Society of Thoracic Surgeons

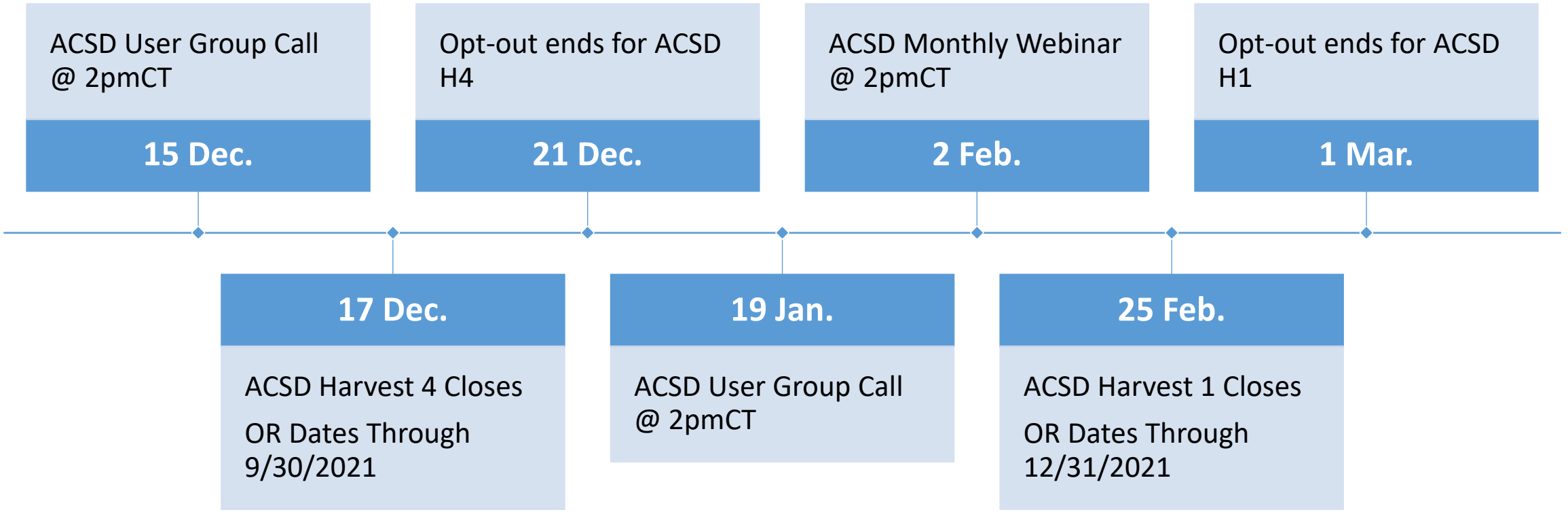
Adult Cardiac User Group Call

December 15, 2021

Agenda

- Welcome and Introductions
- STS Updates
- IQVIA Updates
- Education
- User Feedback
  - Include Ticket Number/Case Number
  - *Use the raise-hand function and be sure to unmute yourself*
  - *OR*
  - *Submit using the Q&A function*

Important Dates for Adult Cardiac



STS Updates

AQO (Advances in Quality and Outcomes: A Data Manager's Meeting)

- Available in the STS Learning Center
- Claim CE's by January 15, 2022
- https://www.corexcel.com/sts/
- If you already completed the evaluations; certifications coming soon

Harvest Close on Friday, December 17

- OR Dates through 9/30/2021

COVID Update

- Any COVID positive patient will continue to be excluded from current analyses (Harvest 4 2021)
- Analysis exclusions will cease for any record with OR date of January 1, 2022 and forward
- Continue to collect Covid variables until further notice

IQVIA Update
Joe Brower

STS National Database™
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IQVIA Updates December 2021

The below updates are targeted to be released to production on the weekend of December 18

Reports

- **Participant Dashboard Report (non-analyzed)**

  STS-6747 – Participant Dashboard displayed a different percentage on the user interface versus the exported Excel report

  STS-7175 – Graphs on the dashboard is not aligning with the data within the tabular table

  STS-7173 – Users are unable to select multiple rows in the dashboard report to display combined results

- **Missing Variable Report**

  STS-7194 – Report logic updated to flag surgical site infection as missing

- **Longitudinal Report**

  STS-7542 - Issue was identified with the Longitudinal Dashboard Report with regards to the Length of Stay Metrics, specifically where the percentages on the Y axis are greater than 100% for 2017-2018 calculations in the cumulative dataset (where data from all harvests are combined). The report calculations were re-executed to resolve this issue.

