



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 : ☐ Male ☐ 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 : ☐ No ☐ 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 : ☐ No ☐ 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 : ☐ Home with No Health Aid ☐ Home with Health Aid ☐ Long Term Care ☐ Other ☐ Not Documented ¹³⁸⁰⁴

RESEARCH STUDY

Patient Enrolled in Research Study ^{3020 (A)} : ☐ No ☐ 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
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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 : ☐ No ☐ Yes ☐ Not Documented ¹⁴²⁵³	
Anticipated Life Expectancy of Less than 1 Year ^{13172 (A)} : ☐ No ☐ Yes ☐ Not Documented ¹⁴⁴⁵⁴	
Oxygen at Home ¹³⁸⁸¹ : ☐ No ☐ Yes	
Immunocompromise Present ¹³⁸⁸² : ☐ No ☐ Yes	Currently on Dialysis ¹³⁸⁸⁰ : ☐ No ☐ Yes
Tobacco Use ⁴⁶²⁵ : ☐ Never ☐ Former ☐ Current-Every Day ☐ Current-Some Days ☐ Smoker – Current Status Unk ☐ 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 : ☐ Light tobacco use (<10/day) ☐ Heavy tobacco use (>=10/day)	

Basic dataset (BDS)

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

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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/Time¹³³²⁹: 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 Presentation¹²¹⁷⁷: ☐ No Symptoms, No Angina ☐ Symptoms Unlikely to be Ischemic ☐ Stable Angina
☐ Unstable Angina ☐ Non-STEMI ☐ STEMI

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

NYHA Class (w/in 2 weeks)^{12163 (A)}: ☐ I ☐ II ☐ III ☐ IV **Cardiac Arrest** (w/in 24 hrs)¹⁴²⁶⁷: ☐ No ☐ Yes

Symptoms of Aortic Stenosis Present^{13186 (A)}: ☐ No ☐ Yes ☐ Not Documented¹³¹⁸⁸

STS Risk Score Type^{13698 (A)}: **STS Risk Score Measurement**^{14271 (A)}:

AV Replace: _____ %

Shared Decision Making¹⁴⁷³²: ☐ No ☐ Yes

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

KCCQ-12 Performed¹³⁸⁴³: ☐ No ☐ 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)}: ☐ Not Performed ☐ Performed ☐ 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)

Hemoglobin⁶⁰³⁰: _____ g/dL ☐ Not Drawn⁶⁰³¹ **Creatinine**⁶⁰⁵⁰: _____ mg/dL ☐ Not Drawn⁶⁰⁵¹

Platelet Count¹³²¹³: _____ μ L ☐ Not Drawn¹³²¹⁴ **Bilirubin**⁶⁰⁵⁵: _____ mg/dL ☐ Not Drawn⁶⁰⁵⁶

INR¹³²⁰³: _____ ☐ Not Drawn⁶⁰⁴⁶ **Albumin**¹⁴²¹⁰: _____ g/dL ☐ Not Drawn¹⁴²¹¹

Sodium⁶⁰³⁵: _____ mEq/L ☐ Not Drawn⁶⁰³⁶

PRE-PROCEDURE PULMONARY FUNCTION (CLOSEST TO THE PROCEDURE)

FEV1 Predicted¹³²¹⁶: _____ % ☐ Not Performed¹³²¹⁷

DLCO (Predicted)¹³²¹⁸: _____ % ☐ Not Performed¹³²¹⁹

PRE-PROCEDURE MEDICATIONS (24 HOURS PRIOR TO THE PROCEDURE)

Anticoagulants¹³⁶⁹⁹: ☐ No ☐ Yes

Positive Inotropes¹³⁶⁴³: ☐ No ☐ Yes

PRE-PROCEDURE DIAGNOSTIC CATH FINDINGS

Diagnostic Cath Performed¹³²²⁰: ☐ No ☐ Yes → If Yes, **Diagnostic Cath Date**¹³²²²: mm / dd / yyyy

Number of Diseased Vessels^{13381 (A)}: ☐ None ☐ One ☐ Two ☐ Three ☐ Not Documented¹³³⁸²

