Transcatheter Aortic Valve Replacement (TAVR)
v3 Data Collection Form

STS/ACC TVT Registry™

A. Demographics

Last Name[2000]: **First Name**[2010]: **Middle Name**[2020]:

Birth Date[2050]: mm / dd / yyyy **SSN**[2030]: - - ☐ SSN N/A[2031] **Patient ID**[2040]: (auto)

Other ID[2045]: **Sex**[2060]: O Male O Female **Patient Zip Code**[2065]: ☐ Zip Code N/A[2066]

Race: (check all that apply) ☐ White[2070] ☐ Black/African American[2071] ☐ American Indian/Alaskan Native[2073]

☐ Asian[2072] → **If** Yes, ☐ Asian Indian[2080] ☐ Chinese[2081] ☐ Filipino[2082] ☐ Japanese[2083] ☐ Korean[2084] ☐ Vietnamese[2085] ☐ Other[2086]

☐ Native Hawaiian/Pacific Islander[2074] → **If** Yes, ☐ Native Hawaiian[2090] ☐ Guamanian or Chamorro[2091] ☐ Samoan[2092] ☐ Other Island[2093]

Hispanic or Latino Ethnicity[2076]: O No O Yes → **If** Yes, **Ethnicity Type:** (check all that apply)

☐ Mexican, Mexican-American, Chicano[2100] ☐ Puerto Rican[2101] ☐ Cuban[2102] ☐ Other Hispanic, Latino or Spanish Origin[2103]

B. Episode of Care

Arrival Date/Time[3001]: mm / dd / yyyy / hh:mm

Admitting Provider's Name, NPI[3050,3051,3052,3053]: _____ Last Name, First Name, MI, NPI

Attending Provider's Name, NPI [3055,3056,3057,3058]: _____ Last Name, First Name, MI, NPI, _____ Last Name, First Name, MI, NPI

Health Insurance[3005]: O No O Yes

→ **If** Yes, **Payment Source**[3010]: (Select all that apply) ☐ Private Health Insurance ☐ Medicare (Fee-For-Service) ☐ Medicare Advantage ☐ Medicaid ☐ Military Health Care ☐ State-Specific Plan (non-Medicaid) ☐ Indian Health Service ☐ Non-US Insurance

MBI #[12846]:

Residence[13803]: O Home with No Health Aid O Home with Health Aid O Long Term Care O Other ☐ Not Documented[13804]

Research Study

Patient Enrolled in Research Study[3020 (A)]: O No O Yes ☐ **Patient Restriction**[3035]

→ **If** Yes, **Research Study Name**[3025], **Research Study Patient ID**[3030]: _____, _____

Transcatheter Valve Therapy (TVT) Pathway

TVT Pathway[13171 (A)]: ☐ TAVR ☐ TMVr ☐ TMVR ☐ Tricuspid Valve Procedure

C. History and Risk Factors

Height[6000]: _____ cm **Weight**[6005]: _____ kg

Number of Prior Open Heart Cardiac Surgeries[13697]: ___ *(If the patient has had >4 prior surgeries and the number is not known, code 4 prior surgeries)*

Heart Failure Hospitalization Within Past Year[13707]: O No O Yes ☐ Not Documented[14253]

Anticipated Life Expectancy of Less than 1 Year[13172 (A)]: O No O Yes ☐ Not Documented[14454]

Oxygen at Home[13881]: O No O Yes

Immunocompromise Present[13882]: O No O Yes **Currently on Dialysis** [13880] O No O Yes

Tobacco Use[4625]: O Never O Former O Current-Every Day O Current-Some Days O Smoker – Current Status Unk O Unk if ever smoked

→If any Current, **Tobacco Type**[4626] *(Select all that apply)*: ☐ Cigarettes ☐ Cigars ☐ Pipe ☐ Smokeless

→If Current Every Day and Cigarettes, **Amount**[4627]: O Light tobacco use (<10/day) O Heavy tobacco use (>=10/day)

Basic dataset (BDS)

(A)= Data element used for "appropriate use criteria (AUC)" metrics

*Paperwork Reduction Act Disclosure Statement: According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0938-1202 (Expires 12/31/2020). The time required to complete this information collection is estimated to average 56 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to: CMS, 7500 Security Boulevard, Attn: PRA Reports Clearance Officer, Mail Stop C4-26-05, Baltimore, Maryland 21244-1850. ****CMS Disclosure**** Please do not send applications, claims, payments, medical records or any documents containing sensitive information to the PRA Reports Clearance Office. Please note that any correspondence not pertaining to the information collection burden approved under the associated OMB control number listed on this form will not be reviewed, forwarded, or retained. If you have questions or concerns regarding where to submit your documents, please contact Sarah Fulton at sarah.fulton@cms.hhs.gov.*

