



# **STS** National Database<sup>TM</sup>

**Trusted. Transformed. Real-Time.**



**Society of Thoracic Surgeons**

**Congenital Heart Surgery Database  
Monthly Webinar**

**September 23, 2021**

# CHSD Monthly Webinar

- Welcome and Introductions
- STS Update
- Complications Revisited
- IQVIA Update
- User Feedback
  - Include Ticket Number/Case Number



# STS Updates

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- **September Training Manual posted**
- **2020 Harvest Analysis Update**
  - Data expected to be released mid October
  - Dashboards UAT testing winding down
    - Fixes are being implemented and re-tested prior to release
  - Participants will be notified when the data is available within IQVIA platform
  - IQVIA to provide an educational session on the Risk Adjusted Dashboards
    - October 5<sup>th</sup> User Group Call
- **2021 Harvest Update**
  - <https://www.sts.org/registries/sts-national-database/harvest-schedule-and-information>
    - **Spring/Fall 2021 Harvest close is TBD**
      - Please continue using open submission and cleaning your data
      - STS will give Participants a minimum of two weeks notice prior to harvest close date
      - Includes procedures up through 6/30/2021



# 2021 AQO: A Data Managers Meeting



ADVANCES IN QUALITY & OUTCOMES:  
**A Data Managers Meeting**  
October 12-15, 2021 ■ VIRTUAL



October 12, 2021 - October 15, 2021

Virtual Meeting

**Registration is open!**

The 2021 Advances in Quality & Outcomes (AQO): A Data Managers Meeting features sessions for all four components of the STS National Database. Surgeon leaders and data managers will gather during AQO this year – virtually – to share valuable research and important clinical findings with the goal of improving data collection and patient outcomes. Each day is dedicated entirely to one registry:

- Tuesday, October 12 – Intermacs/Pedimacs
- Wednesday, October 13 – General Thoracic
- Thursday, October 14 – Adult Cardiac
- Friday, October 15 – Congenital

A detailed agenda with speakers and session times will be available in the coming weeks.

Registration is free for STS National Database participants.\*

Please [provide your contact information](#) if you would like to receive updates.

[View the Preliminary Agenda](#)

[Add Calendar Reminder](#)



## Pricing

Registration is required for all attendees. Your registration entitles you to participate in any or all of the meeting days.

STS National Database Participant*	FREE
General Attendee Multiday – STS Member	\$300
General Attendee Multiday – Non-Member	\$400

If you are not an STS National Database participant, you will need an STS Member ID in order to receive the discounted member rate. For help with your STS Member ID, [contact Member Services](#).

Intermacs and Pedimacs participants: click the designated button below to register.

[Register Now](#)

[Register for Intermacs](#)

**\*To receive free registration for AQO**, you must be an STS National Database Participant assigned to one of these roles:

- **Adult Cardiac, General Thoracic, and/or Congenital Heart Surgery Databases:** Surgeon Representative, Participant Surgeon, Anesthesiologist Representative, Anesthesiologist, Primary Data and File Contact, Primary Direct Data Entry Contact, Backup Data and File Contact, Backup Direct Data Entry Contact, Data Quality Report Recipient, or National Report Recipient.





Chasity Wellnitz  
STS CHSD Consultant

- Complications Revisited

# Complications

*An operative or procedural complication is any complication, regardless of cause, occurring (1) within 30 days after surgery or intervention in or out of the hospital, or (2) after 30 days during the same **hospitalization** subsequent to the operation or intervention. Operative and procedural complications include both intraoperative/intraprocedural complications and postoperative/postprocedural complications in this time interval.*

# Complications

*An operative or procedural complication is any complication, regardless of cause, occurring (1) within 30 days after surgery or intervention in or out of the hospital, or (2) after 30 days during the same ~~hospitalization~~ **episode of care** subsequent to the operation or intervention. Operative and procedural complications include both intraoperative/ intraprocedural complications and postoperative/ postprocedural complications in this time interval.*

# Tips for Coding Complications

- Think intra/post op **events** – describing the intra and post-operative course
- Each definition is different – keep training manual open
- Timing – start intraoperatively and go thru the episode of care **for most complications** – *exceptions noted in training manual*
- Complications will overlap





# Cardiac Dysfunction Defined

*Low cardiac output state characterized by some of the following: tachycardia, oliguria, decreased skin perfusion, need for increased inotropic support (10% above baseline at admission), metabolic acidosis, widened Arterial - Venous oxygen saturation, need to open the chest...*



# Cardiac Dysfunction – How to code

- Must meet both:
    - Cardiac dysfunction *and*
    - Low cardiac output
  - In the setting of normal cardiac function:
    - Hypovolemia will not meet criteria
    - Vasoplegia will not meet criteria
-