Left Main Stenosis $\geq 50\%$ ^{13260 (A)}: ☐ No ☐ Yes ☐ Not Documented¹³²⁶¹

Proximal LAD $\geq 70\%$ ^{13301 (A)}: ☐ No ☐ Yes ☐ Not Documented¹³³⁰²

Right Ventricular Systolic Pressure¹³³⁰³: (highest) _____ mm Hg ☐ Not Documented¹³³⁰⁴

Syntax Score^{13496 (A)}: ☐ Low (Syntax Score <22) ☐ Not Documented¹³⁴⁹⁷
☐ Intermediate (Syntax Score 22-32)
☐ High (Syntax Score ≥ 33)
Note: Only for left main or 3VD in native vessels



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PRE-PROCEDURE CTA FINDINGS

AV Annulus Assessment Method¹³⁴²²: ☐ CTA ☐ TTE ☐ TEE ☐ Other (note: primary documentation should be CTA)

AV Annulus Diameter: Min¹³⁴²⁸: _____ mm **Max**¹³⁴²⁹: _____ mm

AV Annulus Area¹³⁴³⁸: _____ mm² **AV Annulus Perimeter**¹³⁴³⁹: _____ mm

AV Calcification Severity^{13423 (A)}: ☐ None ☐ Minimal ☐ Moderate/Severe ☐ Not Documented¹³⁴³⁷

PRE-PROCEDURE ECHOCARDIOGRAM FINDINGS

LVEF^{13305 (A)}: _____ % ☐ LVEF Not Assessed¹³³⁰⁶

Aortic Valve Disease Etiology¹³⁴⁴²: ☐ Degenerative ☐ Endocarditis ☐ Rheumatic ☐ Other

Aortic Valve Morphology^{13468 (A)}: ☐ Bicuspid ☐ Tricuspid ☐ Other

→If Bicuspid, **Ascending Aorta Size**^{13469 (A)}: _____ cm ☐ Not Documented¹³⁴⁷⁰

AV Annular Calcification¹³⁴⁷¹: ☐ No ☐ Yes

Aortic Regurgitation^{13477 (A)}: (highest) ☐ None ☐ Trace/Trivial ☐ Mild ☐ Moderate ☐ Severe

Aortic Stenosis¹³³⁰⁷: ☐ No ☐ Yes

→If Yes, **AV Area**^{13481 (A)}: (smallest) _____ cm²

→If Yes, **AV Mean Gradient**^{13674 (A)}: (highest) _____ mm Hg

→If <40 mm Hg, **Low Flow (stroke volume index <35 ml/m²)**^{13700 (A)}: ☐ No ☐ Yes ☐ Not Documented¹³⁷⁰¹

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

AV Peak Velocity (CW)^{13703 (A)}: _____ M/sec

Mitral Valve Disease¹³⁷⁰⁴: ☐ No ☐ Yes

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

→If Yes, **Mitral Stenosis**¹³³⁰⁸: ☐ No ☐ Yes

→If Yes, **MV Area**¹³³¹⁶: (smallest) _____ cm²

→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 Regurgitation¹³³¹⁸: (highest) ☐ None ☐ Trace/Trivial ☐ Mild ☐ Moderate ☐ Severe

PRE-PROCEDURE DOBUTAMINE CHALLENGE

Dobutamine Challenge Performed^{13319 (A)}: ☐ No ☐ Yes

→If Yes, **Flow Reserve Present**^{13320 (A)}: ☐ No ☐ Yes

→If Yes, **Aortic Stenosis Type**^{13321 (A)}: ☐ Truly Severe Aortic Stenosis ☐ Pseudo-Severe Aortic Stenosis ☐ Not Documented¹³³²⁵

PROCEDURE INFORMATION

Concomitant Procedures Performed⁷⁰⁶⁵: ☐ No ☐ 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 Status⁷⁰²⁵: ☐ Elective ☐ Urgent ☐ Emergency ☐ Salvage

Heart Team Reason for Procedure¹³⁴⁹⁹: ☐ Extreme Risk ☐ High Risk ☐ Intermediate Risk ☐ Low Risk

Heart Team Evaluation of Suitability for Surgical Replacement¹³⁵⁰⁴: ☐ No ☐ Yes

Procedure Location¹²⁸⁷¹: ☐ Cardiac CathLab ☐ Hybrid CathLab Suite ☐ Hybrid OR Suite ☐ Other

Anesthesia Type¹³³³¹: ☐ General Anesthesia ☐ Deep sedation/Analgesia ☐ Moderate Sedation/Analgesia ☐ Minimal Sedation/Anxiolysis



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PROCEDURE INFORMATION (CONT.)