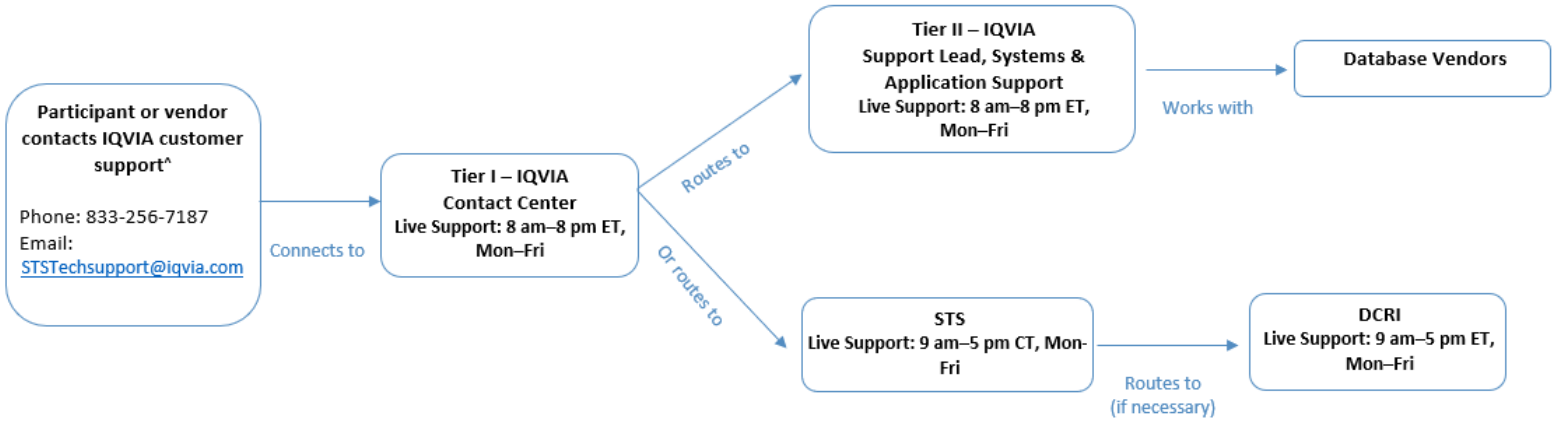
IQVIA Updates December 2021

The below updates are targeted to be released to production on the weekend of December 18

Reports Continued

- **Risk Adjusted Report (analyzed)**
  - **STS-7677** – Scroll bar impacting the UI display and export display of the Quality Rating Reports; results appear misaligned
  - **STS-6706 –** Anesthesia Report calculations updated for attending anesthesiologist medically direct CRNA ratio for 2019 and 2020 reporting years and updated 4.20.2 data version consideration
  - **STS-7008** – Slight difference between observed rate for Any Major Complication, Deep Sternal Infection and Prolonged Ventilation the Risk Adjusted and Regional Outcomes versus what was displayed in the Benchmark reports for AVR + CABG due to rounding on results
  - **STS-7183** – Blood Products benchmark calculations for reporting year 2020 have been updated to remove IBLDPRODREF parent since it is no longer applicable to the 4.20.2 data version
  - **STS-7246 –** Benchmark Report Morbidity/Mortality – Infection Complications - Deep Sternal Infection/Mediastinitis or Conduit Harvest calculations updated to include data version check and parent check when applicable

IQVIA's Support Plan



^ Inquiries received outside live support hours will require a 24-hour turnaround window (i.e., one business day) for responses.