© 2021 STS and ACCF

C. Condition and Procedure History Information (Patient History and Risk Factors up to the procedure)

Condition History[12903] (A)	Occurrence[14264] No	Occurrence[14264] Yes	Date[14251]	
Atrial Fibrillation	O	O		→If Yes, **AFib Class**[13179]: O Paroxysmal O Persistent O Long-standing Persistent (w/in 30 days) O Permanent O None →If Parox or persis, **Recent AF** (w/in 30 days)[14244]: O No O Yes
Atrial Flutter	O	O		→If Yes, **Recent Aflutter** (w/in 30 days)[14245]: O No O Yes
Carotid Artery Stenosis	O	O		→ If Yes, **Current Carotid Artery Stenosis**[14265]: O No O Yes → If Yes, **Location**[14230]: O Right O Left O Bilateral ☐ Location Not Documented[14329]
Cerebrovascular Accident (any)	O	O	mm/dd/yyyy	
Cerebrovascular Disease	O	O		
Chronic Lung Disease	O	O		→ If Yes, **Severity**[13904]: O Mild O Moderate O Severe ☐ Severity Not Documented[14459]
Conduction Defect	O	O		
COVID-19	O	O		
Dementia - Moderate to Severe[(A)]	O	O		
Diabetes Mellitus	O	O		→ If Yes, **Therapy**[14231]:O None O Diet O Oral O Insulin O Other
Endocarditis	O	O		→ If Yes, **Type**[14232]: O Treated O Active
Heart Failure	O	O		
Hostile Chest	O	O		
Hypertension	O	O		
Liver Disease[(A)]	O	O		
Myocardial Infarction	O	O		→If Yes, **MI Timeframe**[13174]: O <30 days O >=30 days
Peripheral Arterial Disease	O	O		
Porcelain Aorta	O	O		
Transient Ischemic Attack	O	O		
Procedure History[12905] (A)	**Occurrence**[14268] **No**	**Occurrence**[14268] **Yes**	**Date**[14252]	
Aortic Valve Procedure	O	O	mm/dd/yyyy	
Aortic Valve Balloon Valvuloplasty	O	O		
Aortic Valve Repair Surgery	O	O		
Aortic Valve Replacement Surgery[(A)]	O	O		→ If Yes, **Implant ID**[14335]/**Dia**[14519] (A): Refer to device list → If Yes, **Type**[14236]: O Stented O Stentless ☐ Not Documented[14237]
Aortic Valve Replacement – Transcath [(A)]	O	O		→ If Yes, **TAVR Implant ID**[14249] /**Dia**[14515] (A): Refer to device list
Aortic Valve Transcatheter Intervention	O	O		
Coronary Artery Bypass Graft	O	O	mm/dd/yyyy	
Implantable Cardioverter Defibrillator	O	O		
Mitral Valve Procedure	O	O	mm/dd/yyyy	
Mitral Valve Annuloplasty Ring Surgery	O	O		
Mitral Valve Repair Surgery	O	O		
Mitral Valve Replacement Surgery	O	O		→ If Yes, **Type**[14241]: O Mechanical O Stented O Stentless ☐ Not Documented[14242]
Mitral Valve Transcatheter Intervention	O	O		
PCI	O	O	mm/dd/yyyy	
Permanent Pacemaker	O	O	mm/dd/yyyy	
Pulmonic Valve Procedure	O	O		
Tricuspid Valve Procedure	O	O	mm/dd/yyyy	

© 2021 STS and ACCF

D. Lab Visit (Complete for each Lab Visit)

Procedures[14273 (A)]: ☐ TAVR ☐ TMVr ☐ TMVR ☐ Tricuspid Valve Procedure

Procedure Room Entry Date/Time[13329]: mm / dd / yyyy HH:MM **Procedure Start Date/Time**[7000]: mm / dd / yyyy HH:MM

Procedure End Date/Time[7005 (A)]: mm / dd / yyyy HH:MM **Procedure Room Exit Date/Time**[13330]: mm / dd / yyyy HH:MM

Presentation and Evaluation

CAD Presentation[12177]: O No Symptoms, No Angina O Symptoms Unlikely to be Ischemic O Stable Angina O Unstable Angina O Non-STEMI O STEMI

Heart Failure (w/in 2 weeks)[14266]: O No O Yes **Cardiogenic Shock** (w/in 24 hrs)[13175]: O No O Yes

NYHA Class (w/in 2 weeks)[12163 (A)]: O I O II O III O IV **Cardiac Arrest** (w/in 24 hrs)[14267]: O No O Yes

Symptoms of Aortic Stenosis Present[13186 (A)]: O No O Yes ☐ Not Documented[13188]

STS Risk Score Type[13698 (A)]: **STS Risk Score Measurement**[14271 (A)]:

AV Replace: _____ %

Shared Decision Making[14732]: O No O Yes

→**If** Yes, **Shared Decision Making Tool Used**[14733]: O No O Yes →**If** Yes, **Shared Decision Making Tool Name**[14734]: _____

KCCQ-12 Performed[13843]: O No O Yes

→**If** Yes, **KCCQ-12**[13846, 48, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67]: (see separate questionnaire) **Q1a:** _____ **Q1b:** _____ **Q1c:** _____ **Q2:** _____ **Q3:** _____ **Q4:** _____

Q5: _____ **Q6:** _____ **Q7:** _____ **Q8a:**_____ **Q8b:**_____ **Q8c:**_____ **KCCQ Summary Score**[14310]: **(calculated)** _____

Five Meter Walk Test[13191 (A)]: O Not Performed O Performed O Unable to Walk

→**If** Performed, **Counter**[13199 (A)]: **Time**[13201 (A)]: **# 1:** _____ seconds
 # 2: _____ seconds
 # 3: _____ seconds