Procedure Aborted ¹³⁵⁰⁵ :	☐ No ☐ Yes
→If Yes, Reason ¹³⁵⁰⁶ :	☐ Access Related ☐ Consent Issue ☐ Device Delivery System Malfunction ☐ Navigation Issue After Successful Access ☐ New Clinical Findings ☐ Patient Clinical Status ☐ System Issue ☐ Other
→If Yes, Action ¹³⁵⁷⁷ :	☐ Conversion to Open Heart Surgery ☐ Scheduled Open Heart Surgery ☐ Rescheduled Transcatheter Procedure ☐ Converted to Clinical Trial ☐ Balloon Valvuloplasty ☐ Converted to Medical Therapy ☐ Other

Conversion to Open Heart Surgery ¹³⁵⁴² :	☐ No ☐ Yes
→If Yes, Reason ¹³⁵⁴³ :	☐ Valve Dislodged to Aorta ☐ Valve Dislodged to Left Ventricle ☐ Annulus Rupture ☐ Ventricular Rupture ☐ Aortic Dissection ☐ Coronary Occlusion ☐ Access Related ☐ Cardiac Tamponade ☐ Inability to Position Device ☐ Device Embolization ☐ Valve Injury ☐ Other

Mechanical Support ⁷⁴²² :	☐ No ☐ Yes →If Yes, Device ⁷⁴²³ :	_____
	→If Yes, Timing ⁷⁴²⁴ :	☐ In place at start of procedure ☐ Inserted during procedure and prior to intervention ☐ Inserted after intervention has begun ☐ Post Procedure

CardioPulmonary Bypass Used ¹³⁵⁷⁹ :	☐ No ☐ Yes	
→If Yes, Status ¹³⁵⁸⁰ :	☐ Elective ☐ Emergency →If Yes, CPB Time ¹³⁵⁸¹ :	_____ min

Delivery System Removed ¹³⁵²⁵ :	☐ No ☐ Yes
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PROCEDURE MEDICATIONS (DURING THE PROCEDURE)

Positive Inotropes: ¹³⁶⁴⁴ :	☐ No ☐ Yes
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RADIATION AND CONTRAST

CODE ALL AVAILABLE MEASUREMENTS	Dose Area Product ¹⁴²⁷⁸ :	_____ ☐ Gy · cm ² ☐ dGy · cm ² ☐ cGy · cm ² ☐ mGy · cm ² ☐ μGy · M ²	
	Cumulative Air Kerma ⁷²¹⁰ :	_____ ☐ mGy ☐ Gy Fluoro Time ⁷²¹⁴ :	_____ min Contrast Volume ⁷²¹⁵ :

TAVR Procedure Information

Primary Procedure Indication ^{13498 (A)} :	(etiology of valve failure) ☐ Aortic Regurgitation ☐ Aortic Stenosis
Valve-in-Valve Procedure ^{13500 (A)} :	☐ No (degenerative native valve) ☐ Yes (degenerative bioprosthetic valve)
→If Yes, Bioprosthetic Valve Fracture Attempted ¹³⁵⁰¹ :	☐ No ☐ Yes
→If Yes, BVF Timing ¹³⁵⁰² (Check all that apply):	☐ Pre Implant ☐ Post Implant
→If Yes, Valve Observed To Be Fractured ¹³⁵⁰³ :	☐ No ☐ Yes