Resources

- STS National Database Webpage
- STSTechSupport@IQVIA.com (Uploader, DQR, Missing Variable, Dashboard, Password and Login)
- ACSDTechSupport@IQVIA.com
- Phone Support: 1-833-256-7187
- STS National Database Feedback Form
- Resource Documents
  - Contact Information
  - Webinar Information
  - FAQ Document
  - Go-Live Checklist
  - Tiered-level Support Document
  - *Training Videos*
  - *Link to IQVIA*
  - ckrohn@sts.org

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Capturing the Deteriorating Patient Accurately

Melinda Offer, RN, MSN

Scenario

Patient presented for elective TAVR. Once the TAVR valve was deployed and seated, there was a significant amount of perivalvular leak. A decision was made to perform a balloon valvuloplasty. During the valvuloplasty, the valve appeared to migrate out of the aortic annulus into the LV outflow track. During this time, the patient appeared to have significant ischemic changes as well as a sudden drop in blood pressure. Echo demonstrated severely reduced left ventricular function. The surgical team was mobilized. The patient's blood pressure continued to deteriorate and ACLS measures were undertaken including chest compressions. While the patient was receiving chest compressions a rapid incision was made in the chest for emergent sternotomy.

What is the Index Procedure and is this Planned or Unplanned?

- What is the index procedure?
  - Answer - SAVR. The TAVR is captured as a prior CV intervention.
- Planned or unplanned?
  - Answer – Planned. Being caught off guard prior to the incision, but having to do a procedure emergently, does not prevent the procedure from being “planned”. This is no different than a dissection that has to emergently go to the OR.

Valve Procedure Performed: OpValve (2129)	☒ Yes ☐ No		
	(If Yes →)	Was a valve explanted: ☐ Yes ☐ No ValExp (2130) (If Yes complete Section K)	
		Aortic Valve Procedure performed: VSAV (2131)	☒ Yes, planned ☐ Yes, unplanned due to surgical complication ☐ Yes, unplanned due to unsuspected disease or anatomy ☐ No
		(If Yes →)	Was a procedure performed on the Aorta? ☐ Yes ☒ No AVAortaProcPerf (2132) (If ‘Yes’ complete M2; If ‘No’ complete K1)

How to Code the TAVR?

The TAVR is captured as a prior CV intervention.

- Also capture the balloon valvuloplasty

Previous Valve Procedure: ** ☒ Yes ☐ No (If PrValve Yes, Enter at least one previous valve procedure and up to 5 PrValve (675)

	#1** PrValveProc1 (695)	#2** PrValveProc2 (700)	#3** PrValveProc3 (705)
No additional valve procedure(s)			
Aortic valve balloon valvotomy/valvuloplasty		✖	
Aortic valve repair, surgical			
Aortic valve replacement, surgical			
Aortic valve replacement, transcatheter	✖		

Pre-op Cardiac Status– Cardiogenic Shock and Resuscitation

The definition for Cardiogenic Shock and Resuscitation state ***"developed prior to induction"***. In this scenario despite their development after induction, you should capture shock and resuscitation.

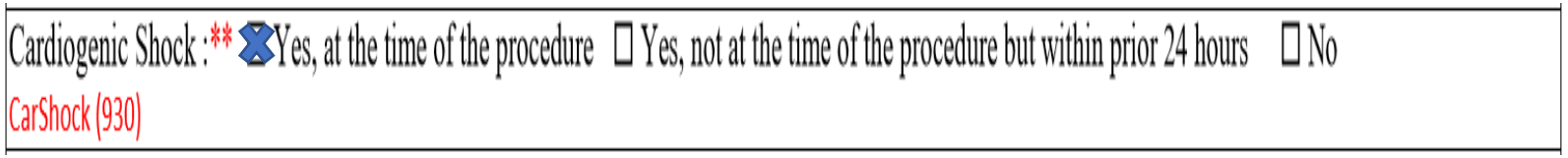
In patients having non-cardiac procedures such as CEA, or a Watchman or ICD, that develop cardiogenic shock or need resuscitation, as defined in the Training Manual, and require emergent surgical intervention, code "cardiogenic shock and resuscitation at time of the procedure".

Pre-op Cardiac Status– Cardiogenic Shock

Definition: Indicate if the patient developed cardiogenic shock prior to Induction.

