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Society of Thoracic Surgeons

Congenital Heart Surgery Database
Monthly Webinar

June 21, 2022
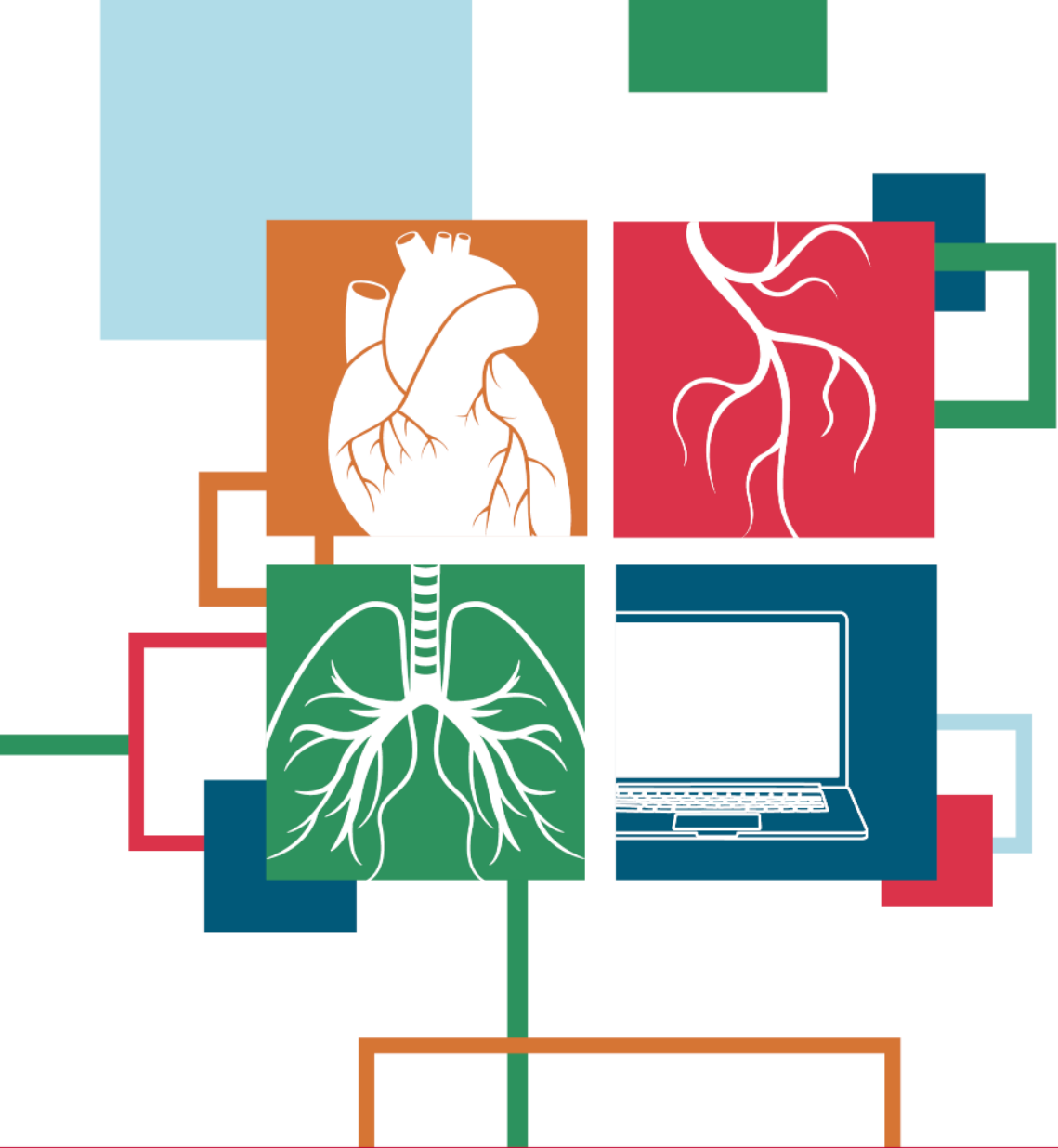
CHSD Monthly Webinar

- Welcome and Introductions
- STS Update
- AQO 2022
- Education (Chasity Wellnitz)
- User Feedback
  - Include Ticket Number/Case Number

STS Updates

- **June Training Manual posted**

- **2021 Harvest Analysis Update**
  - Analysis results expected to be available early Summer (prior to Spring 2022 Harvest Close)
  - Official STS Notification to be sent when available

- **Spring 2022 Harvest Update**
  - Harvest Close: TBD - Task Force discussion will be held at the end of this month
  - More info will be shared with Participants once we have final timeline on release of Fall 2021 analysis reports
  - Opt out: TBD

- **2022 Audit Update**
  - **Notification Letters**
  - **30-day Status Verification (Mt30Stat seq. 4200; MtDDDisStat seq. 4260)**

Abstract Submission Deadline: Tuesday, July 5, 2022.

