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Steroids .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
Nitrates IV .....					
Missing .....					
ACE Inhibitors .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
Anticoagulants .....					
Missing .....					
Coumadin .....					
Missing .....					
Lipid-Lowering Agents .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					

<sup>1</sup>For v2.73 data, the Contraindicated/Not indicated option was deleted

**Isolated Aortic Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Glycoprotein IIb/IIIa Inhibitor .....					
Missing .....					
ADP Inhibitors within 5 Days .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
ADP Inhibitor Discontinuation <sup>2</sup>					
< 1 Day .....					
1 Day .....					
2 Days .....					
3 Days .....					
4 Days .....					
5 Days .....					
Missing .....					
Antiplatelets within 5 Days .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
<b>Operative Information</b>					
Blood Products Used .....					
Number of Blood Product Units Used					
1 Red Blood Cell Unit .....					
2 Red Blood Cell Units .....					
3 Red Blood Cell Units .....					
4+ Red Blood Cell Units .....					
1+ Fresh Frozen Plasma Units .....					
1+ Cryoprecipitate Units .....					
1+ Platelet Units .....					
Missing .....					

<sup>1</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

<sup>2</sup>Excludes patients not on ADP Inhibitors within 5 Days

**Isolated Aortic Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Number of Distal Anastomoses, Total					
1 .....					
2 .....					
3 .....					
4 .....					
5+ .....					
Missing <sup>1</sup> .....					
Vein Harvest Technique <sup>2</sup>					
Endovascular/Endoscopic .....					
Direct Vision .....					
Both .....					
Cryopreserved .....					
Missing .....					
Internal Mammary Artery Used <sup>3</sup>					
Any .....					
Left .....					
Right .....					
Both .....					
Missing .....					
Radial Artery Used .....					
Missing .....					
Radial Artery Harvest Technique .....					
Endovascular/Endoscopic .....					
Direct Vision .....					
Both .....					
Missing .....					
IABP Timing .....					
Preop .....					
Intraop .....					
Postop .....					
Missing timing .....					
Missing .....					
Robotic Technology Assisted .....					
Missing .....					

<sup>1</sup>Where number of arterial conduits and number of vein grafts both missing

<sup>2</sup>Where at least 1 vein was harvested

<sup>3</sup>Excludes patients with prior CABG surgery

**Isolated Aortic Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Cross-Clamp Time (min)</b>					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
<b>Cardiopulmonary Bypass Time (min)</b>					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
<b>Circulatory Arrest .....</b>					
<i>Missing</i> .....					
<b>Circulatory Arrest Time (min)</b>					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
<b>Skin Incision Duration (min)</b>					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
<b>OR Duration (min)</b>					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
<b>Valve Surgery</b>					
Aortic Annular Enlargement .....					
<i>Missing</i> .....					

**Isolated Aortic Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Valve Replacement Type					
Mechanical .....					
Bioprosthetic .....					
Homograft .....					
Autograft .....					
Missing .....					
Antibiotic Selection <sup>1,2</sup> .....					
Exclusions .....					
Missing .....					
Antibiotic Timing <sup>1,3</sup> .....					
Exclusions .....					
Missing .....					
Antibiotics Discontinued <sup>1,4</sup> .....					
Exclusions .....					
Missing .....					
<b>Postoperative Information</b>					
Blood Products Used .....					
Number of Blood Product Units Used					
1 Red Blood Cell Unit .....					
2 Red Blood Cell Units .....					
3 Red Blood Cell Units .....					
4+ Red Blood Cell Units .....					
1+ Fresh Frozen Plasma Units .....					
1+ Cryoprecipitate Units .....					
1+ Platelet Units .....					
Missing .....					
Intraop/Postop Blood Products Used .....					
Total Number of Blood Product Units					
1 Red Blood Cell Unit .....					
2 Red Blood Cell Units .....					
3 Red Blood Cell Units .....					
4+ Red Blood Cell Units .....					
1+ Fresh Frozen Plasma Units .....					
1+ Cryoprecipitate Units .....					
1+ Platelet Units .....					
Missing .....					

<sup>1</sup>All antibiotic measures are calculated among patients without exclusions  
<sup>2</sup>First or second generation cephalosporin prescribed/given prophylactically  
<sup>3</sup>Appropriate timing of prophylactic antibiotics  
<sup>4</sup>Prophylactic antibiotics discontinued within 48 hours



**Isolated Aortic Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Ventilation</b>					
Total Ventilation Hours					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
<b>Initial Ventilation Hours</b>					
Mean .....					
Median .....					
Initial Ventilation <6 hours <sup>1</sup> .....					
<b>Extubated in OR</b> .....					
Missing .....					
<b>Reintubation</b> .....					
Missing .....					
<b>Additional Ventilation Hours<sup>2</sup></b>					
Mean .....					
Median .....					
<b>ICU Stay</b>					
Total ICU Hours					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
<b>Initial ICU Hours</b>					
Mean .....					
Median .....					
<b>Readmitted to ICU</b> .....					
<b>Additional ICU Hours<sup>3</sup></b>					
Mean .....					
Median .....					
<b>Mortality Summary</b>					
In-hospital Mortality .....					
Operative Mortality .....					

<sup>1</sup>Excludes patients extubated in the OR  
<sup>2</sup>Among patients reintubated  
<sup>3</sup>Among patients readmitted to the ICU

**Isolated Aortic Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Mortality Risk-Adjustment<sup>1</sup></b>					
In-hospital Mortality					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					
Operative Mortality					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					
<b>Complications Summary</b>					
Any Complications .....					
Any Major Complications / Operative Mortality .....					
Operative Complications					
Any Reoperation .....					
Reoperation for Bleeding .....					
Reoperation for Valvular Dysfunction <sup>2</sup> ...					
Reoperation for Graft Occlusion <sup>2</sup> .....					
Reoperation for Other Cardiac .....					
Reoperation for Other Non-Cardiac .....					
Infection Complications					
Any Infection .....					
Deep Sternal Infection/Mediastinitis .....					
Septicemia/Sepsis .....					
Conduit Harvest or Cannulation Site <sup>3</sup> ....					

<sup>1</sup>Refer to the Report Overview for information on risk-adjustment methodology

<sup>2</sup>Includes surgical and PCI/Transcatheter interventions

<sup>3</sup>Excludes patients with zero vein grafts

**Isolated Aortic Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Neurological Complications</b>					
Any Neurological .....					
Coma/Encephalopathy .....					
Permanent Stroke .....					
Transient Ischemic Attack .....					
Paralysis .....					
<b>Pulmonary Complications</b>					
Any Pulmonary .....					
Prolonged Ventilation .....					
Pneumonia .....					
Pulmonary Embolism .....					
Pleural Effusion Requiring Drainage .....					
<b>Renal Complications</b>					
Renal Failure <sup>1</sup> .....					
<b>Vascular Complications</b>					
Any Vascular .....					
Acute Limb Ischemia .....					
<b>Other Complications</b>					
Any Other .....					
New Onset Atrial Fibrillation <sup>2</sup> .....					
Recurrent Recent Atrial Fibrillation <sup>3</sup> .....					
Anticoagulant Complication .....					
Cardiac Arrest .....					
Tamponade .....					
Gastro-Intestinal Complication .....					
Multi-System Failure .....					
<b>Discharge Location<sup>4</sup></b>					
Home .....					
Extended Care/TCU .....					
Other Hospital .....					
Nursing Home .....					
Hospice .....					
Left AMA <sup>5</sup> .....					
Other .....					
Missing .....					

<sup>1</sup>Excludes patients with preoperative dialysis or last creatinine >=4  
<sup>2</sup>New Onset AFib is only among patients with no history of arrhythmias  
<sup>3</sup>Recent Recurrent AFib is among patients with history of recent AFib  
<sup>4</sup>Excludes in-hospital mortalities  
<sup>5</sup>Option added in v2.81

**Isolated Aortic Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Discharge Medications<sup>1</sup></b>					
Aspirin .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
ACE inhibitors .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Beta Blockers .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Any Lipid-Lowering Agents <sup>2</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Statin Lipid-Lowering Agents <sup>3</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Non-Statin Lipid-Lowering Agents <sup>3</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
ADP Inhibitors .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>4</sup> .....					
Missing .....					
P2Y12 Antagonists <sup>3</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					

<sup>1</sup>Excludes in-hospital mortalities

<sup>2</sup>Variable dropped in v2.81

<sup>3</sup>Variable added in v2.81

<sup>4</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

**Isolated Aortic Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
Other Antiplatelets <sup>1</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Antiarrhythmics <sup>2</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>3</sup> .....					
Missing .....					
Amiodarone <sup>1</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Coumadin .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>3</sup> .....					
Missing .....					
<b>Discharge Referrals/Counseling<sup>4</sup></b>					
Cardiac Rehabilitation Referral .....					
Missing .....					
Smoking Cessation Counseling .....					
Missing .....					
<b>Readmission and Reason<sup>5</sup></b>					
Readmitted within 30 days <sup>6</sup> .....					
Anticoagulation Complication					
Valvular .....					
Pharmacological .....					
Arrhythmias/Heart Block .....					
Congestive Heart Failure .....					
MI and/or Recurrent Angina .....					
Pericardial Effusion / Tamponade .....					
Pneumonia or other					
Respiratory Complication <sup>2</sup> .....					
Pneumonia <sup>1</sup> .....					
Respiratory Complication, Other <sup>1</sup> .....					

<sup>1</sup>Variable/option added in v2.81

<sup>2</sup>Variable/option dropped in v2.81

<sup>3</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

<sup>4</sup>Excludes in-hospital mortalities and Not Applicable Records

<sup>5</sup>Excludes in-hospital mortalities

<sup>6</sup>Timed from procedure for v2.73, from discharge for v2.81

**Isolated Aortic Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Coronary Artery Dysfunction .....					
Valve Dysfunction .....					
Infection - Deep Sternum .....					
Infection - Conduit Harvest Site .....					
Renal Failure .....					
TIA / Permanent CVA .....					
Acute Vascular Complication .....					
Subacute Endocarditis .....					
VAD Complication .....					
Other .....					
Other - Planned Readmission <sup>1</sup> .....					
Missing/Unknown .....					
<b>Length of Stay Summary</b>					
Total Length of Stay (days)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Post-Procedure Length of Stay (days)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
PLOS <6 days .....					
PLOS >14 days .....					