- Cardiogenic Shock - sustained (>30 min) episode of hypoperfusion evidenced by systolic blood pressure <90 mm Hg and/or, if available, cardiac index <2.2 L/min per square meter determined to be secondary to cardiac dysfunction and/or the requirement for parenteral inotropic or vasopressor agents or mechanical support (e.g., IABP, extracorporeal circulation, VADs) to maintain blood pressure and cardiac index above those specified levels.

This patient is arresting and requiring CPR – **Code "cardiogenic shock at time of procedure"**


Cardiogenic Shock :** ☒ Yes, at the time of the procedure ☐ Yes, not at the time of the procedure but within prior 24 hours ☐ No
CarShock (930)

Pre-op Cardiac Status-Resuscitation

Definition: Indicate whether the patient required cardiopulmonary resuscitation before induction of anesthesia.

Capture resuscitation timeframe:

- within 1 hour or
- 1-24 hours pre-op.
- >24 hours does not count

This patient is arresting and requiring CPR –

Code "resuscitation within 1 hour"

Resuscitation:** ☒ Yes - Within 1 hour of the start of the procedure ☐ Yes - More than 1 hour but less than 24 hours of the start of the procedure ☐ No

Resusc (935)

Operative – Incidence

Incidence: refers to whether the anatomic space involved with the operation had been previously entered e.g the pericardial or the pleural space

- In this scenario, the TAVR was on the same day in the “same procedure” as the SAVR: the case is not a reop
- A TAVR , during a prior event, followed by a SAVR: SAVR is a reop as the aortic valvular space had been violated

Incidence: Code SEQ 1970 as “first CV surgery” since the instruction to code as a reop applies to a prior TAVR (not a freshly implanted TAVR).

Incidence: **	☒ First cardiovascular surgery	☐ Third re-op cardiovascular surgery
Incidenc (1970)	☐ First re-op cardiovascular surgery	☐ Fourth or more re-op cardiovascular surgery
	☐ Second re-op cardiovascular surgery	☐ NA- not a cardiovascular surgery