Click **Submit an Abstract** on the STS AQO Website.

All authors listed on the abstract are required to submit a Disclosure Form at the time of submission. Your submission will not be listed as complete unless each author has submitted a Disclosure Form.

Submit an Abstract

Abstracts are now being accepted for consideration. Submissions are due on Tuesday, July 5, 2022, at 11:59 p.m. ET. Accepted submissions will be presented as e-posters, while a small number also may be selected for oral presentation. Submitted abstracts must use STS National Database Core Fields and Participating Sites Custom Fields to produce results.

Deadline

Tuesday, July 5, 2022, at 11:59 p.m. ET

| View Abstract Guidelines | Submit Abstract |

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ADVANCES IN QUALITY & OUTCOMES:
A Data Managers Meeting
October 26–28, 2022 ▪ PROVIDENCE, RHODE ISLAND

AQO Registration is Open!

Receive Early Bird Registration Pricing through Friday, August 26.

STS MEMBER	Early Bird (August 26, 2022)	Standard
One Track	$550	$650
Two Tracks	$900	$1,100
Multi-Day (Three Tracks)	$1,150	$1,450
Virtual Pass	$300	$300

NON-MEMBER	Early Bird (August 26, 2022)	Standard
One Track	$650	$750
Two Tracks	$1,100	$1,300
Multi-Day (Three Tracks)	$1,450	$1,750
Virtual Pass	$400	$400

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Friday, October 28, 2022 – Congenital Session

	In Person	Virtual Pass
• In-person sessions with live Q&A	✔	
• On-demand content (available mid-October)	✔	✔
• Recorded archive of in-person sessions (available mid-November)	✔	✔
• Breakfast, lunch, and refreshment breaks	✔	
• Personal interactions and networking with peers	✔	
• Networking Reception with speakers, vendors, and colleagues	✔	
• Face-to-face time with exhibitors	✔	
• Complete exhibitor listing	✔	✔
• Exhibit Hall giveaways and Passport to Prizes	✔	
• AQO Hot Topics Webinar (in January)	✔	✔
• Digital conference materials (PowerPoint presentations, handouts, and case scenarios)	✔	✔
• Opportunity to view and vote on your favorite e-poster	✔	✔
• Continuing Education/CEU Credits	✔	✔
• Explore the sights and sounds of Providence, Rhode Island	✔	

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CHSD Preliminary Program Topics

- Implementation of new STAT Scores
- Adults with Congenital Heart Disease Fields
- Version Upgrade / DCF
- Case Scenarios
- Morbidity
- 30-Day Follow-Up
- Anesthesia
- Audit
- Volume Project
- How to Use Your Data for Everyday Practice

- [Submit your questions or case scenarios](#) **by Friday, August 16.**

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The Society of Thoracic Surgeons

ADVANCES IN QUALITY & OUTCOMES:
A Data Managers Meeting
October 26–28, 2022 ■ PROVIDENCE, RI

- Educational sessions and social events will take place at the Rhode Island Convention Center (1 Sabin St, Providence, RI 02903).

- A block of rooms have been reserved at the Omni Providence Hotel (1 West Exchange St., Providence, RI 02903). The special AQO group rate of $259, plus state and local taxes, is guaranteed through **Tuesday, October 4,** or until the group block is sold out.
- Reserve online
- Call 401-598-8000. Be sure to reference "AQO" or "Advances in Quality and Outcomes."