<sup>1</sup>Option added in v2.81



**Isolated Mitral Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Number of Cases</b>					
<b>Demographics</b>					
Age (years)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Age >= 65 years old .....					
Gender, Female .....					
Missing .....					
Race <sup>1</sup>					
Caucasian .....					
Black .....					
Asian .....					
Native American .....					
Native Hawaiian/Pacific Islander .....					
Other .....					
Multiple Races .....					
Missing / Not Documented .....					
Pt. Declined to Disclose <sup>2</sup> .....					
Hispanic or Latino or Spanish Ethnicity ....					
Missing/ Not Documented .....					
Body Mass Index <sup>3</sup>					
Underweight (BMI < 18.5) .....					
Normal (BMI 18.5 - 24.9) .....					
Overweight (BMI 25.0 - 29.9) .....					
Obese I (BMI 30.0 - 34.9) .....					
Obese II (BMI 35.0 - 39.9) .....					
Morbid Obesity (BMI 40.0+) .....					
Missing Height .....					
Missing Weight .....					

<sup>1</sup>Data presented in the report represent the individual response rates for each race category shown; summing the individual non-caucasian categories will not result in the same rates as shown in the graph since non-caucasian, as defined for the graph, does not include races or ethnicities reported in combination with caucasian

<sup>2</sup>Option added in v2.81

<sup>3</sup>BMI = Weight(kg) / Height(m)<sup>2</sup>



**Isolated Mitral Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
<b>Comorbidities</b>					
Diabetes Mellitus .....					
Diet Control .....					
Oral Control .....					
Insulin Control .....					
Other SQ Medication Control <sup>1</sup> .....					
Other Control .....					
Missing Control .....					
Missing .....					
Hypertension .....					
Missing .....					
Current/Recent Cigarette Smoker .....					
Smoker, Current Status Unknown <sup>1</sup> .....					
Missing .....					
Chronic Lung Disease					
Mild .....					
Moderate .....					
Severe .....					
Unknown Severity <sup>1</sup> .....					
Missing .....					
Congestive Heart Failure .....					
CHF / NYHA Class I <sup>2</sup> .....					
CHF / NYHA Class II .....					
CHF / NYHA Class III .....					
CHF / NYHA Class IV .....					
Missing Class .....					
Missing .....					
Peripheral Arterial Disease .....					
Missing .....					
Cerebrovascular Disease .....					
Missing .....					
Coma/Nonresponsive State .....					
Missing .....					

<sup>1</sup>Option added in v2.81

<sup>2</sup>NYHA Class is only collected for patients with CHF

% represents proportion of cases that had both CHF and the indicated NYHA class

**Isolated Mitral Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
CVD TIA .....					
<i>Missing</i> .....					
Carotid Stenosis <sup>1</sup>					
None .....					
50-79% <sup>2</sup> .....					
80-100% .....					
<i>Missing/Not Documented</i> .....					
CVD Prior Carotid Surgery .....					
<i>Missing</i> .....					
Cerebrovascular Accident .....					
<i>Missing</i> .....					
Renal Failure, Dialysis-Dependent .....					
<i>Missing</i> .....					
Last Creatinine Preop					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
<i>Missing</i> .....					
Value >= 4.0 mg/dL .....					
Immunosuppressive Treatment .....					
<i>Missing</i> .....					
Infectious Endocarditis .....					
<i>Missing</i> .....					
<b>Previous Interventions</b>					
Previous Cardiac Surgery <sup>3</sup> .....					
First reoperation .....					
Previous CABG .....					
Previous Valve .....					
Previous AICD .....					

<sup>1</sup>Defined as highest level of occlusion in either carotid.

<sup>2</sup>Option added in v2.81

<sup>3</sup>Previous cardiac surgery reflects any prior CABG, valve, or other cardiac surgery

**Isolated Mitral Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
Previous Pacemaker .....					
<b>Status</b>					
Surgery Status					
Elective .....					
Urgent .....					
Emergent .....					
Emergent Salvage .....					
Missing .....					
MI .....					
Missing .....					
Cardiogenic Shock					
At the time of surgery .....					
Within 24 hrs of surgery <sup>1</sup> .....					
Missing .....					
<b>Hemodynamics and Catheterization</b>					
Ejection Fraction					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
EF missing or not measured .....					
EF <40% <sup>2</sup> .....					
Pulmonary Hypertension <sup>3</sup> .....					
PA mean/systolic pressure missing or not measured .....					
Mitral Stenosis .....					
Missing .....					
Mitral Insufficiency					
Trivial .....					
Mild .....					
Moderate .....					
Severe .....					
Missing/Not Documented .....					

<sup>1</sup>Option added in v2.81

<sup>2</sup>Among patients with measured EF

<sup>3</sup>PA systolic pressure > 35mmHg

**Isolated Mitral Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Preoperative Medications</b>					
Aspirin .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
Inotropics .....					
Missing .....					
Beta Blockers .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
Steroids .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
Nitrates IV .....					
Missing .....					
ACE Inhibitors .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
Anticoagulants .....					
Missing .....					
Coumadin .....					
Missing .....					

<sup>1</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

**Isolated Mitral Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Lipid-Lowering agents .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
Glycoprotein IIb / IIIa Inhibitor .....					
Missing .....					
ADP Inhibitors within 5 Days .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
ADP Inhibitor Discontinuation <sup>2</sup>					
< 1 Day .....					
1 Day .....					
2 Days .....					
3 Days .....					
4 Days .....					
5 Days .....					
Missing .....					
Antiplatelets within 5 Days .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
<b>Operative Information</b>					
Blood Products Used .....					
Number of Blood Product Units Used					
1 Red Blood Cell Unit .....					
2 Red Blood Cell Units .....					
3 Red Blood Cell Units .....					
4+ Red Blood Cell Units .....					
1+ Fresh Frozen Plasma Units .....					
1+ Cryoprecipitate Units .....					
1+ Platelet Units .....					
Missing .....					

<sup>1</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

<sup>2</sup>Excludes patients not on ADP Inhibitors within 5 Days

**Isolated Mitral Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
IABP Timing .....					
Preop .....					
Intraop .....					
Postop .....					
<i>Missing timing</i> .....					
<i>Missing</i> .....					
Robotic Technology Assisted .....					
<i>Missing</i> .....					
Cross-Clamp Time (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Cardiopulmonary Bypass Time (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Circulatory Arrest .....					
<i>Missing</i> .....					
Circulatory Arrest Time (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Skin Incision Duration (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
OR Duration (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					

**Isolated Mitral Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Valve Surgery</b>					
Aortic Annular Enlargement .....					
<i>Missing</i> .....					
Mitral Repair Attempt .....					
<i>Missing</i> .....					
Valve Replacement Type					
Mechanical .....					
Bioprosthetic .....					
Homograft .....					
Autograft .....					
<i>Missing</i> .....					
Antibiotic Selection <sup>1,2</sup> .....					
Exclusions .....					
<i>Missing</i> .....					
Antibiotic Timing <sup>1,3</sup> .....					
Exclusions .....					
<i>Missing</i> .....					
Antibiotics Discontinued <sup>1,4</sup> .....					
Exclusions .....					
<i>Missing</i> .....					
<b>Postoperative Information</b>					
Blood Products Used .....					
Number of Blood Product Units Used					
1 Red Blood Cell Units .....					
2 Red Blood Cell Units .....					
3 Red Blood Cell Units .....					
4+ Red Blood Cell Units .....					
1+ Fresh Frozen Plasma Units .....					
1+ Cryoprecipitate Units .....					
1+ Platelet Units .....					
<i>Missing</i> .....					

<sup>1</sup>All antibiotic measures are calculated among patients without exclusions  
<sup>2</sup>First or second generation cephalosporin prescribed/given prophylactically  
<sup>3</sup>Appropriate timing of prophylactic antibiotics  
<sup>4</sup>Prophylactic antibiotics discontinued within 48 hours

**Isolated Mitral Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
<b>Intraop/Postop Products Used</b> .....					
<b>Total Number of Blood Product Units</b>					
1 Red Blood Cell Unit .....					
2 Red Blood Cell Units .....					
3 Red Blood Cell Units .....					
4+ Red Blood Cell Units .....					
1+ Fresh Frozen Plasma Units .....					
1+ Cryoprecipitate Units .....					
1+ Platelet Units .....					
<i>Missing</i> .....					
<b>Ventilation</b>					
<b>Total Ventilation Hours</b>					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
<b>Initial Ventilation Hours</b>					
Mean .....					
Median .....					
Initial Ventilation <6 hours <sup>1</sup> .....					
Extubated in OR .....					
<i>Missing</i> .....					
Reintubation .....					
<i>Missing</i> .....					
Additional Ventilation Hours <sup>2</sup>					
Mean .....					
Median .....					
<b>ICU Stay</b>					
<b>Total ICU Hours</b>					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					

<sup>1</sup>Excludes patients extubated in the OR

<sup>2</sup>Among patients reintubated



**Isolated Mitral Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
Initial ICU Hours					
Mean .....					
Median .....					
Readmitted to ICU .....					
Additional ICU Hours <sup>1</sup>					
Mean .....					
Median .....					
<b>Mortality Summary</b>					
In-hospital Mortality .....					
Operative Mortality .....					
<b>Mortality Risk-Adjustment<sup>2</sup></b>					
In-hospital Mortality					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					
Operative Mortality					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					
<b>Complications Summary</b>					
Any Complications .....					
Any Major Complications / Operative Mortality .....					

<sup>1</sup>Among patients readmitted to the ICU

<sup>2</sup>Refer to the Report Overview for information on risk-adjustment methodology  
Risk-adjustment is not performed on time periods of less than 6 months

**Isolated Mitral Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
Operative Complications					
Any Reoperation .....					
Reoperation for Bleeding .....					
Reoperation for Valvular Dysfunction <sup>1</sup> ...					
Reoperation for Graft Occlusion <sup>1</sup> .....					
Reoperation for Other Cardiac .....					
Reoperation for Other Non-Cardiac .....					
Infection Complications					
Any Infection .....					
Deep Sternal Infection/Mediastinitis .....					
Septicemia/Sepsis .....					
Neurological Complications					
Any Neurological .....					
Coma/Encephalopathy .....					
Permanent Stroke .....					
Transient Ischemic Attack .....					
Paralysis .....					
Pulmonary Complications					
Any Pulmonary .....					
Prolonged Ventilation .....					
Pneumonia .....					
Pulmonary Embolism .....					
Pleural Effusion Requiring Drainage .....					
Renal Complications					
Renal Failure <sup>2</sup> .....					
Vascular Complications					
Any Vascular .....					
Acute Limb Ischemia .....					
Other Complications					
Any Other .....					
New Onset Atrial Fibrillation <sup>3</sup> .....					
Recent Recurrent Atrial Fibrillation <sup>4</sup> .....					