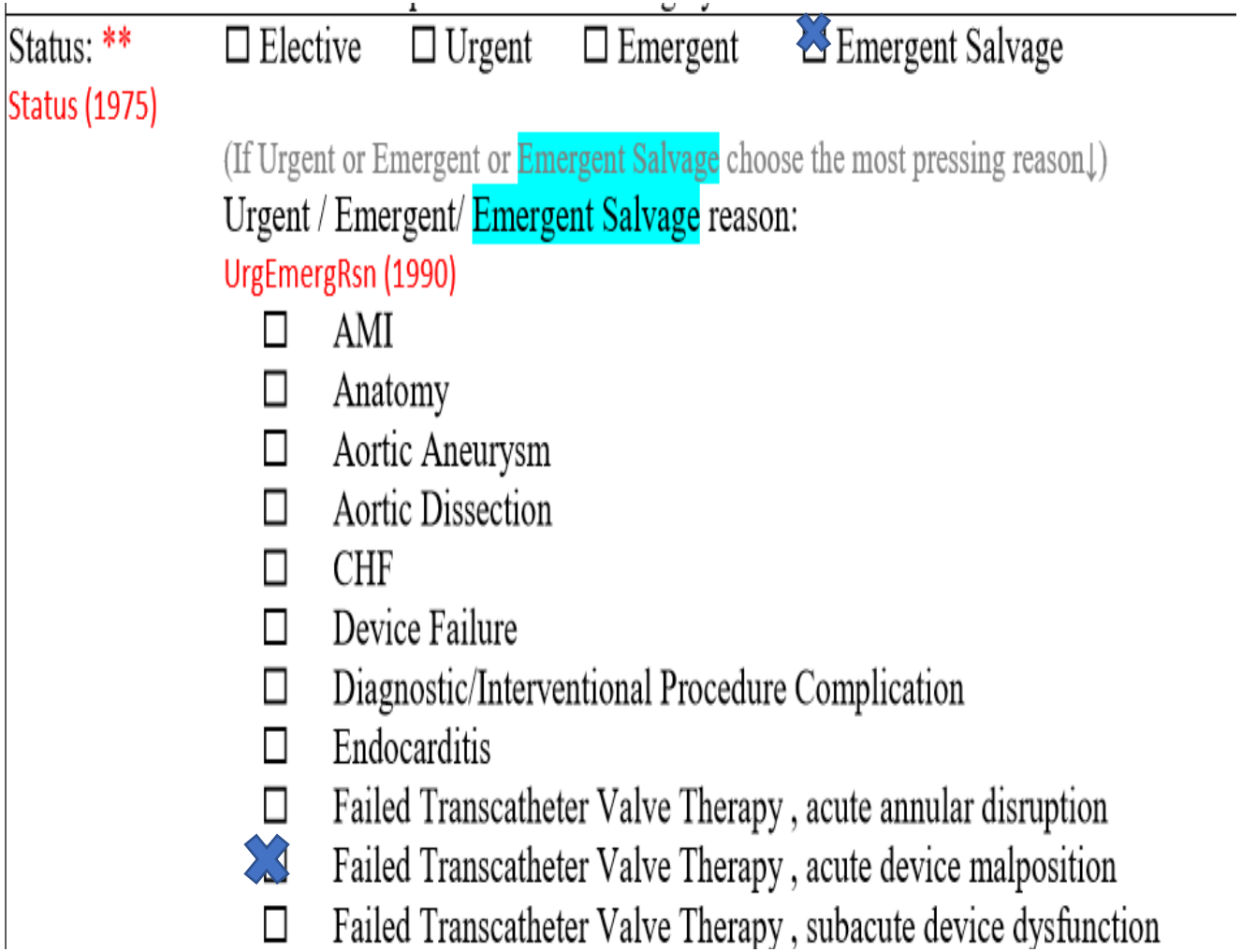
Operative – Status

Status: Emergent Salvage -The patient is undergoing CPR enroute to the OR prior to anesthesia induction or has ongoing ECMO to maintain life.

- Status:- Code SEQ 1975 as “Emergent Salvage”

Reason: Emergent Salvage (annular disruption, malposition, or subacute device dysfunction)

- Code SEQ 1990- Failed Transcatheter Valve Therapy , acute device malposition



Operative Approach and Operative Approach Converted

Operative Approach- Definition: Indicate the initial operative approach.

The intent is to capture the approach for the index procedure. In this scenario, the SAVR is the index procedure.

"Operative Approach Converted" refers to a conversion during the index procedure.

- Operative Approach – CODE SEQ 2100 as "Full conventional sternotomy"
- Operative Approach Converted –Code "NO" to SEQ 2105 as this is not applicable here, as the initial approach for the index procedure was a sternotomy, not the percutaneous TAVR.
  - Operative Approach Converted is most frequently used when a mini–incision procedure has to be converted to a full sternotomy, which can happen for a variety of reasons

Initial Operative Approach: OPApp (2100)	☒ Full conventional sternotomy ☐ Partial sternotomy ☐ Sub-xiphoid ☐ Thoracotomy	☐ Thoracoabdominal Incision ☐ Percutaneous ☐ Port Access ☐ Other
Approach converted during procedure: ☐ Yes ☒ No ApproachCon (2105)		

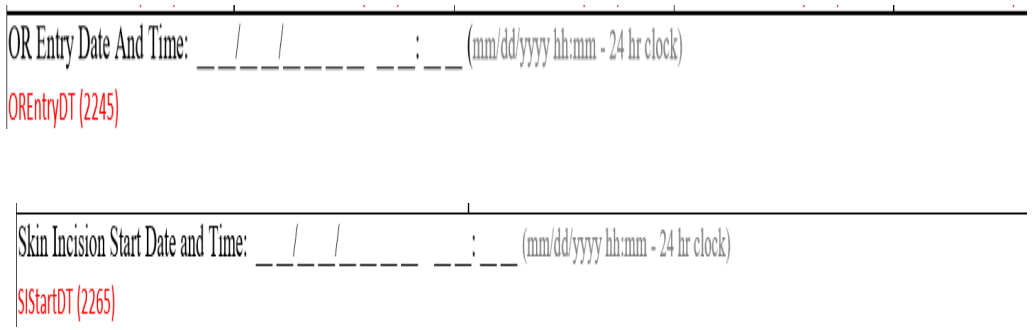
This depends on your site's process.

