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The Society of Thoracic Surgeons

Adult Cardiac Surgery Database

QI Series Webinar

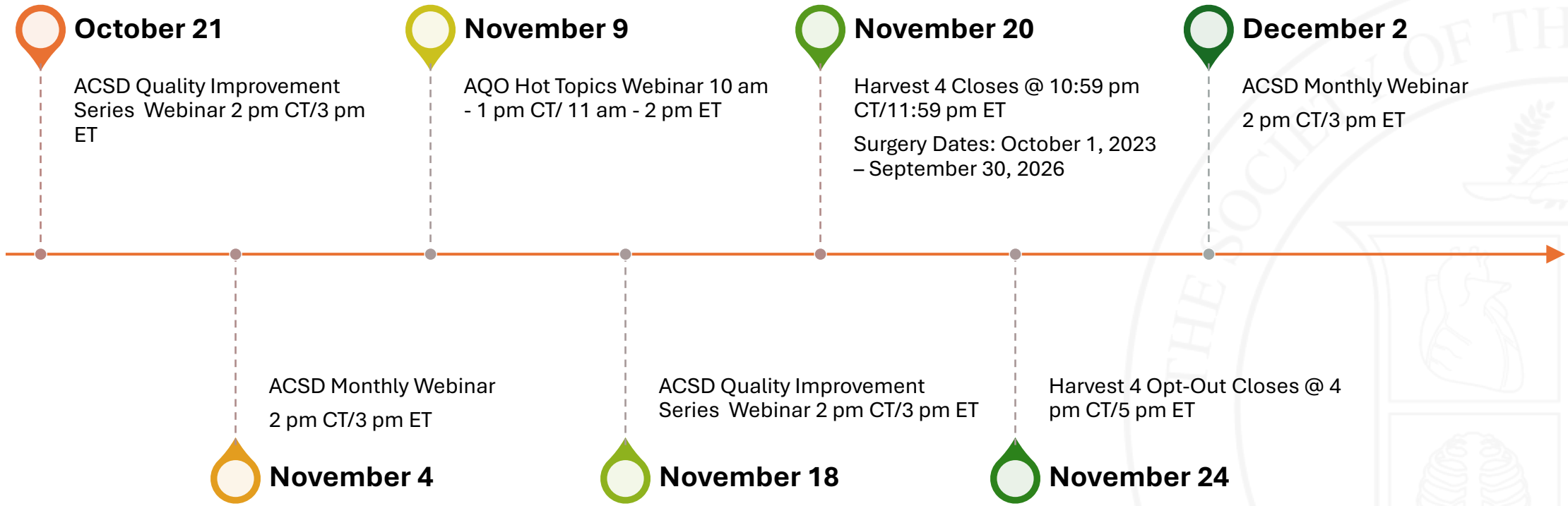
October 21, 2026



Agenda

- Welcome and Introductions
- STS Updates
- Postoperative Events-Renal Failure and Stroke – Melinda Offer
- Open Q&A

Important Dates



2026 Harvest Schedule

Term	Harvest Submission Window Close	Opt-Out Date	Includes Procedures Performed Through:	Report Posting	Comments
Harvest 1	February 20	February 24	December 31, 2025	Spring 2026	Star Rating
Harvest 2	May 29	June 2	March 31, 2026	Summer 2026	
Harvest 3	**August 28**	**September 1**	**June 30, 2026**	**Fall 2026**	**Star Rating**
Harvest 4	November 20	November 24	September 30, 2026	Winter 2026/2027	

Up next: Harvest 3 closes August 28 - opt-out by September 1, reports post Fall 2026 with star ratings.

Analysis for each harvest is based on a 36-month window. Data submission is continuous; submission close occurs at 11:59 p.m. ET on the date listed. Harvest opt-out closes at 5:00 p.m. ET on the date listed.

AQO 2026 – New Orleans

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AQO Virtual Pass

Available through December 21, 2026

Purchase AQO 2026

For those unable to travel to New Orleans, STS offers a virtual option. Virtual Pass buyers will gain access to on-demand content, e-posters online and the recorded archive of all sessions following the conclusion of the meeting.

Category	Member	Non-Member
Virtual Pass	$450	$550

Buy Now

AQO 2026 Justification Letter Request



Hot Topics Webinar

November 9, 2026

Agenda TBD

AQO 2027: Virtual-only

All databases. In-person format returns in 2028.

