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] ☐ Native Hawaiian/Pacific Islander[2074] ☐ Middle Eastern/North African[2075]

Hispanic or Latino Ethnicity[2076]: O No O Yes

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

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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	

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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

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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

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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

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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

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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

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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]: *(Check all that apply)* ☐ No Significant Changes ☐ Pathological Q Wave ☐ New LBBB ☐ Cardiac Arrhythmia

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

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F. Follow-up: 30 day (23 to 75 days post procedure); 1 year (305 to 425 days post procedure)

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 Pulmonary	O Hemorrhage
O Sudden cardiac death	O Renal	O Non-cardiovascular procedure or surgery
O Heart failure	O Gastrointestinal	O Trauma
O Stroke	O Hepatobiliary	O Suicide
O Cardiovascular procedure	O Pancreatic	O Neurological
O Cardiovascular hemorrhage	O Infection	O Malignancy
O Other cardiovascular reason	O Inflammatory/Immunologic	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]: *(Check all that apply)* ☐ No Significant Changes ☐ Pathological Q Wave ☐ New LBBB ☐ Cardiac Arrhythmia

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) _____

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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

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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

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