For sites that have separate Cath and OR logs:

- OR Entry Time: Use the times on the OR log.

For sites that do not separate Cath/OR logs, using only one log:

- OR Entry Time: use the incision time of the SAVR (time of sternotomy or incision to perform the emergent STS qualifying procedure).

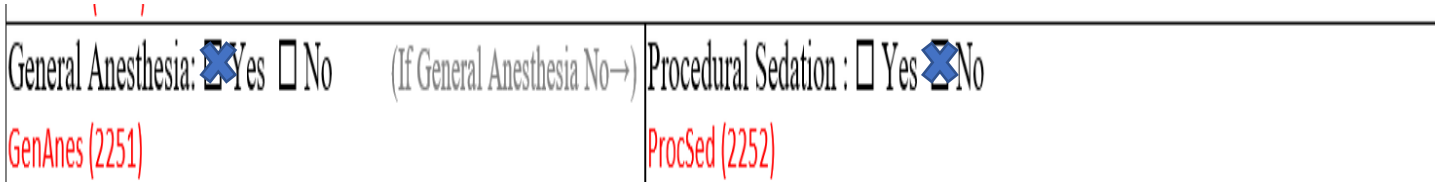


OR Entry Time and Incision Time are coded as the same time for sites who use one log

Anesthesia

General Anesthesia - Indicate whether general anesthesia was used at any time during this procedure.

- SAVR is the index procedure, code the type of Anesthesia used to perform this procedure.
- General Anesthesia – CODE SEQ 2251 as “General Anesthesia”
  - If at any time the procedure requires general anesthesia, that is what you should code.
  - “Procedural Sedation” is only coded if general anesthesia was NEVER used to complete the procedure



Procedures Performed in the Op Note

- TAVR (26 Medtronic Evolut Pro Corevalve) – **This is a prior CV intervention**
- Explantation of transcatheter aortic valve – **Explant of valve, but not other cardiac procedure in this scenario**
- Surgical AVR (21 mm ST Jude Trifecta Tissue Valve) – **Index Procedure**

In this case, just because you see it in the op note, does not mean you code for it as a procedure in the ACSD

Aortic Valve Procedure Performed

- Code SEQ 3390 – Yes, planned
- Code SEQ 3395 – Replacement = Yes
- Code SEQ 3400 TAVR = NO, the TAVR is a prior CV intervention
- Code SEQ 3402 Surgical Valve Replacement = YES

Aortic Valve Procedure Performed: ☒ Yes, planned ☐ Yes, unplanned due to surgical complication
VSAV (3390) ☐ Yes, unplanned due to unsuspected disease or anatomy ☐ No (If Yes ↓)

Procedure Performed:
VSAVPr (3395)

☒ Replacement (If Replacement ↓)

Transcatheter Valve Replacement: ☐ Yes ☒ No (If Yes ↓)
VSTCV (3400)

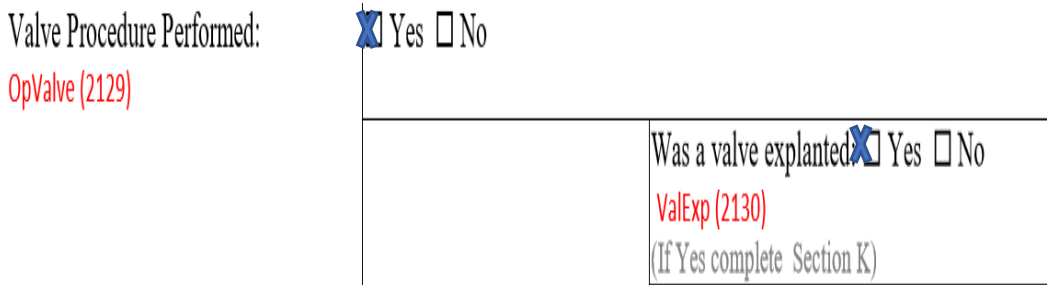
Approach: ☐ Transapical ☐ Transaxillary ☐ Transfemoral ☐ Transaortic ☐ Subclavian ☐ Other
VSTCVR (3405)