<sup>1</sup>Includes surgical and PCI/Transcatheter procedures.  
<sup>2</sup>Excludes patients with preoperative dialysis or last creatinine >= 4  
<sup>3</sup>New Onset AFib is only among patients with no history of arrhythmias  
<sup>4</sup>Recent Recurrent AFib is among patients with history of recent Afib

**Isolated Mitral Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
Cardiac Arrest .....					
Anticoagulant Complication .....					
Tamponade .....					
Gastro-Intestinal Complication .....					
Multi-System Failure .....					
<b>Discharge Location<sup>1</sup></b>					
Home .....					
Extended Care/TCU .....					
Other Hospital .....					
Nursing Home .....					
Hospice .....					
Left AMA <sup>2</sup> .....					
Other .....					
Missing .....					
<b>Discharge Medications<sup>1</sup></b>					
Aspirin .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
ACE inhibitors .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Beta Blockers .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Any Lipid-Lowering Agents <sup>3</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Statin Lipid-Lowering Agents <sup>4</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					

<sup>1</sup>Excludes in-hospital mortalities

<sup>2</sup>Option added in v2.81

<sup>3</sup>Variable dropped in v2.81

<sup>4</sup>Variable added in v2.81

**Isolated Mitral Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
Non-Statin Lipid-Lowering Agents <sup>1</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
ADP Inhibitors .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>2</sup> .....					
Missing .....					
P2Y12 Antagonists <sup>1</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Other Antiplatelets <sup>1</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Antiarrhythmics <sup>3</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>2</sup> .....					
Missing .....					
Amiodarone <sup>1</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Coumadin .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>2</sup> .....					
Missing .....					
<b>Discharge Referrals/Counseling<sup>4</sup></b>					
Cardiac Rehabilitation Referral .....					
Missing .....					
Smoking Cessation Counseling .....					
Missing .....					

<sup>1</sup>Variable added in v2.81

<sup>2</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

<sup>3</sup>Variable dropped in v2.81

<sup>4</sup>Excludes in-hospital mortalities and Not Applicable Records

**Isolated Mitral Valve Replacement Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Readmission and Reason<sup>1</sup></b>					
Readmitted within 30 days <sup>2</sup> .....					
Anticoagulation Complication					
Valvular .....					
Pharmacological .....					
Arrhythmias/Heart Block .....					
Congestive Heart Failure .....					
MI and/or Recurrent Angina .....					
Pericardial Effusion / Tamponade .....					
Pneumonia or Other					
Respiratory Complication <sup>3</sup> .....					
Pneumonia <sup>4</sup> .....					
Respiratory complications, Other <sup>4</sup> .....					
Pleural Effusion req. Intervention <sup>4</sup> .....					
Coronary Artery Dysfunction .....					
Valve Dysfunction .....					
Infection - Deep Sternum .....					
Infection - Conduit Harvest Site .....					
Renal Failure .....					
TIA / Permanent CVA .....					
Acute Vascular Complication .....					
Subacute Endocarditis .....					
VAD Complication .....					
Other .....					
Other - Planned readmission <sup>4</sup> .....					
Missing/Unknown .....					
<b>Length of Stay Summary</b>					
Total Length of Stay (days)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Post-Procedure Length of Stay (days)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
PLOS <6 days .....					
PLOS >14 days .....					

<sup>1</sup>Excludes in-hospital mortalities

<sup>2</sup>Timed from procedure for v2.73, from discharge for v2.81

<sup>3</sup>Option dropped in v2.81

<sup>4</sup>Option added in v2.81

**Isolated Mitral Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Number of Cases</b>					
<b>Demographics</b>					
Age (years)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Age >= 65 years old .....					
Gender, Female .....					
Missing .....					
Race <sup>1</sup>					
Caucasian .....					
Black .....					
Asian .....					
Native American .....					
Native Hawaiian/Pacific Islander .....					
Other .....					
Multiple Races .....					
Missing / Not Documented .....					
Pt. Declined to Disclose <sup>2</sup> .....					
Hispanic or Latino or Spanish Ethnicity ....					
Missing/ Not Documented .....					
Body Mass Index <sup>3</sup>					
Underweight (BMI < 18.5) .....					
Normal (BMI 18.5 - 24.9) .....					
Overweight (BMI 25.0 - 29.9) .....					
Obese I (BMI 30.0 - 34.9) .....					
Obese II (BMI 35.0 - 39.9) .....					
Morbid Obesity (BMI 40.0+) .....					
Missing Height .....					
Missing Weight .....					

<sup>1</sup>Data presented in the report represent the individual response rates for each race category shown; summing the individual non-caucasian categories will not result in the same rates as shown in the graph since non-caucasian, as defined for the graph, does not include races or ethnicities reported in combination with caucasian

<sup>2</sup>Option added in v2.81

<sup>3</sup>BMI = Weight(kg) / Height(m)<sup>2</sup>

**Isolated Mitral Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Comorbidities</b>					
Diabetes Mellitus .....					
Diet Control .....					
Oral Control .....					
Insulin Control .....					
Other SQ Medication Control <sup>1</sup> .....					
Other Control .....					
Missing Control .....					
Missing .....					
Hypertension .....					
Missing .....					
Dyslipidemia .....					
Missing .....					
Family History of CAD .....					
Missing .....					
Current/Recent Cigarette Smoker .....					
Smoker, Current Status Unknown <sup>1</sup> .....					
Missing .....					
Chronic Lung Disease					
Mild .....					
Moderate .....					
Severe .....					
Unknown Severity <sup>1</sup> .....					
Missing .....					
Congestive Heart Failure .....					
CHF / NYHA Class I <sup>2</sup> .....					
CHF / NYHA Class II .....					
CHF / NYHA Class III .....					
CHF / NYHA Class IV .....					
CHF / Missing Class .....					
Missing .....					
Peripheral Arterial Disease .....					
Missing .....					

<sup>1</sup>Option added in v2.81

<sup>2</sup>NYHA Class is only collected for patients with CHF

% represents proportion of cases that had both CHF and the indicated NYHA class

**Isolated Mitral Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Cerebrovascular Disease .....					
Missing .....					
Coma/Nonresponsive State .....					
Missing .....					
CVD TIA .....					
Missing .....					
Carotid Stenosis <sup>1</sup>					
None .....					
50-79% <sup>2</sup> .....					
80-100% .....					
Missing/Not Documented .....					
CVD Prior Carotid Surgery .....					
Missing .....					
Cerebrovascular Accident .....					
Missing .....					
Renal Failure, Dialysis-Dependent .....					
Missing .....					
Last Creatinine Preop					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Missing .....					
Value >= 4.0 mg/dL .....					
Immunosuppressive Treatment .....					
Missing .....					
Infectious Endocarditis .....					
Missing .....					
<b>Previous Interventions</b>					
Previous Cardiac Surgery <sup>3</sup> .....					
First reoperation .....					

<sup>1</sup>Defined as highest level of occlusion in either carotid.

<sup>2</sup>Option added in v2.81

<sup>3</sup>Previous cardiac surgery reflects any prior CABG, valve, or other cardiac surgery



**Isolated Mitral Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
Previous CABG .....					
Previous AICD .....					
Previous Valve .....					
Previous Pacemaker .....					
<b>Status</b>					
Surgery Status					
Elective .....					
Urgent .....					
Emergent .....					
Emergent Salvage .....					
Missing .....					
MI .....					
<= 7 days Prior to Surgery .....					
8-21 days Prior to Surgery .....					
>21 days Prior to Surgery .....					
Missing Timing .....					
Missing .....					
Cardiogenic Shock .....					
At the time of surgery .....					
Within 24 hrs of surgery <sup>1</sup> .....					
Missing .....					
Cardiac Pres. on Admission					
No Symptoms or Angina .....					
Symptoms Unlikely to be Ischemia <sup>2</sup> .....					
Stable Angina .....					
Unstable Angina .....					
Non-ST Elevation MI (Non-STEMI) .....					
ST Elevation MI (STEMI) .....					
Angina Equivalent <sup>1</sup> .....					
Other <sup>1</sup> .....					
Missing .....					

<sup>1</sup>Option added in v2.81

<sup>2</sup>Option dropped in v2.81

**Isolated Mitral Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Hemodynamics and Catheterization</b>					
Number of Diseased Coronary Vessels					
One .....					
Two .....					
Three .....					
Missing .....					
Left Main Disease (>=50% Stenosis) .....					
Missing .....					
Ejection Fraction					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
EF missing or not measured .....					
EF <40% <sup>1</sup> .....					
Pulmonary Hypertension <sup>2</sup> .....					
PA mean/systolic pressure missing or not measured .....					
Mitral Stenosis .....					
Missing .....					
Mitral Insufficiency					
Trivial .....					
Mild .....					
Moderate .....					
Severe .....					
Missing/Not Documented .....					
<b>Preoperative Medications</b>					
Aspirin .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>3</sup> .....					
Missing .....					

<sup>1</sup>Among patients with measured EF

<sup>2</sup>PA systolic pressure > 35mmHg

<sup>3</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

**Isolated Mitral Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Inotropics .....					
Missing .....					
Beta Blockers .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Steroids .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
Nitrates IV .....					
Missing .....					
ACE Inhibitors .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
Anticoagulants .....					
Missing .....					
Coumadin .....					
Missing .....					
Lipid-Lowering agents .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					

<sup>1</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

**Isolated Mitral Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Glycoprotein IIb/IIIa Inhibitor .....					
Missing .....					
ADP Inhibitors within 5 Days .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
ADP Inhibitor Discontinuation <sup>2</sup>					
< 1 Day .....					
1 Day .....					
2 Days .....					
3 Days .....					
4 Days .....					
5 Days .....					
Missing .....					
Antiplatelets within 5 Days .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
<b>Operative Information</b>					
Blood Products Used .....					
Number of Blood Product Units Used					
1 Red Blood Cell Unit .....					
2 Red Blood Cell Units .....					
3 Red Blood Cell Units .....					
4+ Red Blood Cell Units .....					
1+ Fresh Frozen Plasma Units .....					
1+ Cryoprecipitate Units .....					
1+ Platelet Units .....					
Missing .....					

<sup>1</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

<sup>2</sup>Excludes patients not on ADP Inhibitors within 5 Days

**Isolated Mitral Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Number of Distal Anastomoses, Total					
1 .....					
2 .....					
3 .....					
4 .....					
5+ .....					
Missing <sup>1</sup> .....					
Vein Harvest Technique <sup>2</sup>					
Endovascular/Endoscopic .....					
Direct Vision .....					
Both .....					
Cryopreserved .....					
Missing .....					
Internal Mammary Artery Used <sup>3</sup>					
Any .....					
Left .....					
Right .....					
Both .....					
Missing .....					
Radial Artery Used .....					
Missing .....					
Radial Artery Harvest Technique .....					
Endovascular/Endoscopic .....					
Direct Vision .....					
Both .....					
Missing .....					
IABP Timing .....					
Preop .....					
Intraop .....					
Postop .....					
Missing Timing .....					
Missing .....					
Robotic Technology Assisted .....					
Missing .....					