Pre-Procedure Clinical Data (closest to the procedure)

Hemoglobin[6030]:	_____ g/dL	☐ Not Drawn[6031]	**Creatinine**[6050]:	_____ mg/dL	☐ Not Drawn[6051]
Platelet Count[13213]:	_____ µL	☐ Not Drawn[13214]	**Bilirubin**[6055]:	_____ mg/dL	☐ Not Drawn[6056]
INR[13203]:	_____	☐ Not Drawn[6046]	**Albumin**[14210]:	_____ g/dL	☐ Not Drawn[14211]
Sodium[6035]:	_____ mEq/L	☐ Not Drawn[6036]			

Pre-Procedure Pulmonary Function (closest to the procedure)

FEV1 Predicted[13216]: _____ % ☐ Not Performed[13217]

DLCO (Predicted)[13218]: _____ % ☐ Not Performed[13219]

Pre-Procedure Medications (24 hours prior to the procedure)

Anticoagulants[13699]: O No O Yes

Positive Inotropes[13643]: O No O Yes

Pre-Procedure Diagnostic Cath Findings

Diagnostic Cath Performed[13220]: O No O Yes → **If** Yes, **Diagnostic Cath Date**[13222]: mm / dd / yyyy

Number of Diseased Vessels[13381 (A)]: O None O One O Two O Three ☐ Not Documented[13382]

Left Main Stenosis >=50%[13260 (A)]: O No O Yes ☐ Not Documented[13261]

Proximal LAD >=70%[13301 (A)]: O No O Yes ☐ Not Documented[13302]

Right Ventricular Systolic Pressure[13303]: (highest) _____ mm Hg ☐ Not Documented[13304]

Syntax Score[13496 (A)]: O Low (Syntax Score <22)
O Intermediate (Syntax Score 22-32)
O High (Syntax Score >=33)
☐ Not Documented[13497]

Note: Only for left main or 3VD in native vessels

© 20121STS and ACCF

PRE-PROCEDURE CTA FINDINGS

AV Annulus Assessment Method[13422]: O CTA O TTE O TEE O Other *(note: primary documentation should be CTA)*

AV Annulus Diameter: Min[13428]: _____ mm **Max**[13429]: _____ mm

AV Annulus Area[13438]: _____ mm^2 **AV Annulus Perimeter**[13439]: _____ mm

AV Calcification Severity[13423 (A)]: O None O Minimal O Moderate/Severe ☐ Not Documented[13437]

PRE-PROCEDURE ECHOCARDIOGRAM FINDINGS

LVEF[13305 (A)]: _____ % ☐ LVEF Not Assessed[13306]

Aortic Valve Disease Etiology[13442]: O Degenerative O Endocarditis O Rheumatic O Other

Aortic Valve Morphology[13468 (A)]: O Bicuspid O Tricuspid O Other

→**If** Bicuspid, **Ascending Aorta Size**[13469 (A)]: _____ cm ☐ Not Documented[13470]

AV Annular Calcification[13471]: O No O Yes

Aortic Regurgitation[13477 (A)]: (highest) O None O Trace/Trivial O Mild O Moderate O Severe

Aortic Stenosis[13307]: O No O Yes

→**If** Yes, **AV Area**[13481 (A)]: (smallest) _____ cm^2

→**If** Yes, **AV Mean Gradient**[13674 (A)]: (highest) _____ mm Hg

→**If** <40 mm Hg, **Low Flow** *(stroke volume index <35 ml/m^2)*[13700 (A)]: O No O Yes ☐ Not Documented[13701]

→**If** Yes, **AV Peak Gradient**[13702]: (highest) _____ mm Hg

AV Peak Velocity (CW)[13703 (A)]: _____ M/sec

Mitral Valve Disease[13704]: O No O Yes

→**If** Yes, **Mitral Regurgitation**[13672]: (highest) O None O Trace/Trivial O Mild O Moderate O Moderate-Severe O Severe

→**If** Yes, **Mitral Stenosis**[13308]: O No O Yes

→**If** Yes, **MV Area**[13316]: (smallest) _____ cm^2

→**If** Yes, **MV Mean Gradient**[13317]: (highest) _____ mm Hg

Mitral Valve Disease Etiology[13490 (A)] *(Check all that apply)*: ☐ Functional MR (Secondary) ☐ Degenerative MR (Primary) ☐ Post Inflammatory ☐ Endocarditis ☐ Other ☐ None

Tricuspid Regurgitation[13318]: (highest) O None O Trace/Trivial O Mild O Moderate O Severe

PRE-PROCEDURE DOBUTAMINE CHALLENGE

Dobutamine Challenge Performed[13319 (A)]: O No O Yes

→**If** Yes, **Flow Reserve Present**[13320 (A)]: O No O Yes

→**If** Yes, **Aortic Stenosis Type**[13321 (A)]: O Truly Severe Aortic Stenosis O Pseudo-Severe Aortic Stenosis ☐ Not Documented[13325]

PROCEDURE INFORMATION

Concomitant Procedures Performed[7065]: O No O Yes

→**If** Yes, **Procedure Type(s)**[7066]: (select the best option(s)): _____, _____, _____