Valve Sheath Access Site: ¹³⁵⁰⁷	☐ Axillary Artery ☐ Carotid ☐ Direct Aortic ☐ Femoral Artery ☐ Iliac ☐ Subclavian Artery ☐ Transapical ☐ Transcaval ☐ Transseptal via Femoral Vein ☐ Other
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Valve Sheath Access Site Method ¹³⁵⁰⁸ :	☐ Percutaneous Approach ☐ Cutdown ☐ Mini Sternotomy ☐ Mini Thoracotomy ☐ Other
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Valve Sheath Delivery Size ¹³⁵⁰⁹ :	_____ French
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Embolic Protection Deployed ¹³⁵¹⁰ :	☐ No ☐ Yes →If Yes, EP Device ¹³⁵¹¹ :	_____ see device list
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→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 :	☐ No ☐ Yes ☐ Not Applicable ¹³⁵³⁵	☐ No ☐ Yes ☐ Not Applicable ¹³⁵³⁵	
Device Implanted Successfully ¹³⁵³⁶ :	☐ No ☐ Yes	☐ No ☐ Yes	
→If Yes, Device Serial Number ¹⁴²⁸⁶ :			
→If Yes, UDI ¹⁴⁵⁷² :			
→If No, Reason ¹³⁵³⁹ :	☐ Device Embolization ☐ Improper Sizing ☐ Device Embolization ☐ Improper Sizing ☐ Improper Positioning ☐ Other ☐ Improper Positioning ☐ Other		

AV Gradient (mean) ¹⁴³⁰³ (post implant):	_____ mm Hg
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Aortic Regurgitation ¹⁴³⁰⁴ (post implant):	☐ None ☐ Trace/Trivial ☐ Mild ☐ Moderate ☐ 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	☐ No ☐ Yes	mm / dd / yyyy
Aortic Dissection	☐ No ☐ Yes	mm / dd / yyyy
Atrial Fibrillation	☐ No ☐ Yes	mm / dd / yyyy
Bleeding – Access Site	☐ No ☐ Yes	mm / dd / yyyy
Bleeding – Gastrointestinal	☐ No ☐ Yes	mm / dd / yyyy
Bleeding – Genitourinary	☐ No ☐ Yes	mm / dd / yyyy
Bleeding - Hematoma at Access Site	☐ No ☐ Yes	mm / dd / yyyy
Bleeding – Other	☐ No ☐ Yes	mm / dd / yyyy
Bleeding – Retroperitoneal	☐ No ☐ Yes	mm / dd / yyyy
Cardiac Arrest	☐ No ☐ Yes	mm / dd / yyyy
Cardiac Perforation	☐ No ☐ Yes	mm / dd / yyyy
Cardiac Surgery or Intervention – Other Unplanned	☐ No ☐ Yes	mm / dd / yyyy
Coronary Artery Compression	☐ No ☐ Yes	mm / dd / yyyy
COVID-19	☐ No ☐ Yes	mm / dd / yyyy
Device Embolization	☐ No ☐ Yes	mm / dd / yyyy
Device Migration	☐ No ☐ Yes	mm / dd / yyyy
Device Thrombosis	☐ No ☐ Yes	mm / dd / yyyy
Device Related Event – Other	☐ No ☐ Yes	mm / dd / yyyy
Dialysis (New Requirement)	☐ No ☐ Yes	mm / dd / yyyy
Endocarditis	☐ No ☐ Yes	mm / dd / yyyy
ICD	☐ No ☐ Yes	mm / dd / yyyy
Myocardial Infarction	☐ No ☐ Yes	mm / dd / yyyy
Percutaneous Coronary Intervention	☐ No ☐ Yes	mm / dd / yyyy
Permanent Pacemaker	☐ No ☐ Yes	mm / dd / yyyy
Reintervention – Aortic Valve (complete event info)	☐ No ☐ Yes	mm / dd / yyyy
Stroke – Ischemic (complete event info)	☐ No ☐ Yes	mm / dd / yyyy
Stroke – Hemorrhagic (complete event info)	☐ No ☐ Yes	mm / dd / yyyy
Stroke – Undetermined (complete event info)	☐ No ☐ Yes	mm / dd / yyyy
Transient Ischemic Attack (TIA) (complete event info)	☐ No ☐ Yes	mm / dd / yyyy
Vascular Complication – Major	☐ No ☐ Yes	mm / dd / yyyy
Vascular Complication – Minor	☐ No ☐ Yes	mm / dd / yyyy
Vascular Surgery or Intervention – Unplanned	☐ No ☐ 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)