<sup>1</sup>Where number of arterial conduits and number of vein grafts both missing

<sup>2</sup>Where at least 1 vein was harvested

<sup>3</sup>Excludes patients with prior CABG surgery

**Isolated Mitral Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Cross-Clamp Time (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Cardiopulmonary Bypass Time (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Circulatory Arrest .....					
Missing .....					
Circulatory Arrest Time (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Skin Incision Duration (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
OR Duration (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
<b>Valve Surgery</b>					
Aortic Annular Enlargement .....					
Missing .....					
Mitral Repair Attempt .....					
Missing .....					

**Isolated Mitral Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Valve Replacement Type					
Mechanical .....					
Bioprosthetic .....					
Homograft .....					
Autograft .....					
Missing .....					
Antibiotic Selection <sup>1,2</sup> .....					
Exclusions .....					
Missing .....					
Antibiotic Timing <sup>1,3</sup> .....					
Exclusions .....					
Missing .....					
Antibiotics Discontinued <sup>1,4</sup> .....					
Exclusions .....					
Missing .....					
<b>Postoperative Information</b>					
Blood Products Used .....					
Number of Blood Product Units Used					
1 Red Blood Cell Unit .....					
2 Red Blood Cell Units .....					
3 Red Blood Cell Units .....					
4+ Red Blood Cell Units .....					
1+ Fresh Frozen Plasma Units .....					
1+ Cryoprecipitate Units .....					
1+ Platelet Units .....					
Missing .....					
Intraop/Postop Products Used .....					
Total Number of Blood Product Units					
1 Red Blood Cell Unit .....					
2 Red Blood Cell Units .....					
3 Red Blood Cell Units .....					
4+ Red Blood Cell Units .....					
1+ Fresh Frozen Plasma Units .....					
1+ Cryoprecipitate Units .....					
1+ Platelet Units .....					
Missing .....					

<sup>1</sup>All antibiotic measures are calculated among patients without exclusions  
<sup>2</sup>First or second generation cephalosporin prescribed/given prophylactically  
<sup>3</sup>Appropriate timing of prophylactic antibiotics  
<sup>4</sup>Prophylactic antibiotics discontinued within 48 hours

**Isolated Mitral Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
<b>Ventilation</b>					
<b>Total Ventilation Hours</b>					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
<b>Initial Ventilation Hours</b>					
Mean .....					
Median .....					
Initial Ventilation <6 hours <sup>1</sup> .....					
Extubated in OR .....					
Missing .....					
Reintubation .....					
Missing .....					
<b>Additional Ventilation Hours<sup>2</sup></b>					
Mean .....					
Median .....					
<b>ICU Stay</b>					
<b>Total ICU Hours</b>					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
<b>Initial ICU Hours</b>					
Mean .....					
Median .....					
Readmitted to ICU .....					
<b>Additional ICU Hours<sup>3</sup></b>					
Mean .....					
Median .....					
<b>Mortality Summary</b>					
In-hospital Mortality .....					

<sup>1</sup>Excludes patients extubated in the OR

<sup>2</sup>Among patients reintubated

<sup>3</sup>Among patients readmitted to the ICU



**Isolated Mitral Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Operative Mortality .....					
<b>Mortality Risk-Adjustment<sup>1</sup></b>					
In-hospital Mortality					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					
Operative Mortality					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					
<b>Complications Summary</b>					
Any Complications .....					
Any Major Complications / Operative Mortality .....					
Operative Complications					
Any Reoperation .....					
Reoperation for Bleeding .....					
Reoperation for Valvular Dysfunction <sup>2</sup> ...					
Reoperation for Graft Occlusion <sup>2</sup> .....					
Reoperation for Other Cardiac .....					
Reoperation for Other Non-Cardiac .....					
Infection Complications					
Any Infection .....					
Deep Sternal Infection/Mediastinitis .....					
Septicemia/Sepsis .....					
Conduit Harvest or Cannulation Site <sup>3</sup> .....					

<sup>1</sup>Refer to the Report Overview for information on risk-adjustment methodology  
Risk-adjustment is not performed on time periods of less than 6 months  
<sup>2</sup>Includes surgical and PCI/Transcatheter interventions  
<sup>3</sup>Excludes patients with zero vein grafts

**Isolated Mitral Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Neurological Complications</b>					
Any Neurological .....					
Coma/Encephalopathy .....					
Permanent Stroke .....					
Transient Ischemic Attack .....					
Paralysis .....					
<b>Pulmonary Complications</b>					
Any Pulmonary .....					
Prolonged Ventilation .....					
Pneumonia .....					
Pulmonary Embolism .....					
Pleural Effusion Requiring Drainage .....					
<b>Renal complications</b>					
Renal failure <sup>1</sup> .....					
<b>Vascular Complications</b>					
Any Vascular .....					
Acute Limb Ischemia .....					
<b>Other Complications</b>					
Any Other .....					
New Onset Atrial Fibrillation <sup>2</sup> .....					
Recent Recurrent Atrial Fibrillation <sup>3</sup> .....					
Cardiac Arrest .....					
Anticoagulant Complication .....					
Tamponade .....					
Gastro-Intestinal Complication .....					
Multi-System Failure .....					
<b>Discharge Location<sup>4</sup></b>					
Home .....					
Extended Care/TCU .....					
Other Acute Care Hospital .....					
Nursing Home .....					
Hospice .....					
Left AMA <sup>5</sup> .....					
Other .....					
Missing .....					

<sup>1</sup>Excludes patients with preoperative dialysis or last creatinine >= 4  
<sup>2</sup>New Onset AFib is only among patients with no history of arrhythmias  
<sup>3</sup>Recent Recurrent AFib is among patients with history of recent AFib  
<sup>4</sup>Excludes in-hospital mortalities  
<sup>5</sup>Option added in v2.81

**Isolated Mitral Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Discharge Medications<sup>1</sup></b>					
Aspirin .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
ACE inhibitors .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Beta Blockers .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Any Lipid-Lowering Agents <sup>2</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Statin Lipid-Lowering Agents <sup>3</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Non-Statin Lipid-Lowering Agents <sup>3</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
ADP Inhibitors .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>4</sup> .....					
Missing .....					
P2Y12 Antagonists <sup>3</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					

<sup>1</sup>Excludes in-hospital mortalities

<sup>2</sup>Variable dropped in v2.81

<sup>3</sup>Variable added in v2.81

<sup>4</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

**Isolated Mitral Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
Other Antiplatelets <sup>1</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Antiarrhythmics <sup>2</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>3</sup> .....					
Missing .....					
Amiodarone <sup>1</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Coumadin .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>3</sup> .....					
Missing .....					
<b>Discharge Referrals/Counseling<sup>4</sup></b>					
Cardiac Rehabilitation Referral .....					
Missing .....					
Smoking Cessation Counseling .....					
Missing .....					
<b>Readmission and Reason<sup>5</sup></b>					
Readmitted within 30 days <sup>6</sup> .....					
Anticoagulation Complication					
Valvular .....					
Pharmacological .....					
Arrhythmias/Heart Block .....					
Congestive Heart Failure .....					
MI and/or Recurrent Angina .....					
Pericardial Effusion / Tamponade .....					
Pneumonia or other					
Respiratory Complication <sup>2</sup> .....					
Pneumonia <sup>1</sup> .....					
Respiratory Complication, Other <sup>1</sup> .....					
Pleural Effusion req. Intervention <sup>1</sup> .....					

<sup>1</sup>Variable/option added in v2.81

<sup>2</sup>Variable/option dropped in v2.81

<sup>3</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

<sup>4</sup>Excludes in-hospital mortalities and Not Applicable Records

<sup>5</sup>Excludes in-hospital mortalities

<sup>6</sup>Timed from procedure for v2.73, from discharge for v2.81

**Isolated Mitral Valve Replacement + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Coronary Artery Dysfunction .....					
Valve Dysfunction .....					
Infection - Deep Sternum .....					
Infection - Conduit Harvest Site .....					
Renal Failure .....					
TIA / Permanent CVA .....					
Acute Vascular Complication .....					
Subacute Endocarditis .....					
VAD Complication .....					
Other .....					
Other - Planned Readmission <sup>1</sup> .....					
Missing .....					
<b>Length of Stay Summary</b>					
Total Length of Stay (days)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Post-Procedure Length of Stay (days)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
PLOS <6 days .....					
PLOS >14 days .....					

<sup>1</sup>Option added in v2.81



**Isolated Mitral Valve Repair Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Number of Cases</b>					
<b>Demographics</b>					
Age (years)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Age >= 65 years old .....					
Gender, Female .....					
Missing .....					
Race <sup>1</sup>					
Caucasian .....					
Black .....					
Asian .....					
Native American .....					
Native Hawaiian/Pacific Islander .....					
Other .....					
Multiple Races .....					
Missing / Not Documented .....					
Pt. Declined to Disclose <sup>2</sup> .....					
Hispanic or Latino or Spanish Ethnicity ....					
Missing/ Not Documented .....					
Body Mass Index <sup>3</sup>					
Underweight (BMI < 18.5) .....					
Normal (BMI 18.5 - 24.9) .....					
Overweight (BMI 25.0 - 29.9) .....					
Obese I (BMI 30.0 - 34.9) .....					
Obese II (BMI 35.0 - 39.9) .....					
Morbid Obesity (BMI 40.0+) .....					
Missing Height .....					
Missing Weight .....					

<sup>1</sup>Data presented in the report represent the individual response rates for each race category shown; summing the individual non-caucasian categories will not result in the same rates as shown in the graph since non-caucasian, as defined for the graph, does not include races or ethnicities reported in combination with caucasian

<sup>2</sup>Option added in v2.81

<sup>3</sup>BMI = Weight(kg) / Height(m)<sup>2</sup>

**Isolated Mitral Valve Repair Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
<b>Comorbidities</b>					
Diabetes Mellitus .....					
Diet Control .....					
Oral Control .....					
Insulin Control .....					
Other SQ Medication Control <sup>1</sup> .....					
Other Control .....					
Missing Control .....					
Missing .....					
Hypertension .....					
Missing .....					
Current/Recent Cigarette Smoker .....					
Smoker, Current Status Unknown <sup>1</sup> .....					
Missing .....					
Chronic Lung Disease					
Mild .....					
Moderate .....					
Severe .....					
Unknown Severity <sup>1</sup> .....					
Missing .....					
Congestive Heart Failure .....					
CHF / NYHA Class I <sup>2</sup> .....					
CHF / NYHA Class II .....					
CHF / NYHA Class III .....					
CHF / NYHA Class IV .....					
CHF / Missing Class .....					
Missing .....					
Peripheral Arterial Disease .....					
Missing .....					
Cerebrovascular Disease .....					
Missing .....					