CE/CEU & EVALUATIONS

Claim your continuing education credit

STEP 1

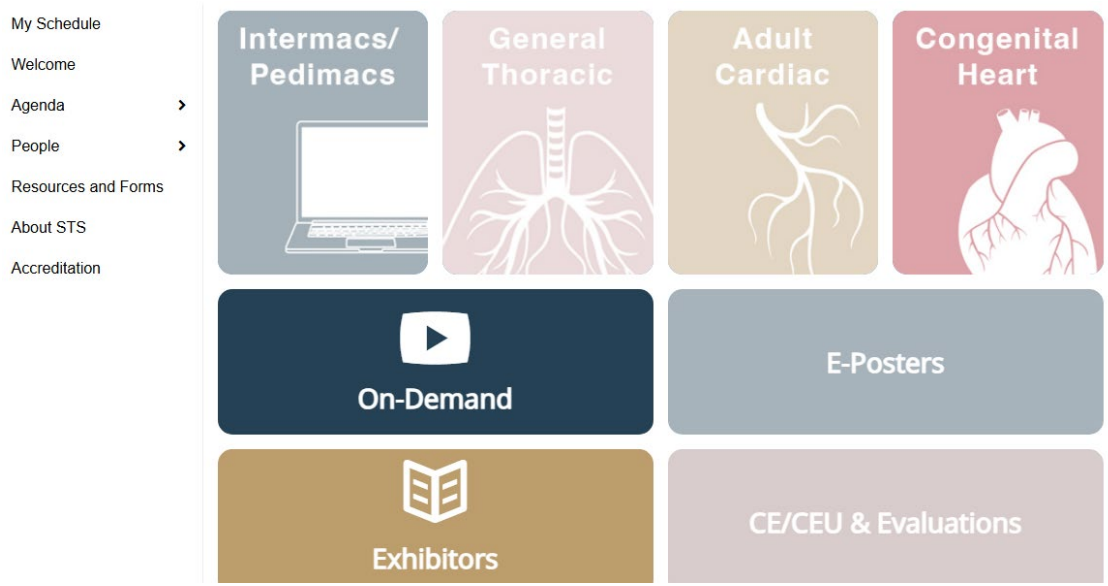
View all AQO content before you start your evaluation

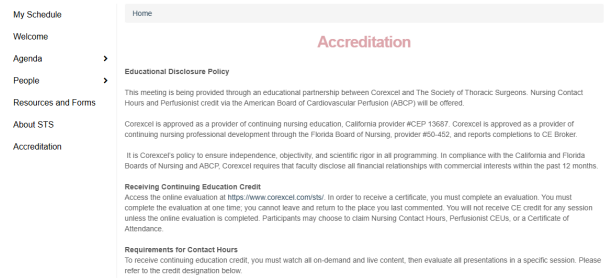
STEP 2

Complete the evaluation in one sitting — you cannot leave and return

DEADLINE

Claim your credit by Monday, January 4, 2027







STS Updates

NEW **ACSD Public Reporting Page updated**
Now includes the 2026 Harvest 1 analysis

NEW **Aorta procedure resources**
Procedure Identification Chart and Risk Model Variable Chart now available on the STS website.

NEW **October 2026 training resources**
ACSD Training Manual Volume 1 and FAQ Summary now available. No updates to Volume 2.

COMING SOON **Harvest 3 Reports**
Reports will be available soon.

COMING SOON **National Report Overview**
Harvest 3 overview will be available soon.

Aorta Procedure Highlights

Harvest 3

Reports will include analyzed data for Aorta Procedures

Proc ID 13

PLANNED AORTA PROCEDURE SUBGROUPS

Ascending aorta

Includes hemiarch procedures

Bentall

AVR + root +/- ascending aorta

Ascending aorta + AVR

Valve sparing root procedures

+/- ascending aorta

Aorta Procedure Highlights

INCLUDED

Planned elective and urgent procedures

EXCLUSIONS

Concomitant procedures

Exception: epicardial and LAA exclusion Afib procedures allowed

Endocarditis/infection

Trauma

Prior ascending aorta procedures

Cardiogenic shock

Multiple exclusions apply. PLEASE consult the Procedure Identification Chart for additional information.