Operator Name/NPI[14476, 14477, 14478, 14479]: *Last Name, First Name, MI, NPI* _____, *Last Name, First Name, MI, NPI* _____

Procedure Status[7025]: O Elective O Urgent O Emergency O Salvage

Heart Team Reason for Procedure[13499]: O Extreme Risk O High Risk O Intermediate Risk O Low Risk

Heart Team Evaluation of Suitability for Surgical Replacement[13504]: O No O Yes

Procedure Location[12871]: O Cardiac CathLab O Hybrid CathLab Suite OHybrid OR Suite O Other

Anesthesia Type[13331]: O General Anesthesia O Deep sedation/Analgesia O Moderate Sedation/Analgesia O Minimal Sedation/Anxiolysis

© 2021 STS and ACCF

PROCEDURE INFORMATION (CONT.)

Procedure Aborted[13505]: O No O Yes

→**If** Yes, **Reason**[13506]: O Access Related O Consent Issue O Device Delivery System Malfunction O Navigation Issue After Successful Access O New Clinical Findings O Patient Clinical Status O System Issue O Other

→**If** Yes, **Action**[13757]: O Conversion to Open Heart Surgery O Scheduled Open Heart Surgery O Rescheduled Transcatheter Procedure O Converted to Clinical Trial O Balloon Valvuloplasty O Converted to Medical Therapy O Other

Conversion to Open Heart Surgery[13542]: O No O Yes

→**If** Yes, **Reason**[13543]: O Valve Dislodged to Aorta O Valve Dislodged to Left Ventricle O Annulus Rupture O Ventricular Rupture O Aortic Dissection O Coronary Occlusion O Access Related O Cardiac Tamponade O Inability to Position Device O Device Embolization O Valve Injury O Other

Mechanical Support[7422]: O No O Yes →**If** Yes, **Device**[7423]: _____

→**If** Yes, **Timing**[7424]: O In place at start of procedure O Inserted during procedure and prior to intervention O Inserted after intervention has begun O Post Procedure

CardioPulmonary Bypass Used[13579]: O No O Yes

→**If** Yes, **Status**[13580]: O Elective O Emergency →**If** Yes, **CPB Time**[13581]: _____ min

Delivery System Removed[13525]: O No O Yes

PROCEDURE MEDICATIONS (DURING THE PROCEDURE)

Positive Inotropes:[13644]: O No O Yes

RADIATION AND CONTRAST

CODE ALL AVAILABLE MEASUREMENTS

Dose Area Product[14278]: _____ O Gy · cm^2 O dGy · cm^2 O cGy · cm^2 O mGy · cm^2 O µGy · M^2

Cumulative Air Kerma[7210]: _____ O mGy O Gy **Fluoro Time**[7214]: _____ min **Contrast Volume**[7215]: _____ mL

TAVR Procedure Information

Primary Procedure Indication[13498 (A)]: *(etiology of valve failure)* O Aortic Regurgitation O Aortic Stenosis

Valve-in-Valve Procedure[13500 (A)]: O No (degenerative native valve) O Yes (degenerative bioprosthetic valve)

→**If** Yes, **Bioprosthetic Valve Fracture Attempted**[13501]: O No O Yes

→**If** Yes, **BVF Timing**[13502] *(Check all that apply)*: ☐ Pre Implant ☐ Post Implant

→**If** Yes, **Valve Observed To Be Fractured**[13503]: O No O Yes

Valve Sheath Access Site:[13507] O Axillary Artery O Carotid O Direct Aortic O Femoral Artery O Iliac O Subclavian Artery O Transapical O Transcaval O Transseptal via Femoral Vein O Other

Valve Sheath Access Site Method[13508]: O Percutaneous Approach O Cutdown O Mini Sternotomy O Mini Thoracotomy O Other

Valve Sheath Delivery Size[13509]: _____ French

Embolic Protection Deployed[13510]: O No O Yes →**If** Yes, **EP Device**[13511]: _____ see device list

→**If** Procedure Aborted is No, **TAVR DEVICES**	**DEVICE 1**[13524]	**DEVICE 2**[13524]
Device ID[14485]/**Dia**[14532]:	Refer to Device List	Refer to Device List
Device Capture and Repositioning Performed[13534]:	O No O Yes ☐ Not Applicable[13535]	O No O Yes ☐ Not Applicable[13535]
Device Implanted Successfully[13536]:	O No O Yes	O No O Yes
→**If** Yes, **Device Serial Number**[14286]:		
→**If** Yes, **UDI**[14572]:		
→**If** No, **Reason**[13539]:	O Device Embolization O Improper Sizing O Improper Positioning O Other	O Device Embolization O Improper Sizing O Improper Positioning O Other

AV Gradient (mean)[14303] *(post implant)*: _____ mm Hg

Aortic Regurgitation[14304] *(post implant)*: O None O Trace/Trivial O Mild O Moderate O Severe

© 2021 STS and ACCF

POST-PROCEDURE - INTRA OR POST-PROCEDURE EVENTS (COMPLETE FOR EACH PROCEDURE TYPE AND EVERY OCCURRENCE)