Event¹⁴³¹²:

Event Date¹⁴³¹³:

mm / dd / yyyy

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

Status¹⁴³¹⁴:

☐ Alive ☐ Deceased

→If Deceased, Date of Death¹⁴³¹⁵: mm / dd / yyyy

Clinical Comments¹⁴⁴⁶²:

→IF EVENT¹⁴³¹² = STROKE OR TIA (IN-HOSPITAL)

Symptom Onset Date¹⁴³¹⁶: mm / dd / yyyy

Neurologic Deficit with Rapid Onset¹⁴³¹⁷:

☐ No ☐ Yes

→If Yes, Clinical Presentation¹⁴³¹⁸:

☐ Stroke/TIA ☐ Non-Stroke

→If Stroke/TIA, Symptom Duration ≥ 24 hours¹⁴³¹⁹:

☐ No ☐ Yes

→If Stroke/TIA, Brain Imaging Performed¹⁴³²⁰:

☐ No ☐ Yes

→If Yes, Brain Imaging Type¹⁴³⁴⁹:

☐ CT ☐ CT w/Contrast ☐ MRI ☐ MRI w/Contrast ☐ Other (e.g. angiography)

→If Yes, Brain Imaging Findings¹⁴³⁵⁰:

☐ Infarct ☐ Hemorrhage ☐ No Deficit

→If Stroke/TIA, Event Related Sequelae¹⁴³⁵¹ (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 Location¹⁴³⁵²:

☐ Home ☐ Skilled Nursing Facility ☐ Extended Care/TCU/Rehab ☐ Other Discharge Location

→If Status=Alive, Patient Discharged to Prior Place of Living¹⁴⁴²¹:

☐ No ☐ Yes

→If Status=Deceased, Stroke Diagnosed During Autopsy¹⁴³⁵³:

☐ No ☐ Yes ☐ Info Not Available

→IF EVENT¹⁴³¹² = AORTIC VALVE RE-INTERVENTION (IN-HOSPITAL)

Aortic Valve Re-intervention Type¹⁴³⁵⁴:

☐ Surgical Replacement ☐ Surgical Repair ☐ Transcatheter Replacement
☐ Balloon Valvuloplasty ☐ Leaflet Clip Procedure ☐ Paravalvular Leak Closure
☐ Other Transcatheter Intervention

Primary Indication¹⁴³⁵⁵:

☐ Regurgitation ☐ Stenosis ☐ Device Embolization ☐ Device Fracture ☐ Device Migration
☐ Endocarditis ☐ Paravalvular Leak ☐ Device Thrombosis ☐ Valve Injury ☐ Other

→If Regurgitation, AV Regurg¹⁴³⁵⁶: (highest)

☐ None ☐ Trace/Trivial ☐ Mild ☐ Moderate ☐ Severe

→If Trace/Trivial, Mild, Moderate, or Severe Paravalvular Regurgitation¹⁴³⁵⁷:

☐ None ☐ Mild ☐ Moderate ☐ Severe

→If Trace/Trivial, Mild, Moderate, or Severe Central Regurgitation¹⁴³⁵⁸:

☐ None ☐ Mild ☐ Moderate ☐ Severe

→If Stenosis, AV Area¹⁴³⁵⁹: (smallest)

_____ cm²

→If Stenosis, AV Mean Gradient¹⁴²⁸²: (highest)

_____ mm Hg



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

Hemoglobin (lowest)¹³⁷⁶³: _____ (g/dL) ☐ Not Drawn¹⁴²⁴³ **Creatinine (highest)**¹³⁷⁶⁴: _____ (mg/dL) ☐ Not Drawn¹⁴²⁹³
Creatinine (discharge)¹⁰⁰⁶⁰: _____ (mg/dL) ☐ Not Drawn¹⁰⁰⁶¹