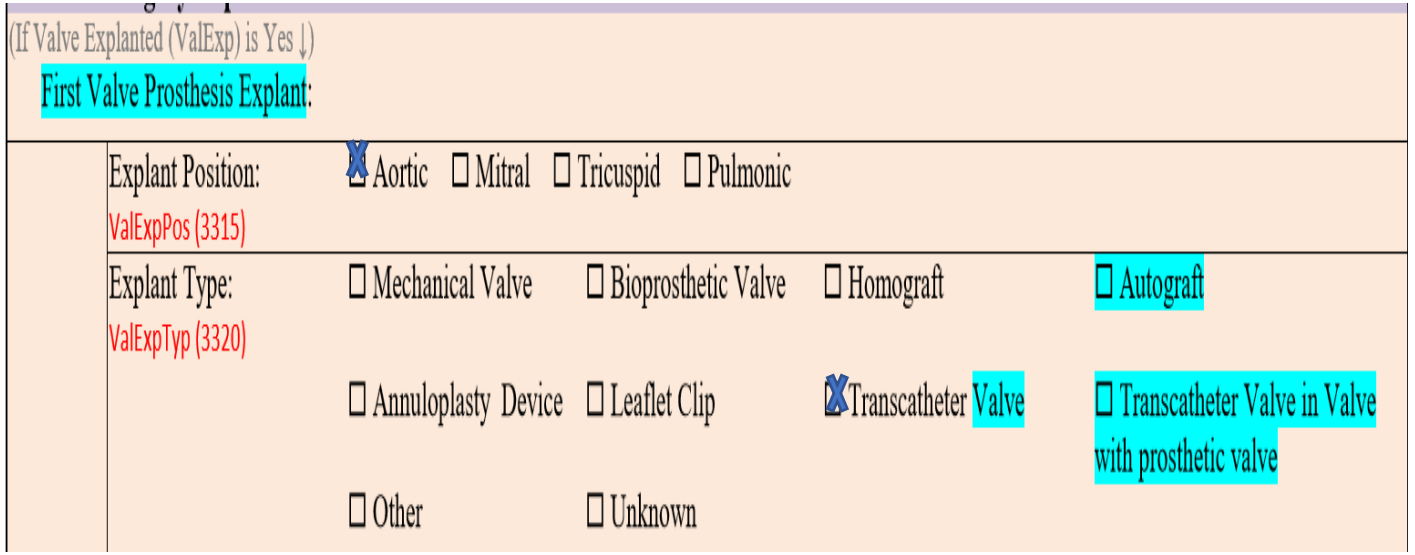
Surgical valve Replacement: ☒ Yes ☐ No
VSAVSurgRep (3407)

Valve Explant Surgery – Yes or No?

Op Note - An aortotomy was then performed intimately attached to the aortic wall was the transcatheter valve. I was able to manipulate the valve frame in order to complete the aortotomy. At this point the valve was grasped and inspected.

- **Answer - In this scenario, the TAVR valve was deployed and was explanted. Since the TAVR is a prior CV intervention, we need to document the explant of the valve.**





Other Cardiac Procedure Yes or No?

Should the removal of the transcatheter valve be considered another procedure, and thus this case will not be coded as an isolated aortic valve replacement?

- Answer – No this is not an "other cardiac procedure" since it was retrieved at time of aortotomy.
- If the valve had been found in some other location that required an incision not normally associated with the SAVR then it would be an "other cardiac procedure." For example, TAVR valve was found in the LV and had to be removed that would be an "other cardiac procedure."

Other Cardiac Procedure, except Afib:	☐ Yes, planned
OpOCard (2140)	☐ Yes, unplanned due to surgical complication
	☐ Yes, unplanned due to unsuspected disease or anatomy
	☒ No
(If Yes, Complete Section M)	

thank you!

Open Discussion

Please use the Q&A Function.

We will answer as many questions as possible.

We encourage your feedback and want to hear from you!