INTRA OR POST PROCEDURE EVENT(S)[12153]	EVENT(S) OCCURRED[9002]	→ IF YES, EVENT DATE(S)[14275]
Annular Rupture	O No O Yes	mm / dd / yyyy
Aortic Dissection	O No O Yes	mm / dd / yyyy
Atrial Fibrillation	O No O Yes	mm / dd / yyyy
Bleeding – Access Site	O No O Yes	mm / dd / yyyy
Bleeding – Gastrointestinal	O No O Yes	mm / dd / yyyy
Bleeding – Genitourinary	O No O Yes	mm / dd / yyyy
Bleeding - Hematoma at Access Site	O No O Yes	mm / dd / yyyy
Bleeding – Other	O No O Yes	mm / dd / yyyy
Bleeding – Retroperitoneal	O No O Yes	mm / dd / yyyy
Cardiac Arrest	O No O Yes	mm / dd / yyyy
Cardiac Perforation	O No O Yes	mm / dd / yyyy
Cardiac Surgery or Intervention – Other Unplanned	O No O Yes	mm / dd / yyyy
Coronary Artery Compression	O No O Yes	mm / dd / yyyy
COVID-19	O No O Yes	mm / dd / yyyy
Device Embolization	O No O Yes	mm / dd / yyyy
Device Migration	O No O Yes	mm / dd / yyyy
Device Thrombosis	O No O Yes	mm / dd / yyyy
Device Related Event – Other	O No O Yes	mm / dd / yyyy
Dialysis (New Requirement)	O No O Yes	mm / dd / yyyy
Endocarditis	O No O Yes	mm / dd / yyyy
ICD	O No O Yes	mm / dd / yyyy
Myocardial Infarction	O No O Yes	mm / dd / yyyy
Percutaneous Coronary Intervention	O No O Yes	mm / dd / yyyy
Permanent Pacemaker	O No O Yes	mm / dd / yyyy
Reintervention – Aortic Valve (complete event info)	O No O Yes	mm / dd / yyyy
Stroke – Ischemic (complete event info)	O No O Yes	mm / dd / yyyy
Stroke – Hemorrhagic (complete event info)	O No O Yes	mm / dd / yyyy
Stroke – Undetermined (complete event info)	O No O Yes	mm / dd / yyyy
Transient Ischemic Attack (TIA) (complete event info)	O No O Yes	mm / dd / yyyy
Vascular Complication – Major	O No O Yes	mm / dd / yyyy
Vascular Complication – Minor	O No O Yes	mm / dd / yyyy
Vascular Surgery or Intervention – Unplanned	O No O Yes	mm / dd / yyyy

© 2021 STS and ACCF

IN-HOSPITAL EVENT INFORMATION (COMPLETE FOR EACH ISCHEMIC, HEMORRHAGIC, UNDETERMINED STROKE, TIA OR AORTIC VALVE RE-INTERVENTION)

Event[14312]**:** **Event Date**[14313]**:** mm / dd / yyyy

O Ischemic Stroke(In-hospital) O Hemorrhagic Stroke(In-hospital) O Undetermined Stroke(In-hospital) O TIA(In-hospital)
O Aortic Valve Re-intervention(In-hospital)

Status[14314]**:** O Alive O Deceased →**If** Deceased, **Date of Death**[14315]**:** mm / dd / yyyy

Clinical Comments[14462]**:**

→IF EVENT[14312] = STROKE OR TIA (IN-HOSPITAL)

Symptom Onset Date[14316]**:** mm / dd / yyyy

Neurologic Deficit with Rapid Onset[14317]**:** O No O Yes

→**If** Yes, **Clinical Presentation**[14318]**:** O Stroke/TIA O Non-Stroke

→**If** Stroke/TIA, **Symptom Duration ≥ 24 hours**[14319]**:** O No O Yes

→**If** Stroke/TIA, **Brain Imaging Performed**[14320]**:** O No O Yes

→**If** Yes, **Brain Imaging Type**[14349]**:** O CT O CT w/Contrast O MRI O MRI w/Contrast O Other (e.g. angiography)

→**If** Yes, **Brain Imaging Findings**[14350]**:** O Infarct O Hemorrhage O No Deficit

→**If** Stroke/TIA, **Event Related Sequelae**[14351] (*Select all that apply*): ☐ Death ☐ Permanent Vegetative State ☐ Altered Consciousness ☐ Blindness ☐ Aphasia ☐ Loss of Motor Function ☐ Loss of Sensory Function ☐ Facial Paralysis ☐ Prolonged Length of Stay ☐ Other

→**If** Status=Alive, **Discharge Location**[14352]: O Home O Skilled Nursing Facility O Extended Care/TCU/Rehab O Other Discharge Location

→**If** Status=Alive, **Patient Discharged to Prior Place of Living**[14421]: O No O Yes

→**If** Status=Deceased, **Stroke Diagnosed During Autopsy**[14353]: O No O Yes O Info Not Available

→IF EVENT[14312] = AORTIC VALVE RE-INTERVENTION (IN-HOSPITAL)

Aortic Valve Re-intervention Type[14354]**:** O Surgical Replacement O Surgical Repair O Transcatheter Replacement O Balloon Valvuloplasty O Leaflet Clip Procedure O Paravalvular Leak Closure O Other Transcatheter Intervention