12-Lead ECG Performed¹³⁶¹⁶: ☐ No ☐ 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)

Echocardiogram¹³⁵⁹²: ☐ Yes - TTE ☐ Yes - TEE ☐ Not Performed¹³⁶⁴⁵

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

→ If Yes, **AV Area**¹³⁴⁹⁵: (smallest) _____ cm²

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

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

→ If Trace/Trivial, Mild, Moderate, or Severe **Paravalvular Regurgitation**¹⁴⁵⁰³: ☐ None ☐ Mild ☐ Moderate ☐ Severe ☐ Not Documented¹⁴⁵²⁴

→ If Trace, Mild, Moderate, or Sev **Central Regurgitation**¹⁴⁴⁹⁹: ☐ None ☐ Mild ☐ Moderate ☐ Severe ☐ Not Documented¹⁴⁴⁸⁷

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

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

E. DISCHARGE

Discharge Date¹⁰¹⁰⁰: _____ mm / dd / yyyy

Discharge Provider Name, NPI^{10070,10071,10072,10073}: _____ Last Name, First Name, MI, NPI

Discharge Status¹⁰¹⁰⁵ ☐ Alive ☐ Deceased

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

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

→ If Alive, **Hospice Care**¹⁰¹¹⁵: ☐ No ☐ Yes

→ If Deceased, **Death During Procedure**¹⁰¹²⁰: ☐ No ☐ Yes

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

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

PRBCs Transfused⁹²⁷⁵: ☐ No ☐ 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	☐	☐	☐	☐
	Warfarin	☐	☐	☐	☐
Antiplatelet	Aspirin	☐	☐	☐	☐
Non-Vitamin K Dependent Oral Anticoagulant	Direct Factor Xa Inhibitors	☐	☐	☐	☐
P2Y12 Inhibitors	P2Y12 Antagonist	☐	☐	☐	☐



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F. FOLLOW-UP: 30 DAY (23 TO 75 DAYS POST PROCEDURE); 1 YEAR (305 TO 425 DAYS POST PROCEDURE)

Assessment Date¹¹⁰⁰⁰: mm / dd / yyyy

Reference Episode Arrival Date/Time¹¹⁰⁰²: mm / dd / yyyy HH:MM

Reference Episode Discharge Date¹⁴³³⁸: mm / dd / yyyy

Reference Procedure Start Date/Time¹¹⁰⁰¹: mm / dd / yyyy HH:MM

Reference Procedure Type¹³⁷⁰⁵: ☐ TAVR ☐ TMVr ☐ TMVR ☐ Tricuspid Valve Procedure

Method(s) to Determine Status¹¹⁰⁰³: ☐ Office Visit ☐ Medical Records ☐ Letter from Medical Provider
☐ Phone Call ☐ Social Security Death Master File ☐ Hospitalized
☐ Obituary List ☐ CMS Linked Data ☐ Other

Follow-up Status¹¹⁰⁰⁴: ☐ Alive ☐ Deceased ☐ Lost to Follow-up

→ If Alive, Residence¹³⁸⁰⁵: ☐ Home with No Health Aid ☐ Home with Health Aid ☐ Long Term Care ☐ Other ☐ Not Documented¹⁴⁵¹¹

→ If Deceased, Date of Death¹¹⁰⁰⁶: mm / dd / yyyy

→ If Deceased, Cause of Death¹¹⁰⁰⁷:

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

FOLLOW-UP CLINICAL ASSESSMENT

Hemoglobin¹³⁷⁷⁵: _____ g/dL ☐ Not Drawn¹⁴³²⁶ Creatinine¹³³¹⁰: _____ mg/dL ☐ Not Drawn¹³³¹¹

NYHA Classification¹³⁶⁸⁸: ☐ I ☐ II ☐ III ☐ IV ☐ Not Documented¹⁴³³³

12-Lead ECG Performed¹³⁶⁸⁹: ☐ No ☐ Yes

→ If Yes, 12-Lead ECG Findings¹³⁶²¹: ☐ No Significant Changes ☐ Pathological Q Wave ☐ New LBBB ☐ Cardiac Arrhythmia
(Check all that apply)