## Cardiac Dysfunction - Definition Improvements

*A patient will be considered to have “inotrope dependence” if they cannot be weaned from inotropic support (10% above baseline at admission) after any period of 48 consecutive hours that occurs after the time of OR Exit Date and Time, and either (1) within 30 days after surgery in or out of the hospital, and (2) after 30 days during the same ~~hospitalization episode of care~~ subsequent to the operation. ~~If patient meets criteria for severe cardiac dysfunction, only code "severe."~~*

# Cardiac Dysfunction – Coding Tips

- Criteria is ***not*** dependent on treatment
- No consideration of expected vs. unexpected
- Immediately post op timeframe ***still counts*** if criteria is met

## Data capture ideas:

- Partner with clinicians
- Update EHR documentation templates

# Intraventricular Hemorrhage > Grade 2

- No current Training Manual definition
- Will bring over the IVH definition from preoperative factors
  - A Grade 3 IVH requires the existence of a neurologic imaging study indicating a new or previously unsuspected collection of intraventricular hemorrhage that involves at least 50% of the ventricular cross-sectional area in sagittal view but not an intraparenchymal component.
  - A Grade 4 IVH requires the existence of a neurologic imaging study indicating a new or previously unsuspected collection of intraventricular hemorrhage that includes an intraparenchymal component extending beyond the germinal matrix

# Arrhythmias While in the OR

**Do not code arrhythmias while on bypass/separating from bypass**

## **Arrhythmia requiring drug therapy**

If drug given at the time of separation from bypass and is discontinued or resolved before leaving the OR, do not code

## **Arrhythmia requiring cardioversion or defibrillation**

Includes rapid atrial/overdrive pacing for a rapid rhythm

## **Arrhythmia necessitating PM, Temporary PM**

Only code if the pacing is present when the patient leaves the OR



## Scenario:

Before skin incision, patient experienced an arrhythmia during line placement that resolved following an amiodarone bolus.

## *Complication: To Code or Not to Code...*

Complication Arrhythmia requiring drug therapy: **Yes**

- The arrhythmia was treated with a medication/drug
- The arrhythmia occurred prior to the insertion of the bypass cannula

## Scenario:

Patient discharges to an acute care facility for extended recovery following a cardiac repair. While there, the patient experiences a pleural effusion and receives a chest tube.

## *Complication: To Code or Not to Code...*

Complication Pleural effusion requiring drainage: **Yes**

- The pleural effusion was drained
- Occurred during the episode of care

## Scenario:

Patient remains on milrinone for 10 days post operatively (>10% at baseline).

## *Complication: To Code or Not to Code...*

Complication Cardiac dysfunction:  
*Depends...*

- Code **YES** if the patient remained on an inotrope due to cardiac dysfunction with low cardiac output.
- Code **NO** if the patient remained on an inotrope without cardiac dysfunction or without LCOS

## Scenario:

Patient returns from the OR on milrinone. An hour later, the patient experiences profound hypotension, tachycardia, and acidosis. Resolved with multiple fluid boluses and the initiation of an epinephrine infusion. The MD dictates the patient had vasoplegia with adequate cardiac function.

*Complication: To Code or Not to Code...*

Complication Cardiac dysfunction:  
**No**

- The patient did not experience cardiac dysfunction

## Scenario:

Patient with a preoperative history of arrhythmia controlled with oral amiodarone. Post-operatively, the patient experiences arrhythmia and is started on an amiodarone infusion.

## *Complication: To Code or Not to Code...*

Complication Arrhythmia requiring drug therapy: **Yes**

- The patient did experience an arrhythmia treated with drug/medication
- The arrhythmia occurred during the episode of care

# Answers to Submitted FAQs....

- How much data to complete when procedure canceled before skin incision
  - Complete the diagnosis, procedure (canceled before skin incision), Op type (Other), and preop factors
- How to capture pulmonary hypertension preoperatively
  - Can include as a diagnosis, Pulmonary vascular obstructive disease
  - Codes 1385, 1390, 1400, 1410



## How to Code the Diagnoses

**Defined** – *Indicate all diagnoses noted at the time of the surgical procedure or documented by preoperative studies. This entry may duplicate the fundamental diagnosis.*

**Code:**

- Primary diagnosis
- Other diagnosis(es) if present
- S/P diagnosis(es)
- Fundamental diagnosis – not required but useful locally

## Scenario:

Patient with TOF, PS underwent previous TOF repair, PDA ligation, ASD patch closure. Presents with pulmonary insufficiency and surgical plan is to replace the pulmonary valve with a valved homograft.

## *Included Diagnosis(es)*

- *Fundamental diagnosis:* TOF, PS
- *Primary diagnosis:* Pulmonary insufficiency
- *Other diagnosis(es):* None
- *S/P diagnosis:* TOF repair; ASD repair, patch; PDA closure, surgical

## Scenario:

Patient with heterotaxy right atrial isomerism, complete unbalanced AVSD, PDA, and aortic arch hypoplasia.

Undergoes initial aortic arch reconstruction, PA banding, and PDA ligation. Due to an increasing arch gradient and severe common AV valve regurgitation, patient returns for DKS, Glenn and common AV valvuloplasty.