Primary Indication[14355]**:** Regurgitation O Stenosis O Device Embolization O Device Fracture O Device Migration O Endocarditis O Paravalvular Leak O Device Thrombosis O Valve Injury O Other

→**If** Regurgitation, **AV Regurg**[14356]**:** (highest) O None O Trace/Trivial O Mild O Moderate O Severe

→**If** Trace/Trivial, Mild, Moderate, or Severe **Paravalvular Regurgitation**[14357]**:** O None O Mild O Moderate O Severe

→**If** Trace/Trivial, Mild, Moderate, or Severe **Central Regurgitation**[14358]**:** O None O Mild O Moderate O Severe

→**If** Stenosis, **AV Area**[14359]**:** (smallest) _____ cm^2

→**If** Stenosis, **AV Mean Gradient**[14282]**:** (highest) _____ mm Hg

© 2021 STS and ACCF

POST-PROCEDURE CLINICAL DATA (COMPLETE FOR EACH PROCEDURE TYPE)

Hemoglobin (lowest)[13763]: _____ (g/dL) ☐ Not Drawn[14243] **Creatinine (highest)**[13764]: _____ (mg/dL) ☐ Not Drawn[14293]

Creatinine (discharge)[10060]: _____ (mg/dL) ☐ Not Drawn[10061]

12-Lead ECG Performed[13616]: O No O Yes

→**If** Yes, **12-Lead ECG Findings**[13765]: ☐ No Significant Changes ☐ Pathological Q Wave ☐ New LBBB ☐ Cardiac Arrhythmia
(Check all that apply)

POST-PROCEDURE ECHOCARDIOGRAM *(COMPLETE FOR EACH PROCEDURE)*

Echocardiogram[13592]: O Yes - TTE O Yes – TEE ☐ Not Performed[13645]

→**If** Yes, **Date**[13493]: mm / dd / yyyy

→**If** Yes, **AV Area**[13495]: (smallest) _____ cm^2

→**If** Yes **AV Mean Gradient**[13675]: (highest) _____ mm Hg

→**If** Yes, **Aortic Regurgitation**[13526]: O None O Trace/Trivial O Mild O Moderate O Severe

→**If** Trace/Trivial, Mild, Moderate, or Severe **Paravalvular Regurgitation**[14503]: O None O Mild O Moderate O Severe ☐ Not Documented[14524]

→**If** Trace, Mild, Moderate, or Sev **Central Regurgitation**[14499]: O None O Mild O Moderate O Severe ☐ Not Documented[14487]

→**If** Yes, **Mitral Regurgitation**[13494]: (highest) O None O Trace/Trivial O Mild O Moderate O Moderate-Severe O Severe

→**If** Yes, **Tricuspid Regurgitation**[13677]: (highest) O None O Trace/Trivial O Mild O Moderate O Severe

E. DISCHARGE

Discharge Date[10100]: mm / dd / yyyy

Discharge Provider Name, NPI[10070,10071,10072,10073]: *Last Name, First Name, MI, NPI* _____

Discharge Status[10105] O Alive O Deceased

→ **If** Alive, **Cardiac Rehabilitation Referral**[10116]: O No - Reason Not Documented O No - Medical Reason Documented O No - Health Care System Reason Documented O No - Patient-Oriented Reason O Yes

→ **If** Alive, **Discharge Location**[10110]: O Home O Skilled Nursing Facility O Extended Care/TCU/Rehab O Other Acute Care Hospital O Left Against Medical Advice (AMA) O Other Discharge Location

→ **If** Alive, **Hospice Care**[10115]: O No O Yes

→ **If** Deceased, **Death During Procedure**[10120]: O No O Yes

→ **If** Deceased, **Cause of Death**[10125]:

O Acute myocardial infarction
O Sudden cardiac death
O Heart failure
O Stroke
O Cardiovascular procedure
O Cardiovascular hemorrhage
O Other cardiovascular reason
O Pulmonary
O Renal
O Gastrointestinal
O Hepatobiliary
O Pancreatic
O Infection
O Inflammatory/Immunologic
O Hemorrhage
O Non-cardiovascular procedure or surgery
O Trauma
O Suicide
O Neurological
O Malignancy
O Other non-cardiovascular reason

PRBCs Transfused[9275]: O No O Yes *Note: Code the total # of units between start of the procedure and discharge*

→**If** Yes, **PRBCs Units Transfused**[13670]: _____

DISCHARGE MEDICATIONS *D/c meds are not required for patients who expired, discharged to "Other Acute Care Hospital," "AMA", or are receiving Hospice Care.*

CATEGORY	MEDICATION CODE[10200]	PRESCRIBED[10205]			
		YES	NO–NO REASON	NO–MEDICAL REASON	NO–PT REASON
Anticoagulant	Direct Thrombin Inhibitor	O	O	O	O
	Warfarin	O	O	O	O
Antiplatelet	Aspirin	O	O	O	O
Non-Vitamin K Dependent Oral Anticoagulant	Direct Factor Xa Inhibitors	O	O	O	O
P2Y12 Inhibitors	P2Y12 Antagonist	O	O	O	O

© 2021 STS and ACCF

F. Follow-up

Follow-up should be performed at the following intervals post-procedure: **30** days (- 7 days/+ 75), **1** year (+/- 60 days)