<sup>1</sup>Option added in v2.81

<sup>2</sup>NYHA Class is only collected for patients with CHF

% represents proportion of cases that had both CHF and the indicated NYHA class



**Isolated Mitral Valve Repair Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Coma/Nonresponsive State .....					
Missing .....					
CVD TIA .....					
Missing .....					
Carotid Stenosis <sup>1</sup>					
None .....					
50-79% <sup>2</sup> .....					
80-100% .....					
Missing/Not Documented .....					
CVD Prior Carotid Surgery .....					
Missing .....					
Cerebrovascular Accident .....					
Missing .....					
Renal Failure, Dialysis-Dependent .....					
Missing .....					
Last Creatinine Preop					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Missing .....					
Value >= 4.0 mg/dl .....					
Immunosuppressive Treatment .....					
Missing .....					
Infectious Endocarditis .....					
Missing .....					
<b>Previous Interventions</b>					
Previous Cardiac Surgery <sup>3</sup> .....					
First reoperation .....					
Previous CABG .....					

<sup>1</sup>Defined as highest level of occlusion in either carotid.

<sup>2</sup>Option added in v2.81

<sup>3</sup>Previous cardiac surgery reflects any prior CABG, valve, or other cardiac surgery

**Isolated Mitral Valve Repair Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Previous Valve .....					
Previous AICD .....					
Previous Pacemaker .....					
<b>Status</b>					
Surgery Status					
Elective .....					
Urgent .....					
Emergent .....					
Emergent Salvage .....					
Missing .....					
MI .....					
Missing .....					
Cardiogenic Shock					
At the time of surgery .....					
Within 24 hrs of surgery <sup>1</sup> .....					
Missing .....					
<b>Hemodynamics and Catheterization</b>					
Ejection Fraction					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
EF missing or not measured .....					
EF <40% <sup>2</sup> .....					
Pulmonary Hypertension <sup>3</sup> .....					
PA mean/systolic pressure missing or not measured .....					
Mitral Stenosis .....					
Missing .....					

<sup>1</sup>Option added in v2.81

<sup>2</sup>Among patients with measured EF

<sup>3</sup>PA systolic pressure > 35mmHg

**Isolated Mitral Valve Repair Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Mitral Insufficiency					
Trivial .....					
Mild .....					
Moderate .....					
Severe .....					
Missing/Not Documented .....					
<b>Preoperative Medications</b>					
Aspirin .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
Inotropics .....					
Missing .....					
Beta Blockers .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Steroids .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
Nitrates IV .....					
Missing .....					
ACE Inhibitors .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
Anticoagulants .....					
Missing .....					
Coumadin .....					
Missing .....					

<sup>1</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

**Isolated Mitral Valve Repair Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Lipid-Lowering Agents .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
Glycoprotein IIb/IIIa Inhibitor .....					
Missing .....					
ADP Inhibitors within 5 Days .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
ADP Inhibitor Discontinuation <sup>2</sup>					
< 1 Day .....					
1 Day .....					
2 Days .....					
3 Days .....					
4 Days .....					
5 Days .....					
Missing .....					
Antiplatelets within 5 Days .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
<b>Operative Information</b>					
Blood Products Used .....					
Number of Blood Product Units Used					
1 Red Blood Cell Unit .....					
2 Red Blood Cell Units .....					
3 Red Blood Cell Units .....					
4+ Red Blood Cell Units .....					
1+ Fresh Frozen Plasma Units .....					
1+ Cryoprecipitate Units .....					
1+ Platelet Units .....					
Missing .....					

<sup>1</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

<sup>2</sup>Excludes patients not on ADP Inhibitors within 5 Days

**Isolated Mitral Valve Repair Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
IABP Timing .....					
Preop .....					
Intraop .....					
Postop .....					
Missing timing .....					
Missing .....					
Robotic Technology Assisted .....					
Missing .....					
Cross-Clamp Time (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Cardiopulmonary Bypass Time (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Circulatory Arrest .....					
Missing .....					
Circulatory Arrest Time (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Skin Incision Duration (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					

**Isolated Mitral Valve Repair Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
OR Duration (min)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
<b>Valve Surgery</b>					
Aortic Annular Enlargement .....					
Missing .....					
Antibiotic Selection <sup>1,2</sup> .....					
Exclusions .....					
Missing .....					
Antibiotic Timing <sup>1,3</sup> .....					
Exclusions .....					
Missing .....					
Antibiotics Discontinued <sup>1,4</sup> .....					
Exclusions .....					
Missing .....					
<b>Postoperative Information</b>					
Blood Products Used .....					
Number of Blood Product Units Used					
1 Red Blood Cell Unit .....					
2 Red Blood Cell Units .....					
3 Red Blood Cell Units .....					
4+ Red Blood Cell Units .....					
1+ Fresh Frozen Plasma Units .....					
1+ Cryoprecipitate Units .....					
1+ Platelet Units .....					
Missing .....					

<sup>1</sup>All antibiotic measures are calculated among patients without exclusions  
<sup>2</sup>First or second generation cephalosporin prescribed/given prophylactically  
<sup>3</sup>Appropriate timing of prophylactic antibiotics  
<sup>4</sup>Prophylactic antibiotics discontinued within 48 hours

**Isolated Mitral Valve Repair Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Intraop/Postop Products Used .....					
Total Number of Blood Product Units					
1 Red Blood Cell Unit .....					
2 Red Blood Cell Units .....					
3 Red Blood Cell Units .....					
4+ Red Blood Cell Units .....					
1+ Fresh Frozen Plasma Units .....					
1+ Cryoprecipitate Units .....					
1+ Platelet Units .....					
Missing .....					
Ventilation					
Total Ventilation Hours					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Initial Ventilation Hours					
Mean .....					
Median .....					
Initial Ventilation <6 hours <sup>1</sup> .....					
Extubated in OR .....					
Missing .....					
Reintubation .....					
Missing .....					
Additional Ventilation Hours <sup>2</sup>					
Mean .....					
Median .....					
ICU Stay					
Total ICU Hours					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					

<sup>1</sup>Excludes patients extubated in the OR

<sup>2</sup>Among patients reintubated

**Isolated Mitral Valve Repair Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Initial ICU Hours					
Mean .....					
Median .....					
Readmitted to ICU .....					
Additional ICU Hours <sup>1</sup>					
Mean .....					
Median .....					
<b>Mortality Summary</b>					
In-hospital Mortality .....					
Operative Mortality .....					
<b>Mortality Risk-Adjustment<sup>2</sup></b>					
In-hospital Mortality					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					
Operative Mortality					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					
<b>Complications Summary</b>					
Any Complications .....					
Any Major Complications / Operative Mortality .....					

<sup>1</sup>Among patients readmitted to the ICU

<sup>2</sup>Refer to the Report Overview for information on risk-adjustment methodology  
Risk-adjustment is not performed on time periods of less than 6 months



**Isolated Mitral Valve Repair Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Operative Complications					
Any Reoperation .....					
Reoperation for Bleeding .....					
Reoperation for Valvular Dysfunction <sup>1</sup> ...					
Reoperation for Graft Occlusion <sup>1</sup> .....					
Reoperation for Other Cardiac .....					
Reoperation for Other Non-Cardiac .....					
Infection Complications					
Any Infection .....					
Deep Sternal Infection/Mediastinitis .....					
Septicemia/Sepsis .....					
Neurological Complications					
Any Neurological .....					
Coma/Encephalopathy .....					
Permanent Stroke .....					
Transient Ischemic Attack .....					
Paralysis .....					
Pulmonary Complications					
Any Pulmonary .....					
Prolonged Ventilation .....					
Pneumonia .....					
Pulmonary Embolism .....					
Pleural Effusion Requiring Drainage .....					
Renal Complications					
Renal Failure <sup>2</sup> .....					
Vascular Complications					
Any Vascular .....					
Acute Limb Ischemia .....					
Other Complications					
Any Other .....					
New Onset Atrial Fibrillation <sup>3</sup> .....					
Recent Recurrent Atrial Fibrillation <sup>4</sup> .....					

<sup>1</sup>Includes surgical and PCI/Transcatheter interventions

<sup>2</sup>Excludes patients with preoperative dialysis or last creatinine >=4

<sup>3</sup>New Onset AFib is only among patients with no history of arrhythmias

<sup>4</sup>Recent Recurrent AFib is among patients with history of recent AFib

**Isolated Mitral Valve Repair Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
Cardiac Arrest .....					
Anticoagulant Complication .....					
Tamponade .....					
Gastro-Intestinal Complication .....					
Multi-System Failure .....					
<b>Discharge Location<sup>1</sup></b>					
Home .....					
Extended Care/TCU .....					
Other Acute Care Hospital .....					
Nursing Home .....					
Hospice .....					
Left AMA <sup>2</sup> .....					
Other .....					
Missing .....					
<b>Discharge Medications<sup>1</sup></b>					
Aspirin .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
ACE inhibitors .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Beta Blockers .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Any Lipid-Lowering Agents <sup>3</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Statin Lipid-Lowering Agents <sup>4</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					

<sup>1</sup>Excludes in-hospital mortalities

<sup>2</sup>Option added in v2.81

<sup>3</sup>Variable dropped in v2.81

<sup>4</sup>Variable added in v2.81

**Isolated Mitral Valve Repair Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Non-Statin Lipid-Lowering Agents <sup>1</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
ADP Inhibitors .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>2</sup> .....					
Missing .....					
P2Y12 Antagonists <sup>1</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Other Antiplatelets <sup>1</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Antiarrhythmics <sup>3</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>2</sup> .....					
Missing .....					
Amiodarone <sup>1</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Coumadin .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>2</sup> .....					
Missing .....					
<b>Discharge Referrals/Counseling<sup>4</sup></b>					
Cardiac Rehabilitation Referral .....					
Missing .....					
Smoking Cessation Counseling .....					
Missing .....					

<sup>1</sup>Variable added in v2.81

<sup>2</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

<sup>3</sup>Variable dropped in v2.81

<sup>4</sup>Excludes in-hospital mortalities and Not Applicable Records

**Isolated Mitral Valve Repair Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Readmission and Reason<sup>1</sup></b>					
Readmitted within 30 Days <sup>2</sup> .....					
Anticoagulation Complication					
Valvular .....					
Pharmacological .....					
Arrhythmias/Heart Block .....					
Congestive Heart Failure .....					
MI and/or Recurrent Angina .....					
Pericardial Effusion / Tamponade .....					
Pneumonia or Other					
Respiratory Complication <sup>3</sup> .....					
Pneumonia <sup>4</sup> .....					
Respiratory Complications, Other <sup>4</sup> .....					
Pleural Effusion req. Intervention <sup>4</sup> .....					
Coronary Artery Dysfunction .....					
Valve Dysfunction .....					
Infection - Deep Sternum .....					
Infection - Conduit Harvest Site .....					
Renal Failure .....					
TIA / Permanent CVA .....					
Acute Vascular Complication .....					
Subacute Endocarditis .....					
VAD Complication .....					
Other .....					
Other - Planned readmission <sup>4</sup> .....					
Missing/Unknown .....					
Total Length of Stay (days)					
<b>Length of Stay Summary</b>					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Post-Procedure Length of Stay (days)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
PLOS <6 days .....					
PLOS >14 days .....					