Aorta Procedure Highlights

RISK-ADJUSTED RESULTS

Will be available for:

Operative mortality

Reoperation for cardiac reasons

Stroke

Prolonged ventilation

Renal failure

Model excludes deep sternal wound infection

NOT INCLUDED

Aorta procedures are excluded from:

Multiprocedural Composite

Surgical Treatment of Afib metric

Star ratings

STS Public Reporting

Post-op Renal Failure and Post-op Stroke

Melinda Offer, RN, MSN

When to code post-op renal failure “Yes”

Renal failure is determined by one of the 3 methods below:

Creatinine ≥3 × baseline - CreatLst (605)

OR

Creatinine ≥4.0 mg/dL

AND a rise of ≥0.5 mg/dL from the preoperative value

OR

New postoperative dialysis

Key points for coding

1 **Baseline creatinine: SEQ 605 (CreatLst)**

Use the value closest to surgery, before anesthetic management in the induction area or operating room.

2 **Preoperative dialysis SEQ 375 (Dialysis)**

If the patient was on dialysis pre-op, then do not code post-op renal failure or dialysis as a post-op complication.

3 **Preoperative creatinine =>4.0 mg/dL**

Do not code postoperative renal failure or dialysis as a complication. The risk-adjusted renal-failure metric excludes these patients.

What does a “0.5 rise” mean?

This creatinine indicator requires both thresholds

≥4 mg/dL

Highest postoperative serum creatinine

AND

≥0.5 mg/dL rise

Compared with the preoperative value

Rise = highest postoperative value − preoperative value

A 0.5 mg/dL rise alone is insufficient

Both examples rise by 0.5 mg/dL. Only the second reaches 4 mg/dL.

Preoperative	Highest postoperative	Rise	Meets this indicator?
1.0 mg/dL	1.5 mg/dL	0.5 mg/dL	No: postoperative value <4
3.6 mg/dL	**4.1 mg/dL**	**0.5 mg/dL**	**Yes: both thresholds met**

Warning

The Peak Post-op Creatinine

should never be less than

the Peak Post-op Creatinine within 48 hours.

Peak Postoperative Creatinine Level within 48 hours of OR Exit: PeakPostCreat48Hrs (6550)_____	Peak Postoperative Creatinine Level prior to discharge: _____ PostCreat (6555)

Dialysis must actually begin

A new postoperative requirement includes a single treatment or longer-term therapy.

Scenario	Coding guidance
New dialysis received after surgery	Include, even for a one-time treatment
Dialysis needed but refused before initiation	Do not include
Patient dies before dialysis begins	Do not include
Preoperative peritoneal dialysis changes to postoperative hemodialysis	Do not code this switch as a new event

CRRT modalities

Modality	Description
SCUF	Slow continuous ultrafiltration: **no dialysate, used for fluid removal.**
CVVH	Continuous venovenous hemofiltration: **solute clearance without dialysate.**
CVVHD	Continuous venovenous hemodialysis **uses dialysate for solute clearance.**
CVVHDF	Continuous venovenous hemodiafiltration: **uses dialysate for solute clearance.**
PIRRT	Prolonged intermittent renal replacement therapy: 6–18 hours, at least 3 times weekly. **Convective (hemofiltration) or diffusive (hemodialysis) solute removal.**

YES – For renal failure

Hemodialysis
Peritoneal dialysis
CRRT
CVVH
CVVH-D
CVVHDF
PIRRT

NO - For fluid overload alone

Ultrafiltration
SCUF
Aquapheresis

Dialysis Duration captures ongoing dialysis need

April 2021 FAQ

The patient received dialysis after surgery.
The nephrologist arranged dialysis at discharge.
The patient refused dialysis after discharge.

YES

Code DialDur

The intent is to separate patients with possible long-term dialysis from those that recovered kidney function prior to discharge.

Question #1

I have a patient that has a pre-op creatinine of 0.8 and a highest post op creatinine of 2.4. Is this Post Op Renal failure?

A. Code No to post-op renal failure

B. Code Yes to post-op renal failure

Yes, post-op renal failure

If peak post-operative creatinine level (Seq. 6555) is **greater than or equal to** 3x last creatinine level pre-op (Seq. 605) code renal failure – 0.8 x 3 – 2.4

Question #2

Patient had a history of CKD and base creatinine was 3.5 and post peak was 4.1. Do I code this as renal failure?

A. Code No to post-op renal failure

B. Code Yes to post-op renal failure

Yes, post-op renal failure

One of the indicators for renal failure is a serum creatinine level =>4 mg/dL with at least a 0.5 mg/dL rise.