Assessment Date[11000]: mm / dd / yyyy

Reference Episode Arrival Date/Time[11002]: mm / dd / yyyy HH:MM

Reference Episode Discharge Date[14338]: mm / dd / yyyy

Reference Procedure Start Date/Time[11001]: mm / dd / yyyy HH:MM

Reference Procedure Type[13705]: O TAVR O TMVr O TMVR O Tricuspid Valve Procedure

Method(s) to Determine Status[11003]:
☐ Office Visit ☐ Medical Records ☐ Letter from Medical Provider
☐ Phone Call ☐ Social Security Death Master File ☐ Hospitalized
☐ Obituary List ☐ CMS Linked Data ☐ Other

Follow-up Status[11004]: O Alive O Deceased O Lost to Follow-up

→ **If** Alive, **Residence**[13805]: O Home with No Health Aid O Home with Health Aid O Long Term Care O Other ☐ Not Documented[14511]

→ **If** Deceased, **Date of Death**[11006]: mm / dd / yyyy

→ **If** Deceased, **Cause of Death**[11007]:

O Acute myocardial infarction
O Sudden cardiac death
O Heart failure
O Stroke
O Cardiovascular procedure
O Cardiovascular hemorrhage
O Other cardiovascular reason
O Pulmonary
O Renal
O Gastrointestinal
O Hepatobiliary
O Pancreatic
O Infection
O Inflammatory/Immunologic
O Hemorrhage
O Non-cardiovascular procedure or surgery
O Trauma
O Suicide
O Neurological
O Malignancy
O Other non-cardiovascular reason

Follow-Up Clinical Assessment

Hemoglobin[13775]: _____ g/dL ☐ Not Drawn[14326] **Creatinine**[13310]: _____ mg/dL ☐ Not Drawn[13311]

NYHA Classification[13688]: O I O II O III O IV ☐ Not Documented[14333]

12-Lead ECG Performed[13689]: O No O Yes

→**If** Yes, **12-Lead ECG Findings**[13621]: ☐ No Significant Changes ☐ Pathological Q Wave ☐ New LBBB ☐ Cardiac Arrhythmia
(Check all that apply)

Follow-Up Imaging – Echocardiogram and 4D CT

Echocardiogram[13492]: O Yes – TTE O Yes – TEE ☐ Not Performed[14512] →**If** Yes, **Date**[13593]: mm / dd / yyyy

→**If** Yes, **LVEF**[13690]: _____ % ☐ LVEF Not Assessed[13691]

→**If** Yes, **AV Mean Gradient**[13676]: (highest) _____ mm Hg

→**If** Yes, **Aortic Valve Area**[13669]: (smallest) _____ cm^2

→**If** Yes, **Aortic Regurgitation**[13527]: O None O Trace/Trivial O Mild O Moderate O Severe

→**If** Trace/Trivial, Mild, Moderate, or Severe **Paravalvular Regurgitation**[14504]: O None O Mild O Moderate O Severe ☐ Not Documented[14527]

→**If** Trace/Trivial, Mild, Moderate, or Severe **Central Regurgitation**[14500]: O None O Mild O Moderate O Severe ☐ Not Documented[14490]

→**If** Yes, **Tricuspid Regurgitation**[13678]: (highest) O None O Trace/Trivial O Mild O Moderate O Severe

4D CT Performed[13692]: O No O Yes

→**If** Yes, **Date**[13693]: mm / dd / yyyy

→**If** Yes, **Valve Thrombosis Noted**[13694]: O No O Yes

→**If** Yes, **Leaflet Dysfunction Noted**[13695]: O No O Yes

Follow-Up KCCQ

KCCQ-12 Performed[13845]: O No O Yes →**If** Yes, **KCCQ-12 Date**[13844]: mm / dd / yyyy

→**If** Yes, **KCCQ-12** [13847, 69, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68]: (see separate questionnaire) **Q1a:** _____ **Q1b:** _____ **Q1c:** _____ **Q2:** _____ **Q3:** _____ **Q4:** _____

Q5: _____ **Q6:** _____ **Q7:** _____ **Q8a:**_____ **Q8b:**_____ **Q8c:**_____

KCCQ Summary Score[14535]: **(calculated)** _____

© 2021 STS and ACCF

Follow-up Medications

Category	Medication Code[11990]	Prescribed[13696]			
		Yes	No– No Reason	No– Medical Reason	No– Pt Reason
Anticoagulants	Direct Thrombin Inhibitor	O	O	O	O
	Warfarin	O	O	O	O
Antiplatelet	Aspirin	O	O	O	O
Non-Vitamin K Dependent Oral Anticoagulant	Direct Factor Xa Inhibitor	O	O	O	O
P2Y12 Inhibitors	P2Y12 Antagonist	O	O	O	O

Follow-up Events

Specify the events (and event dates) that occurred between discharge and 30 day (first) follow-up (FU), or between FU assessment date #1 and #2.