<sup>1</sup>Excludes in-hospital mortalities

<sup>2</sup>Timed from procedure for v2.73, from discharge for v2.81

<sup>3</sup>Option dropped in v2.81

<sup>4</sup>Option added in v2.81

**Isolated Mitral Valve Repair + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Number of Cases</b>					
<b>Demographics</b>					
Age (years)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Age >= 65 years old .....					
Gender, Female .....					
Missing .....					
Race <sup>1</sup>					
Caucasian .....					
Black .....					
Asian .....					
Native American .....					
Native Hawaiian/Pacific Islander .....					
Other .....					
Multiple Races .....					
Missing / Not Documented .....					
Pt. Declined to Disclose <sup>2</sup> .....					
Hispanic or Latino or Spanish Ethnicity ....					
Missing/ Not Documented .....					
Body Mass Index <sup>3</sup>					
Underweight (BMI < 18.5) .....					
Normal (BMI 18.5 - 24.9) .....					
Overweight (BMI 25.0 - 29.9) .....					
Obese I (BMI 30.0 - 34.9) .....					
Obese II (BMI 35.0 - 39.9) .....					
Morbid Obesity (BMI 40.0+) .....					
Missing Height .....					
Missing Weight .....					

<sup>1</sup>Data presented in the report represent the individual response rates for each race category shown; summing the individual non-caucasian categories will not result in the same rates as shown in the graph since non-caucasian, as defined for the graph, does not include races or ethnicities reported in combination with caucasian

<sup>2</sup>Option added in v2.81

<sup>3</sup>BMI = Weight(kg) / Height(m)<sup>2</sup>

**Isolated Mitral Valve Repair + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Comorbidities</b>					
Diabetes Mellitus .....					
Diet Control .....					
Oral Control .....					
Insulin Control .....					
Other SQ Medication Control <sup>1</sup> .....					
Other Control .....					
Missing Control .....					
Missing					
Hypertension .....					
Missing .....					
Dyslipidemia .....					
Missing .....					
Family History of CAD .....					
Missing .....					
Current/Recent Cigarette Smoker .....					
Smoker, Current Status Unknown <sup>1</sup> .....					
Missing .....					
Chronic Lung Disease					
Mild .....					
Moderate .....					
Severe .....					
Unknown Severity <sup>1</sup> .....					
Missing .....					
Congestive Heart Failure .....					
CHF / NYHA Class I <sup>2</sup> .....					
CHF / NYHA Class II .....					
CHF / NYHA Class III .....					
CHF / NYHA Class IV .....					
CHF / Missing Class .....					
Missing .....					
Peripheral Arterial Disease .....					
Missing .....					

<sup>1</sup>Option added in v2.81

<sup>2</sup>NYHA Class is only collected for patients with CHF

% represents proportion of cases that had both CHF and the indicated NYHA class

**Isolated Mitral Valve Repair + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
Cerebrovascular Disease .....					
Missing .....					
Coma/Nonresponsive State .....					
Missing .....					
CVD TIA .....					
Missing .....					
Carotid Stenosis <sup>1</sup>					
None .....					
50-79% <sup>2</sup> .....					
80-100% .....					
Missing/Not Documented .....					
CVD Prior Carotid Surgery .....					
Missing .....					
Cerebrovascular Accident .....					
Missing .....					
Renal Failure, Dialysis-dependent .....					
Missing .....					
Last Creatinine Preop					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Missing .....					
Value >= 4.0 mg/dL .....					
Immunosuppressive Treatment .....					
Missing .....					
Infectious Endocarditis .....					
Missing .....					
<b>Previous Interventions</b>					
Previous Cardiac Surgery <sup>3</sup> .....					
First reoperation .....					

<sup>1</sup>Defined as highest level of occlusion in either carotid.

<sup>2</sup>Option added in v2.81

<sup>3</sup>Previous cardiac surgery reflects any prior CABG, valve, or other cardiac surgery

**Isolated Mitral Valve Repair + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Previous CABG .....					
Previous AICD .....					
Previous Valve .....					
Previous Pacemaker .....					
<b>Status</b>					
Surgery Status					
Elective .....					
Urgent .....					
Emergent .....					
Emergent Salvage .....					
Missing .....					
MI .....					
<= 7 days prior to surgery .....					
8-21 days prior to surgery .....					
>21 days prior to surgery .....					
Missing timing .....					
Missing .....					
Cardiogenic Shock .....					
At the time of surgery .....					
Within 24 hrs of surgery <sup>1</sup> .....					
Missing .....					
Cardiac Pres. on Admission					
No Symptoms or Angina .....					
Symptoms Unlikely to be Ischemia .....					
Stable Angina .....					
Unstable Angina .....					
Non-ST Elevation MI (Non-STEMI) .....					
ST Elevation MI (STEMI) .....					
Angina Equivalent <sup>1</sup> .....					
Other <sup>1</sup> .....					
Missing .....					

<sup>1</sup>Option added in v2.81



**Isolated Mitral Valve Repair + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Hemodynamics and Catheterization</b>					
Number of Diseased Coronary Vessels					
One .....					
Two .....					
Three .....					
Missing .....					
Left Main Disease (>=50% stenosis) .....					
Missing .....					
Ejection Fraction					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
EF missing or not measured .....					
EF <40% <sup>1</sup> .....					
Pulmonary Hypertension <sup>2</sup> .....					
PA mean/systolic pressure missing or not measured .....					
Mitral Stenosis .....					
Missing .....					
Mitral Insufficiency					
Trivial .....					
Mild .....					
Moderate .....					
Severe .....					
Missing .....					
<b>Preoperative Medications</b>					
Aspirin .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>3</sup> .....					
Missing .....					

<sup>1</sup>Among patients with measured EF

<sup>2</sup>PA systolic pressure > 35mmHg

<sup>3</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

**Isolated Mitral Valve Repair + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Inotropics .....					
Missing .....					
Beta Blockers .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Steroids .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
Nitrates IV .....					
Missing .....					
ACE Inhibitors .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
Anticoagulants .....					
Missing .....					
Coumadin .....					
Missing .....					
Lipid-Lowering Agents .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					

<sup>1</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

**Isolated Mitral Valve Repair + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Glycoprotein IIb / IIIa Inhibitor .....					
Missing .....					
ADP Inhibitors within 5 Days .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
ADP Inhibitor Discontinuation <sup>2</sup>					
< 1 Day .....					
1 Day .....					
2 Days .....					
3 Days .....					
4 Days .....					
5 Days .....					
Missing .....					
Antiplatelets within 5 Days .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>1</sup> .....					
Missing .....					
<b>Operative Information</b>					
Blood Products Used .....					
Number of Blood Product Units Used					
1 Red Blood Cell Unit .....					
2 Red Blood Cell Units .....					
3 Red Blood Cell Units .....					
4+ Red Blood Cell Units .....					
1+ Fresh Frozen Plasma Units .....					
1+ Cryoprecipitate Units .....					
1+ Platelet Units .....					
Missing .....					

<sup>1</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

<sup>2</sup>Excludes patients not on ADP Inhibitors within 5 Days

**Isolated Mitral Valve Repair + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Number of Distal Anastamoses, Total					
1 .....					
2 .....					
3 .....					
4 .....					
5+ .....					
Missing <sup>1</sup> .....					
Vein Harvest Technique <sup>2</sup>					
Endovascular/Endoscopic .....					
Direct Vision .....					
Both .....					
Cryopreserved .....					
Missing .....					
Internal Mammary Artery Used <sup>3</sup>					
Any .....					
Left .....					
Right .....					
Both .....					
Missing .....					
Radial Artery Used .....					
Missing .....					
Radial Artery Harvest Technique .....					
Endovascular/Endoscopic .....					
Direct Vision .....					
Both .....					
Missing .....					
IABP Timing .....					
Preop .....					
Intraop .....					
Postop .....					
Missing timing .....					
Missing .....					
Robotic Technology Assisted .....					
Missing .....					

<sup>1</sup>Where number of arterial conduits and number of vein grafts both missing  
<sup>2</sup>Where at least 1 vein was harvested  
<sup>3</sup>Excludes patients with prior CABG surgery

**Isolated Mitral Valve Repair + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Cross-Clamp Time (min)</b>					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
<b>Cardiopulmonary Bypass Time (min)</b>					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
<b>Circulatory Arrest .....</b>					
<i>Missing</i> .....					
<b>Circulatory Arrest Time (min)</b>					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
<b>Skin Incision Duration (min)</b>					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
<b>OR Duration (min)</b>					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
<b>Valve Surgery</b>					
<b>Aortic Annular Enlargement .....</b>					
<i>Missing</i> .....					
<b>Antibiotic Selection<sup>1,2</sup> .....</b>					
Exclusions .....					
<i>Missing</i> .....					

<sup>1</sup>All antibiotic measures are calculated among patients without exclusions  
<sup>2</sup>First or second generation cephalosporin prescribed/given prophylactically

**Isolated Mitral Valve Repair + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
Antibiotic Timing <sup>1,2</sup> .....					
Exclusions .....					
Missing .....					
Antibiotics Discontinued <sup>1,3</sup> .....					
Exclusions .....					
Missing .....					
<b>Postoperative Information</b>					
Blood Products Used .....					
Number of Blood Product Units Used					
1 Red Blood Cell Unit .....					
2 Red Blood Cell Units .....					
3 Red Blood Cell Units .....					
4+ Red Blood Cell Units .....					
1+ Fresh Frozen Plasma Units .....					
1+ Cryoprecipitate Units .....					
1+ Platelet Units .....					
Missing .....					
Intraop/Postop Products Used .....					
Total Number of Blood Product Units					
1 Red Blood Cell Unit .....					
2 Red Blood Cell Units .....					
3 Red Blood Cell Units .....					
4+ Red Blood Cell Units .....					
1+ Fresh Frozen Plasma Units .....					
1+ Cryoprecipitate Units .....					
1+ Platelet Units .....					
Missing .....					
Ventilation					
Total Ventilation Hours					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Initial Ventilation Hours					
Mean .....					
Median .....					