Rise = highest postoperative value − preoperative value

4.1 minus 3.5 = 0.6 rise

Question #3

Patient has a pre-op diagnosis of "ESRD s/p renal transplant“. The patients’ pre-op creatinine was1.24; post-op highest creatinine was 4.91. Not on pre-op dialysis. Do I code this as post-op renal failure?

A. Code No to post-op renal failure

B. Code Yes to post-op renal failure

Yes, post-op renal failure

The patient was not on dialysis pre-op and the patient’s pre-op creatinine was not => 4.0 so the patient will not be excluded from the post-op renal failure metric.

The post-op creatinine was => 4.0 with at least a 0.5 mg/dL rise from the pre-op creatinine (Seq. 605)

Question #4

If the pre-op creatinine level is 0.76 and the highest post-op creatinine was 2.58, but on Discharge the creatinine returned to almost normal 0.78. Does this count as Post-op Renal Failure?

A. Code No to post-op renal failure

B. Code Yes to post-op renal failure

Yes, post-op renal failure

If peak post-operative creatinine level (Seq. 6555) is greater than or equal to 3x last creatinine level pre-op (Seq. 605) code renal failure - 0.76 x 3 = 2.28

Postoperative stroke: coding criteria

Post-Op-Neuro-Stroke Perm

Stroke is an acute episode of focal or global neurological dysfunction caused by brain or retinal vascular injury because of hemorrhage or infarction

Confirmed on imaging **OR** **Neurological symptoms do not resolve within 24 hours**

Imaging confirmation can qualify the event even when symptoms resolve within 24 hours.

Stroke Types

Ischemic

Blockage of a blood vessel supplying the brain.

Hemorrhagic

Bleeding into or around the brain.

- *Includes intraparenchymal, intraventricular or subarachnoid hemorrhage.*

Do not code in Post-op Stroke

Confusion

Delirium

Encephalopathic events

When opinions differ about whether a stroke occurred, the neurologist is the final arbitrator.

Positive imaging with symptoms under 24 hours

Abrupt onset neurological deficit

MRI positive for acute CVA

Symptoms resolve within 24 hours

YES

Code post-op CVA

Imaging confirms postoperative stroke. Symptom resolution within 24 hours does not exclude this event.

Anoxic coma after cardiac arrest

November 2021 FAQ

Postoperative cardiac arrest

Unresponsive to verbal and noxious stimuli

Myoclonic jerks

Neurologist's diagnosis: "Anoxic coma"

Capture anoxic coma as encephalopathy

SEQ 6821 (CNEnceph)

Question #1

POD 4 patient "has new focal deficit of the right hand with weakness" documented at 0741.

MRI done show acute infarcts. Embolic phenomena is suspected."

Patient left AMA the same day. No neurology consult. Would this be captured as a stroke?

A. Yes
B. No

Yes

Stroke was confirmed on imaging

Question #2

POD 1 patient c/o sudden onset numbness and heaviness in the right side of this tongue and mouth and difficulty speaking.

Patient went for CT which did not show any acute areas of hemorrhage or areas of infarct. Neurologist states that patient was not a candidate for tPA or IA.

Symptoms resolved within 2 hours

Is this coded as a stroke?

A. Yes
B. No

No

No positive imaging and symptoms did not last > 24 hours

We do not capture TIA in V 4.2

Question #3

A patient had a Coronary Artery Bypass (CAB) and Carotid Artery Endarterectomy (CEA) done by a cardiac surgeon and a vascular surgeon. Post-op the patient developed left sided weakness in arm. A stroke was confirmed on imaging; however, it was documented in the progress notes that the stroke was from the CEA. Do I code this as a post-op stroke?

A. Yes
B. No

Yes

Patient had post-op stroke

Stroke was confirmed on imaging

Question #4

We recently had a patient that had speech difficulty and aphasia. Symptoms lasted 48-72 hours post-op. Speech improved slightly at discharge. CT scan was negative. Neurologist states it was a stroke. CT surgeon feels it was not a stroke. Do I code as a stroke?

A. Yes
B. No

Yes

Symptoms did not resolve within 24 hours

Update Aug 2022 – The Neurologist is the final arbitrator when there are differences in opinion as to if a stroke occurred

Thank you

Any questions?



Questions?



Please use the raise-hand function.

Please use the Q&A Function.

We will answer as many questions as possible.

We encourage your feedback and want to hear from you!

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Thank You for Joining!

ACSD Monthly Webinar – Aorta Session 7
Wednesday, November 4, 2026, at 2pm CT/3pm ET