Event(s)[12933]	Event(s) Occurred[14276]	→ If Yes, Event Date(s)[14277]
Atrial Fibrillation	O No O Yes	mm / dd / yyyy
Bleeding – Life Threatening	O No O Yes	mm / dd / yyyy
Bleeding – Major	O No O Yes	mm / dd / yyyy
Cardiac Surgery or Intervention – Other Unplanned	O No O Yes	mm / dd / yyyy
COVID-19	O No O Yes	mm / dd / yyyy
Device Embolization	O No O Yes	mm / dd / yyyy
Device Fracture	O No O Yes	mm / dd / yyyy
Device Thrombosis	O No O Yes	mm / dd / yyyy
Dialysis (New Requirement)	O No O Yes	mm / dd / yyyy
Endocarditis	O No O Yes	mm / dd / yyyy
ICD	O No O Yes	mm / dd / yyyy
Myocardial Infarction	O No O Yes	mm / dd / yyyy
PCI	O No O Yes	mm / dd / yyyy
Permanent Pacemaker	O No O Yes	mm / dd / yyyy
Readmission – (Non-Valve Related)	O No O Yes	mm / dd / yyyy
Readmission – (Valve Related)	O No O Yes	mm / dd / yyyy
Reintervention – Aortic Valve (complete event info)	O No O Yes	mm / dd / yyyy
Stroke – Ischemic (complete event info)	O No O Yes	mm / dd / yyyy
Stroke – Hemorrhagic (complete event info)	O No O Yes	mm / dd / yyyy
Stroke – Undetermined (complete event info)	O No O Yes	mm / dd / yyyy
Transient Ischemic Attack (TIA) (complete event info)	O No O Yes	mm / dd / yyyy
Vascular Complication – Major	O No O Yes	mm / dd / yyyy
Vascular Complication – Minor	O No O Yes	mm / dd / yyyy
Vascular Surgery or Intervention – Unplanned	O No O Yes	mm / dd / yyyy

© 2021 STS and ACCF

FOLLOW-UP EVENT INFORMATION (COMPLETE FOR EACH ISCHEMIC, HEMORRHAGIC, UNDETERMINED STROKE, TIA OR AORTIC VALVE RE-INTERVENTION)

Event[14385]**:** **Event Date**[14386]**:** mm / dd / yyyy

O Ischemic Stroke (F-U) O Hemorrhagic Stroke (F-U) O Undetermined Stroke(F-U) O TIA (F-U) O Aortic Valve Re-intervention (F-U)

Status[14387]**:** O Alive O Deceased →**If** Deceased, **Date of Death:**[14388]**:** mm / dd / yyyy

Clinical Comments[14463]**:**

→IF EVENT[14385] = STROKE OR TIA (FOLLOW-UP)

Symptom Onset Date[14389]**:** mm / dd / yyyy

Neurologic Deficit with Rapid Onset[14390]**:** O No O Yes

→**If** Yes, **Clinical Presentation**[14391]**:** O Stroke/TIA O Non-Stroke

→**If** Stroke/TIA, **Symptom Duration ≥ 24 hours**[14392]**:** O No O Yes

→**If** Stroke/TIA, **Brain Imaging Performed**[14393]**:** O No O Yes

→**If** Yes, **Brain Imaging Type**[14394]**:** O CT O CT w/Contrast O MRI O MRI w/Contrast O Other (e.g. angiography)

→**If** Yes, **Brain Imaging Findings**[14395]**:** O Infarct O Hemorrhage O No Deficit

→**If** Stroke/TIA, **Event Related Sequelae**[14396] *(Select all that apply)*: ☐ Death ☐ Permanent Vegetative State ☐ Altered Consciousness ☐ Blindness ☐ Aphasia ☐ Loss of Motor Function ☐ Loss of Sensory Function ☐ Facial Paralysis ☐ Prolonged Length of Stay ☐ Other

→**If** Status=Alive, **Discharge Location**[14420]: O Home O Skilled Nursing Facility O Extended Care/TCU/Rehab O Other Discharge Location

→**If** Status=Alive, **Patient Discharged to Prior Place of Living**[14422]: O No O Yes

→**If** Status=Deceased, **Stroke Diagnosed During Autopsy**[14397]: O No O Yes O Info Not Available

→IF EVENT[14385] = AORTIC VALVE RE-INTERVENTION (FOLLOW-UP)

Aortic Valve Re-intervention Type[14398]**:** O Surgical Replacement O Surgical Repair O Transcatheter Replacement O Balloon Valvuloplasty O Leaflet Clip Procedure O Paravalvular Leak Closure O Other Transcatheter Intervention

Primary Indication[14399]**:** O Regurgitation O Stenosis O Device Embolization O Device Fracture O Device Migration O Endocarditis O Paravalvular Leak O Device Thrombosis O Valve Injury O Other

→**If** Regurgitation, **AV Regurg**[14400]**:** (highest) O None O Trace/Trivial O Mild O Moderate O Severe

→**If** Trace/Trivial, Mild, Moderate, or Severe **Paravalvular Regurgitation**[14403]**:** O None O Mild O Moderate O Severe

→**If** Trace/Trivial, Mild, Moderate, or Severe **Central Regurgitation**[14401]**:** O None O Mild O Moderate O Severe

→**If** Stenosis, **AV Area**[14402]**:** (smallest) _____ cm^2

→**If** Stenosis, **AV Mean Gradient**[14404]**:** (highest) _____ mm Hg

© 2021 STS and ACCF