<sup>1</sup>All antibiotic measures are calculated among patients without exclusions

<sup>2</sup>Appropriate timing of prophylactic antibiotics

<sup>3</sup>Prophylactic antibiotics discontinued within 48 hours

**Isolated Mitral Valve Repair + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Initial Ventilation <6 hours <sup>1</sup> .....					
Extubated in OR .....					
Missing .....					
Reintubation .....					
Missing .....					
Additional Ventilation Hours <sup>2</sup>					
Mean .....					
Median .....					
ICU Stay					
Total ICU Hours					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Initial ICU Hours					
Mean .....					
Median .....					
Readmitted to ICU .....					
Additional ICU Hours <sup>3</sup>					
Mean .....					
Median .....					
<b>Mortality Summary</b>					
In-hospital Mortality .....					
Operative Mortality .....					

<sup>1</sup>Excludes patients extubated in the OR

<sup>2</sup>Among patients reintubated

<sup>3</sup>Among patients readmitted to the ICU

**Isolated Mitral Valve Repair + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Mortality Risk-Adjustment<sup>1</sup></b>					
In-hospital Mortality					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					
Operative Mortality					
Odds Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
O/E Ratio .....					
Lower 95% Confidence Limit .....					
Upper 95% Confidence Limit .....					
Risk-adjusted Rate .....					
<b>Complications Summary</b>					
Any Complications .....					
Any Major Complications / Operative Mortality .....					
Operative Complications					
Any Reoperation .....					
Reoperation for Bleeding .....					
Reoperation for Valvular Dysfunction <sup>2</sup> ...					
Reoperation for Graft Occlusion <sup>2</sup> .....					
Reoperation for Other Cardiac .....					
Reoperation for Other Non-Cardiac .....					
Infection Complications					
Any Infection .....					
Deep Sternal Infection/Mediastinitis .....					
Septicemia/Sepsis .....					
Conduit Harvest or Cannulation Site <sup>3</sup> .....					

<sup>1</sup>Refer to the Report Overview for information on risk-adjustment methodology  
 Risk-adjustment is not performed on time periods of less than 6 months  
<sup>2</sup>Includes surgical and PCI/Transcatheter interventions  
<sup>3</sup>Excludes patients with zero vein grafts



**Isolated Mitral Valve Repair + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Neurological Complications</b>					
Any Neurological .....					
Coma/Encephalopathy .....					
Permanent Stroke .....					
Transient Ischemic Attack .....					
Paralysis .....					
<b>Pulmonary Complications</b>					
Any Pulmonary .....					
Prolonged Ventilation .....					
Pneumonia .....					
Pulmonary Embolism .....					
Pleural Effusion Requiring Drainage .....					
<b>Renal Complications</b>					
Renal Failure <sup>1</sup> .....					
<b>Vascular Complications</b>					
Any Vascular .....					
Acute Limb Ischemia .....					
<b>Other Complications</b>					
Any Other .....					
New Onset Atrial Fibrillation <sup>2</sup> .....					
Recent Recurrent Atrial Fibrillation <sup>3</sup> .....					
Cardiac Arrest .....					
Anticoagulant Complication .....					
Tamponade .....					
Gastro-Intestinal Complication .....					
Multi-System Failure .....					
<b>Discharge Location<sup>4</sup></b>					
Home .....					
Extended Care/TCU .....					
Other Acute Care Hospital .....					
Nursing Home .....					
Hospice .....					
Left AMA <sup>5</sup> .....					
Other .....					
Missing .....					

<sup>1</sup>Excludes patients with preoperative dialysis or last creatinine >=4  
<sup>2</sup>New Onset AFib is only among patients with no history of arrhythmias  
<sup>3</sup>Recent Recurrent AFib is among patients with history of recent AFib  
<sup>4</sup>Excludes in-hospital mortalities  
<sup>5</sup>Option added in v2.81

**Isolated Mitral Valve Repair + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
<b>Discharge Medications<sup>1</sup></b>					
Aspirin .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
ACE inhibitors .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Beta Blockers .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Any Lipid-Lowering Agents <sup>2</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Statin Lipid-Lowering Agents <sup>3</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Non-Statin Lipid-Lowering Agents <sup>3</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
ADP Inhibitors .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>4</sup> .....					
Missing .....					
P2Y12 Antagonists <sup>3</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					

<sup>1</sup>Excludes in-hospital mortalities

<sup>2</sup>Variable dropped in v2.81

<sup>3</sup>Variable added in v2.81

<sup>4</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

**Isolated Mitral Valve Repair + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group 2016	STS 2016
	2014	2015	2016		
Other Antiplatelets <sup>1</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Antiarrhythmics <sup>2</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>3</sup> .....					
Missing .....					
Amiodarone <sup>1</sup> .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated .....					
Missing .....					
Coumadin .....					
Among Eligible Cases .....					
Contraindicated / Not Indicated <sup>3</sup> .....					
Missing .....					
<b>Discharge Referrals/Counseling<sup>4</sup></b>					
Cardiac Rehabilitation Referral .....					
Missing .....					
Smoking Cessation Counseling .....					
Missing .....					
<b>Readmission and Reason<sup>5</sup></b>					
Readmitted within 30 days <sup>6</sup> .....					
Anticoagulation Complication					
Valvular .....					
Pharmacological .....					
Arrhythmias/Heart Block .....					
Congestive Heart Failure .....					
MI and/or Recurrent Angina .....					
Pericardial Effusion / Tamponade .....					
Pneumonia or other					
Respiratory Complication <sup>2</sup> .....					
Pneumonia <sup>1</sup> .....					
Respiratory Complication, Other <sup>1</sup> .....					
Pleural Effusion req. Intervention <sup>1</sup> .....					

<sup>1</sup>Variable/option added in v2.81

<sup>2</sup>Variable/option dropped in v2.81

<sup>3</sup>For v2.73 data, the Contraindicated/Not Indicated option was deleted

<sup>4</sup>Excludes in-hospital mortalities and Not Applicable Records

<sup>5</sup>Excludes in-hospital mortalities

<sup>6</sup>Timed from procedure for v2.73, from discharge for v2.81

**Isolated Mitral Valve Repair + CABG Procedures  
Data Summary**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 99999			Like Group	STS
	2014	2015	2016	2016	2016
Coronary Artery Dysfunction .....					
Valve Dysfunction .....					
Infection - Deep Sternum .....					
Infection - Conduit Harvest Site .....					
Renal Failure .....					
TIA / Permanent CVA .....					
Acute Vascular Complication .....					
Subacute Endocarditis .....					
VAD Complication .....					
Other .....					
Other - Planned Readmission <sup>1</sup> .....					
Missing .....					
<b>Length of Stay Summary</b>					
Total Length of Stay (days)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
Post-Procedure Length of Stay (days)					
Mean .....					
Median .....					
25 <sup>th</sup> Percentile .....					
75 <sup>th</sup> Percentile .....					
PLOS <6 days .....					
PLOS >14 days .....					

<sup>1</sup>Option added in v2.81



**Regional Outcomes Comparison**

**Participant 99999  
STS Period Ending 12/31/2016**

**The region displayed for your site contains the following state(s):**  
Ohio

Between 2014 and 2016, there were 56 participants in this region

**Regional Outcomes Comparison**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 2016	Region 2016
<b>Isolated CAB</b>		
<b>Number of Cases</b>		
<b>Mortality Summary &amp; Risk-Adjustment</b>		
In-hospital Mortality		
Observed Rate .....		
Risk-adjusted Rate .....		
Lower 95% Confidence Limit .....		
Upper 95% Confidence Limit .....		
Operative Mortality		
Observed Rate .....		
Risk-adjusted Rate .....		
Lower 95% Confidence Limit .....		
Upper 95% Confidence Limit .....		
<b>Complications Summary &amp; Risk-Adjustment</b>		
Major Complications/Operative Mortality		
Observed Rate .....		
Risk-adjusted Rate .....		
Lower 95% Confidence Limit .....		
Upper 95% Confidence Limit .....		
Any Reoperation		
Observed Rate .....		
Risk-adjusted Rate .....		
Lower 95% Confidence Limit .....		
Upper 95% Confidence Limit .....		
Deep Sternal Infection/Mediastinitis		
Observed Rate .....		
Risk-adjusted Rate .....		
Lower 95% Confidence Limit .....		
Upper 95% Confidence Limit .....		
Permanent Stroke		
Observed Rate .....		
Risk-adjusted Rate .....		
Lower 95% Confidence Limit .....		
Upper 95% Confidence Limit .....		

	Participant 2016	Region 2016
Renal Failure		
Observed Rate .....		
Risk-adjusted Rate .....		
Lower 95% Confidence Limit .....		
Upper 95% Confidence Limit .....		
Prolonged Ventilation		
Observed Rate .....		
Risk-adjusted Rate .....		
Lower 95% Confidence Limit .....		
Upper 95% Confidence Limit .....		
<b>Length of Stay Summary</b>		
Total Length of Stay (days)		
Mean .....		
Median .....		
Post-Procedure Length of Stay (days)		
Mean .....		
Median .....		
<b>Length of Stay Risk-Adjustment</b>		
Short stay: PLOS <6 days		
Observed Rate .....		
Risk-adjusted Rate .....		
Lower 95% Confidence Limit .....		
Upper 95% Confidence Limit .....		
Long stay: PLOS >14 days		
Observed Rate .....		
Risk-adjusted Rate .....		
Lower 95% Confidence Limit .....		
Upper 95% Confidence Limit .....		

Regional Outcomes Comparison

Participant 99999  
STS Period Ending 12/31/2016

	Participant 2016	Region 2016
<b><u>Aortic Valve Replacement</u></b>		
<b>Number of Cases</b>		
<b>Mortality Summary &amp; Risk-Adjustment</b>		
In-hospital Mortality		
Observed Rate .....		
Risk-adjusted rate .....		
Lower 95% confidence limit .....		
Upper 95% confidence limit .....		
Operative Mortality		
Observed Rate .....		
Risk-adjusted rate .....		
Lower 95% confidence limit .....		
Upper 95% confidence limit .....		
<b>Complications Summary</b>		
Major Complications/Operative Mortality ..		
Any Reoperation .....		
Deep Sternal Infection/Mediastinitis .....		
Permanent stroke .....		
Renal failure .....		
Prolonged ventilation .....		
<b>Length of Stay Summary</b>		
Total Length of Stay (days)		
Mean .....		
Median .....		
Post-Procedure Length of Stay (days)		
Mean .....		
Median .....		
PLOS <6 days .....		
PLOS >14 days .....		