FOLLOW-UP IMAGING – ECHOCARDIOGRAM AND 4D CT

Echocardiogram¹³⁴⁹²: ☐ Yes – TTE ☐ Yes – TEE ☐ Not Performed¹⁴⁵¹² → If Yes, Date¹³⁵⁹³: mm / dd / yyyy

→ If Yes, LVEF¹³⁶⁹⁰: _____ % ☐ LVEF Not Assessed¹³⁶⁹¹

→ If Yes, AV Mean Gradient¹³⁶⁷⁶: (highest) _____ mm Hg

→ If Yes, Aortic Valve Area¹³⁶⁶⁹: (smallest) _____ cm²

→ If Yes, Aortic Regurgitation¹³⁵²⁷: ☐ None ☐ Trace/Trivial ☐ Mild ☐ Moderate ☐ Severe

→ If Trace/Trivial, Mild, Moderate, or Severe Paravalvular Regurgitation¹⁴⁵⁰⁴: ☐ None ☐ Mild ☐ Moderate ☐ Severe

☐ Not Documented¹⁴⁵²⁷

→ If Trace/Trivial, Mild, Moderate, or Severe Central Regurgitation¹⁴⁵⁰⁰: ☐ None ☐ Mild ☐ Moderate ☐ Severe ☐ Not Documented¹⁴⁴⁹⁰

→ If Yes, Tricuspid Regurgitation¹³⁶⁷⁸: (highest) ☐ None ☐ Trace/Trivial ☐ Mild ☐ Moderate ☐ Severe

4D CT Performed¹³⁶⁹²: ☐ No ☐ Yes

→ If Yes, Date¹³⁶⁹³: mm / dd / yyyy

→ If Yes, Valve Thrombosis Noted¹³⁶⁹⁴: ☐ No ☐ Yes

→ If Yes, Leaflet Dysfunction Noted¹³⁶⁹⁵: ☐ No ☐ Yes

FOLLOW-UP KCCQ

KCCQ-12 Performed¹³⁸⁴⁵: ☐ No ☐ Yes → If Yes, KCCQ-12 Date¹³⁸⁴⁴: 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
Score¹⁴⁵³⁵: (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	☐	☐	☐	☐
	Warfarin	☐	☐	☐	☐
Antiplatelet	Aspirin	☐	☐	☐	☐
Non-Vitamin K Dependent Oral Anticoagulant	Direct Factor Xa Inhibitor	☐	☐	☐	☐
P2Y12 Inhibitors	P2Y12 Antagonist	☐	☐	☐	☐

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	☐ No ☐ Yes	mm / dd / yyyy
Bleeding – Life Threatening	☐ No ☐ Yes	mm / dd / yyyy
Bleeding – Major	☐ No ☐ Yes	mm / dd / yyyy
Cardiac Surgery or Intervention – Other Unplanned	☐ No ☐ Yes	mm / dd / yyyy
COVID-19	☐ No ☐ Yes	mm / dd / yyyy
Device Embolization	☐ No ☐ Yes	mm / dd / yyyy
Device Fracture	☐ No ☐ Yes	mm / dd / yyyy
Device Thrombosis	☐ No ☐ Yes	mm / dd / yyyy
Dialysis (New Requirement)	☐ No ☐ Yes	mm / dd / yyyy
Endocarditis	☐ No ☐ Yes	mm / dd / yyyy
ICD	☐ No ☐ Yes	mm / dd / yyyy
Myocardial Infarction	☐ No ☐ Yes	mm / dd / yyyy
PCI	☐ No ☐ Yes	mm / dd / yyyy
Permanent Pacemaker	☐ No ☐ Yes	mm / dd / yyyy
Readmission – (Non-Valve Related)	☐ No ☐ Yes	mm / dd / yyyy
Readmission – (Valve Related)	☐ No ☐ Yes	mm / dd / yyyy
Reintervention – Aortic Valve (complete event info)	☐ No ☐ Yes	mm / dd / yyyy
Stroke – Ischemic (complete event info)	☐ No ☐ Yes	mm / dd / yyyy
Stroke – Hemorrhagic (complete event info)	☐ No ☐ Yes	mm / dd / yyyy
Stroke – Undetermined (complete event info)	☐ No ☐ Yes	mm / dd / yyyy
Transient Ischemic Attack (TIA) (complete event info)	☐ No ☐ Yes	mm / dd / yyyy
Vascular Complication – Major	☐ No ☐ Yes	mm / dd / yyyy
Vascular Complication – Minor	☐ No ☐ Yes	mm / dd / yyyy
Vascular Surgery or Intervention – Unplanned	☐ No ☐ 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)