## *Included Diagnosis(es)*

- *Fundamental diagnosis:* Single ventricle, Heterotaxy
- *Primary diagnosis:* Common AV valve insufficiency
- *Other diagnosis(es):* Aortic arch hypoplasia; Single ventricle, Unbalanced AV canal
- *S/P diagnosis:* Aortic arch repair; PA banding; PDA closure, surgical



# IQVIA Update Joe Brower

# IQVIA 2021 Known Issues

**Items below are under review by the IQVIA development team and will be included in a future release.**

## **Missing Variable Report**

- **STS-6892** – Identified variable logic will be updated on the MVR report for cases where demographic version is prior to 3.3, currently they are displaying as missing
- **STS-7282** – Anesthesia Adverse event update to the calculation will be added to the MVR report calculation
- **STS-7271** – COVID19 variables (TempCode) and (TempDate) and Hematocrit Prior to Circulatory Arrest or Cerebral Perfusion (HCTPriCircA) will be added to the MVR report calculation

# IQVIA 2021 Known Issues Con't

**Items below are under review by the IQVIA development team and will be included in the CHSD Risk Adjusted Report Release.**

## **Primary Procedure Report**

**STS-7126** - Primary Procedure Mismatch Report Exception Rule 1 is being ignored and using the general rule, VSD repairs are displayed as the recommended primary

**STS-7240** – Exception Rule related to codes 1280 and/or 1660 are not recognized in identified scenarios



# IQVIA 2021 Known Issues

**Items below are under review by the IQVIA development team and will be included in a future release.**

## **Missing Variable Report**

**Confirmed Variables that not reported as missing - the report will be updated:**

- 1. TempCode**
- 2. TempDate**
- 3. Anesthesia Adverse Event**
- 4. HCTPriCircA**

# IQVIA Update

**Please note: Submitted tickets are currently under review and the IQVIA support team will follow up on resolution and/or target release confirmation.**

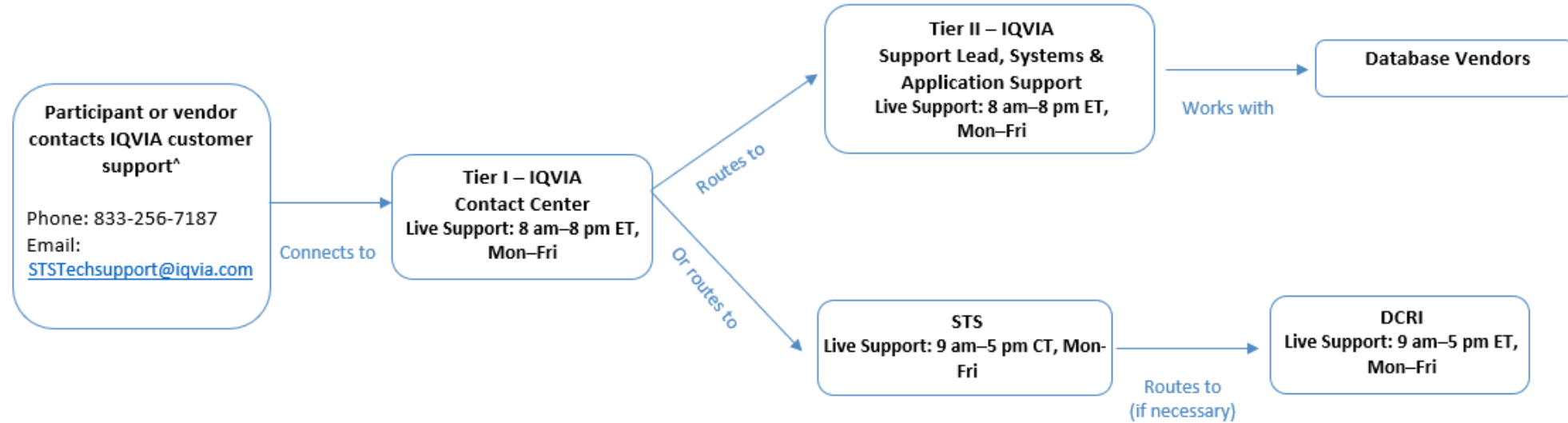
**The IQVIA Team is currently reviewing items that will be released in an upcoming release. Those items will be posted to the Notifications section.**



# IQVIA Support Plan



Please include your Participant ID



# 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](mailto:STSTechSupport@IQVIA.com) (Uploader, DQR, Missing Variable, Dashboard, Password and Login )
- 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*



# Contact Information

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- 312-202-5822

Database Operational  
Questions

- [STSDB@sts.org](mailto:STSDB@sts.org)



# Upcoming CHSD Webinars

## User Group Call

- October 5 @ 12:00pm CT

## Monthly Webinar

- October 21 @ 12pm CT



# 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!



# STS National Database™

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## THANK YOU FOR JOINING!