	Participant 2016	Region 2016
<b><u>Aortic Valve Replacement + CAB</u></b>		
<b>Number of Cases</b>		
<b>Mortality Summary &amp; Risk-Adjustment</b>		
In-hospital Mortality		
Observed Rate .....		
Risk-adjusted Rate .....		
Lower 95% Confidence Limit .....		
Upper 95% Confidence Limit .....		
Operative Mortality		
Observed Rate .....		
Risk-adjusted Rate .....		
Lower 95% Confidence Limit .....		
Upper 95% Confidence Limit .....		
<b>Complications Summary</b>		
Major Complications/Operative Mortality ..		
Any Reoperation .....		
Deep Sternal Infection/Mediastinitis .....		
Permanent Stroke .....		
Renal Failure .....		
Prolonged Ventilation .....		
<b>Length of Stay Summary</b>		
Total Length of Stay (days)		
Mean .....		
Median .....		
Post-Procedure Length of Stay (days)		
Mean .....		
Median .....		
PLOS <6 days .....		
PLOS >14 days .....		



Regional Outcomes Comparison

Participant 99999  
STS Period Ending 12/31/2016

	Participant 2016	Region 2016
<b><u>Mitral Valve Replacement</u></b>		
<b>Number of Cases</b>		
<b>Mortality Summary &amp; Risk-Adjustment</b>		
In-hospital Mortality		
Observed Rate .....		
Risk-adjusted Rate .....		
Lower 95% Confidence Limit .....		
Upper 95% Confidence Limit .....		
Operative Mortality		
Observed Rate .....		
Risk-adjusted Rate .....		
Lower 95% Confidence Limit .....		
Upper 95% Confidence Limit .....		
<b>Complications Summary</b>		
Major Complications/Operative Mortality ..		
Any Reoperation .....		
Deep Sternal Infection/Mediastinitis .....		
Permanent Stroke .....		
Renal Failure .....		
Prolonged Ventilation .....		
<b>Length of Stay Summary</b>		
Total Length of Stay (days)		
Mean .....		
Median .....		
Post-Procedure Length of Stay (days)		
Mean .....		
Median .....		
PLOS <6 days .....		
PLOS >14 days .....		

	Participant 2016	Region 2016
<b><u>Mitral Valve Replacement + CAB</u></b>		
<b>Number of Cases</b>		
<b>Mortality Summary &amp; Risk-Adjustment</b>		
In-hospital Mortality		
Observed Rate .....		
Risk-adjusted Rate .....		
Lower 95% Confidence Limit .....		
Upper 95% Confidence Limit .....		
Operative Mortality		
Observed Rate .....		
Risk-adjusted Rate .....		
Lower 95% Confidence Limit .....		
Upper 95% Confidence Limit .....		
<b>Complications Summary</b>		
Major Complications/Operative Mortality ..		
Any Reoperation .....		
Deep Sternal Infection/Mediastinitis .....		
Permanent Stroke .....		
Renal Failure .....		
Prolonged Ventilation .....		
<b>Length of Stay Summary</b>		
Total Length of Stay (days)		
Mean .....		
Median .....		
Post-Procedure Length of Stay (days)		
Mean .....		
Median .....		
PLOS <6 days .....		
PLOS >14 days .....		

**Regional Outcomes Comparison**

**Participant 99999  
STS Period Ending 12/31/2016**

	Participant 2016	Region 2016
<b><u>Mitral Valve Repair</u></b>		
<b>Number of Cases</b>		
<b>Mortality Summary &amp; Risk-Adjustment</b>		
In-hospital Mortality .....		
Operative Mortality .....		
<b>Complications Summary</b>		
Major Complications/Operative Mortality ..		
Any Reoperation .....		
Deep Sternal Infection/Mediastinitis .....		
Permanent Stroke .....		
Renal Failure .....		
Prolonged Ventilation .....		
<b>Length of Stay Summary</b>		
Total Length of Stay (days)		
Mean .....		
Median .....		
Post-Procedure Length of Stay (days)		
Mean .....		
Median .....		
PLOS <6 days .....		
PLOS >14 days .....		

	Participant 2016	Region 2016
<b><u>Mitral Valve Repair + CAB</u></b>		
<b>Number of Cases</b>		
<b>Mortality Summary &amp; Risk-Adjustment</b>		
In-hospital Mortality .....		
Operative Mortality .....		
<b>Complications Summary</b>		
Major Complications/Operative Mortality ..		
Any Reoperation .....		
Deep Sternal Infection/Mediastinitis .....		
Permanent Stroke .....		
Renal Failure .....		
Prolonged Ventilation .....		
<b>Length of Stay Summary</b>		
Total Length of Stay (days)		
Mean .....		
Median .....		
Post-Procedure Length of Stay (days)		
Mean .....		
Median .....		
PLOS <6 days .....		
PLOS >14 days .....		



Other Procedures

Participant 99999  
 STS Period Ending 12/31/2016

STS 2016	AV Replace + MV Replace	Pulmonic Valve	Tricuspid Valve	LVA	VSD	ASD	SVR
<p><b>Number of Cases</b></p> <p><b>Demographics</b>                      Age (years)                        &gt;= 65 years old                      Gender, Female</p> <p><b>Operative Data</b>                      Cross-clamp Time (min)                        Mean                        Median</p> <p>Perfusion Time (min)                        Mean                        Median</p> <p><b>Intraoperative Blood Products Used</b>                      1 Red Blood Cell Unit                      2 Red Blood Cell Units                      3 Red Blood Cell Units                      4+ Red Blood CellUnits</p>							

Other Procedures

Participant 99999  
 STS Period Ending 12/31/2016

STS 2016	AV Replace + MV Replace	Pulmonic Valve	Tricuspid Valve	LVA	VSD	ASD	SVR
<p><b>Outcomes - Mortality</b>                      In-hospital Mortality                      Operative Mortality</p> <p><b>Outcomes - Complications</b>                      Any Major Complications / Operative Mortality                      Any Reoperation                      Deep Sternal Infection/Mediastinitis                      Permanent Stroke                      Renal Failure Complication                      Prolonged Ventilation</p> <p><b>Postoperative Blood Products Used</b>                      1 Red Blood Cell Unit                      2 Red Blood Cell Units                      3 Red Blood Cell Units                      4+ Red Blood CellUnits</p> <p><b>Outcomes - Length of Stay</b>                      Total Length of Stay (days)                      Mean                      Median</p> <p>Post-Procedure Length of Stay (days)                      Mean                      Median</p>							

Other Procedures

Participant 99999  
 STS Period Ending 12/31/2016

STS 2016	Aortic Aneurysm				Ventricular Assist Device
	Ascending Aorta	Aortic Arch	Descending Aorta	Thoracoabdominal Aorta	
<p><b>Number of Cases</b></p> <p><b>Demographics</b>                      Age (years)                          &gt;= 65 years old                      Gender, Female</p> <p><b>Operative Data</b>                      Cross-clamp Time (min)                          Mean                          Median                      Perfusion Time (min)                          Mean                          Median</p> <p><b>Intraoperative Blood Products Used</b>                      1 Red Blood Cell Unit                      2 Red Blood Cell Units                      3 Red Blood Cell Units                      4+ Red Blood CellUnits</p>					

Other Procedures

Participant 99999  
 STS Period Ending 12/31/2016

STS 2016	Aortic Aneurysm				Ventricular Assist Device
	Ascending Aorta	Aortic Arch	Descending Aorta	Thoracoabdominal Aorta	
<p><b>Outcomes - Mortality</b>                      In-hospital Mortality                      Operative Mortality</p> <p><b>Outcomes - Complications</b>                      Any Major Complications / Operative Mortality                      Any Reoperation                      Deep Sternal Infection/Mediastinitis                      Permanent Stroke                      Renal Failure Complication                      Prolonged Ventilation</p> <p><b>Postoperative Blood Products Used</b>                      1 Red Blood Cell Unit                      2 Red Blood Cell Units                      3 Red Blood Cell Units                      4+ Red Blood CellUnits</p> <p><b>Outcomes - Length of Stay</b>                      Total Length of Stay (days)                      Mean                      Median</p> <p>Post-Procedure Length of Stay (days)                      Mean                      Median</p>					

**Appendix A: Participant-Specific Data Quality Summary**

**Participant 99999**  
**STS Period Ending 12/31/2016**

**INTRODUCTION**

This data in this appendix is specific to your participating organization. We provide this data quality information to help you interpret and assess the weight and reliability of your results and to help you target data review and cleanup efforts for future harvests to the warehouse. Addressing and correcting data quality issues will result in increased value and meaningfulness of future participant-specific reports.

**INCLUSION TIME PERIOD (First and Last Surgery Dates)**

The first and last surgery dates found in the report for Participant 99999 for any record are:

**First Surgery**                      **Last Surgery**  
January 8, 2014 to December 20, 2016

**MISSING DATA**

For all fields reported, the percentage of missing data is listed in the data summary table for each procedure. The graph at right displays the ten reported data fields that have a percentage missing of 0.1% or more for CAB risk model variables at your participating organization in the latest calendar year.

**MISSING DATA COLLECTION MONTHS**

The table at right displays the months covered in this report for which no data from your organization is present at the warehouse. A review of this list can highlight incomplete data capture and/or data transfer problems.

<b>Year</b>	<b>Months with no data</b>
2014	[No missing months]
2015	[No missing months]
2016	[No missing months]

**LIKE GROUP ASSIGNMENTS**

Please refer to the Report Overview for further details about Like Group specifications.

**CABG Group:** Non-Residency Low Volume  
**Valve Group:** Non-Residency Low Volume



**Appendix A: Participant-Specific Data Quality Summary**

**Participant 99999**  
**STS Period Ending 12/31/2016**

**OUTLIER DATA**

The STS Database Committee has developed thresholds for model-related data fields in order to highlight extreme participant-level values, known as outliers. The table below shows these thresholds along with your organization’s value. Outliers are bolded.

<b>Reported variable</b>	<b>Low Threshold</b>	<b>High Threshold</b>	<b>Your Value</b>
Patient age, mean			
Morbid obesity (BMI 40.0+)			
Diabetes Mellitus			
Hypertension			
Arrhythmia, afib/aflutter			
Chronic Lung Disease			
Cardiac Presentation, Unstable Angina			
Congestive Heart Failure			
NYHA Class IV			
Peripheral Arterial Disease			
Cerebrovascular Disease			
Cerebrovascular Accident			
Creatinine, mean			
Renal Failure, Dialysis-Dependent			
Immunosuppressive Treatment			
First Reoperation			
Second+ Reoperation			
PCI <= 6 hours Prior to Surgery			
Emergent			
Emergent/Salvage			
MI			
Cardiogenic Shock			
Resuscitation			
Triple Vessel Disease			
Left Main Disease (>50% Stenosis)			
EF, mean			
Preop IABP			
Outcome: Operative Mortality			
Outcome: Combined Mortality/Morbidity			
Outcome: Any Reoperation			
Outcome: Deep Sternal Infx/Mediastinitis			
Outcome: Permanent Stroke			
Outcome: Prolonged Ventilation			
Outcome: Renal Failure			