Event¹⁴³⁸⁵:

Event Date¹⁴³⁸⁶:

mm / dd / yyyy

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

Status¹⁴³⁸⁷:

☐ Alive

☐ Deceased

→If Deceased, Date of Death:¹⁴³⁸⁸: mm / dd / yyyy

Clinical Comments¹⁴⁴⁶³:

→IF EVENT¹⁴³⁸⁵ = STROKE OR TIA (FOLLOW-UP)

Symptom Onset Date¹⁴³⁸⁹: mm / dd / yyyy

Neurologic Deficit with Rapid Onset¹⁴³⁹⁰:

☐ No ☐ Yes

→If Yes, Clinical Presentation¹⁴³⁹¹:

☐ Stroke/TIA ☐ Non-Stroke

→If Stroke/TIA, Symptom Duration ≥ 24 hours¹⁴³⁹²:

☐ No ☐ Yes

→If Stroke/TIA, Brain Imaging Performed¹⁴³⁹³:

☐ No ☐ Yes

→If Yes, Brain Imaging Type¹⁴³⁹⁴:

☐ CT ☐ CT w/Contrast ☐ MRI ☐ MRI w/Contrast ☐ Other (e.g. angiography)

→If Yes, Brain Imaging Findings¹⁴³⁹⁵:

☐ Infarct ☐ Hemorrhage ☐ No Deficit

→If Stroke/TIA, Event Related Sequelae¹⁴³⁹⁶ (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 Location¹⁴⁴²⁰:

☐ Home ☐ Skilled Nursing Facility ☐ Extended Care/TCU/Rehab ☐ Other Discharge Location

→If Status=Alive, Patient Discharged to Prior Place of Living¹⁴⁴²²:

☐ No ☐ Yes

→If Status=Deceased, Stroke Diagnosed During Autopsy¹⁴³⁹⁷:

☐ No ☐ Yes ☐ Info Not Available

→IF EVENT¹⁴³⁸⁵ = AORTIC VALVE RE-INTERVENTION (FOLLOW-UP)

Aortic Valve Re-intervention Type¹⁴³⁹⁸:

☐ Surgical Replacement ☐ Surgical Repair ☐ Transcatheter Replacement
☐ Balloon Valvuloplasty ☐ Leaflet Clip Procedure ☐ Paravalvular Leak Closure
☐ Other Transcatheter Intervention

Primary Indication¹⁴³⁹⁹:

☐ Regurgitation ☐ Stenosis ☐ Device Embolization ☐ Device Fracture ☐ Device Migration
☐ Endocarditis ☐ Paravalvular Leak ☐ Device Thrombosis ☐ Valve Injury ☐ Other

→If Regurgitation, AV Regurg¹⁴⁴⁰⁰: (highest)

☐ None ☐ Trace/Trivial ☐ Mild ☐ Moderate ☐ Severe

→If Trace/Trivial, Mild, Moderate, or Severe Paravalvular Regurgitation¹⁴⁴⁰³:

☐ None ☐ Mild ☐ Moderate ☐ Severe

→If Trace/Trivial, Mild, Moderate, or Severe Central Regurgitation¹⁴⁴⁰¹:

☐ None ☐ Mild ☐ Moderate ☐ Severe

→If Stenosis, AV Area¹⁴⁴⁰²: (smallest)

_____ cm²

→If Stenosis, AV Mean Gradient¹⁴⁴⁰⁴: (highest)

_____ mm Hg