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Chasity Wellnitz

CHSD Consultant/Core Group

Phoenix Children's Hospital

Webinar Discussion Topics

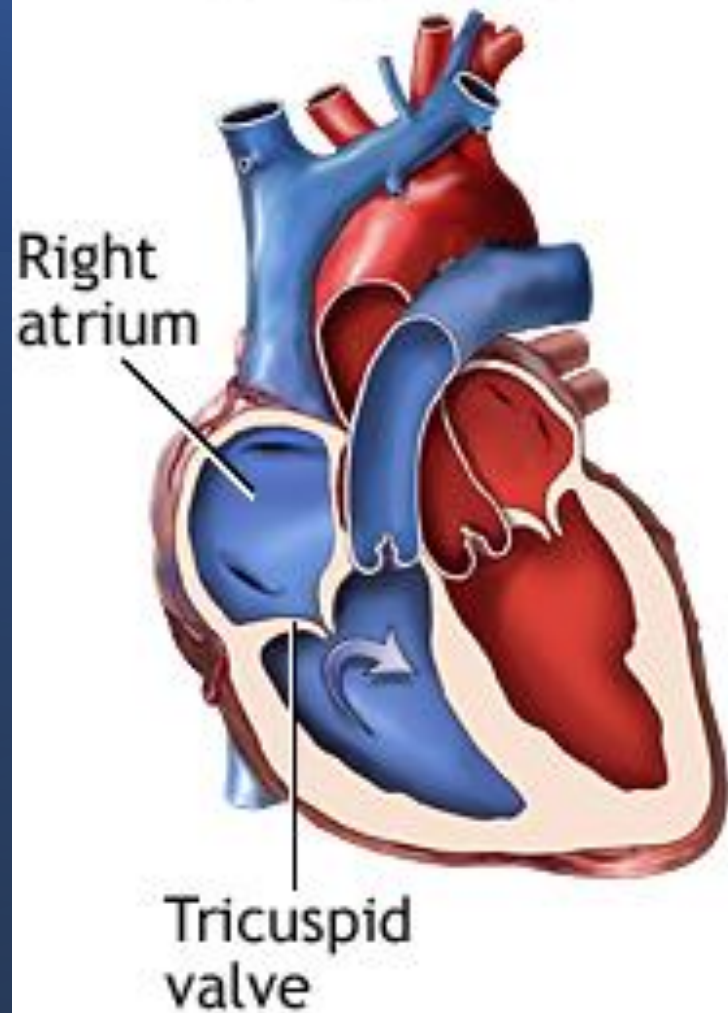- Starnes procedure coding clarification

- Database audit policy

Procedure Coding Update:
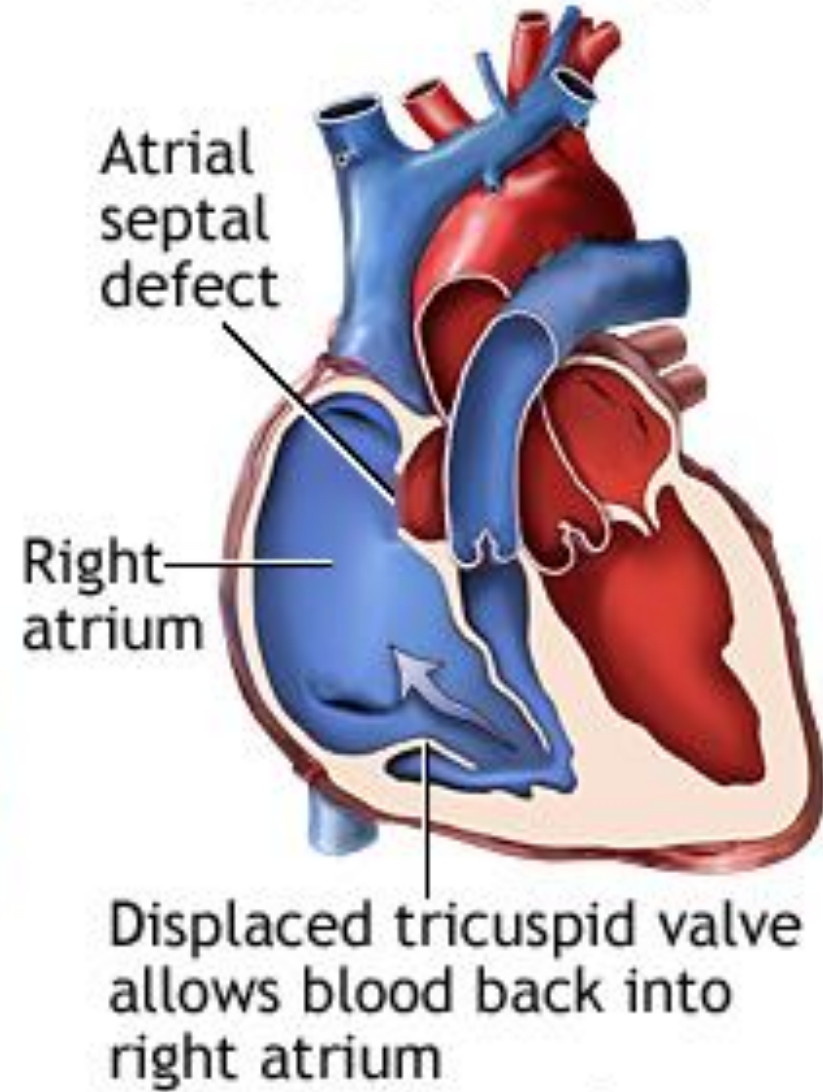
Starnes procedure

What is a Starnes procedure?

- Surgical treatment for Ebstein anomaly – more severe cases

- Surgical technique
  - Fenestrated patch closure of the tricuspid valve
  - Systemic to pulmonary artery shunt
  - Atrial septectomy
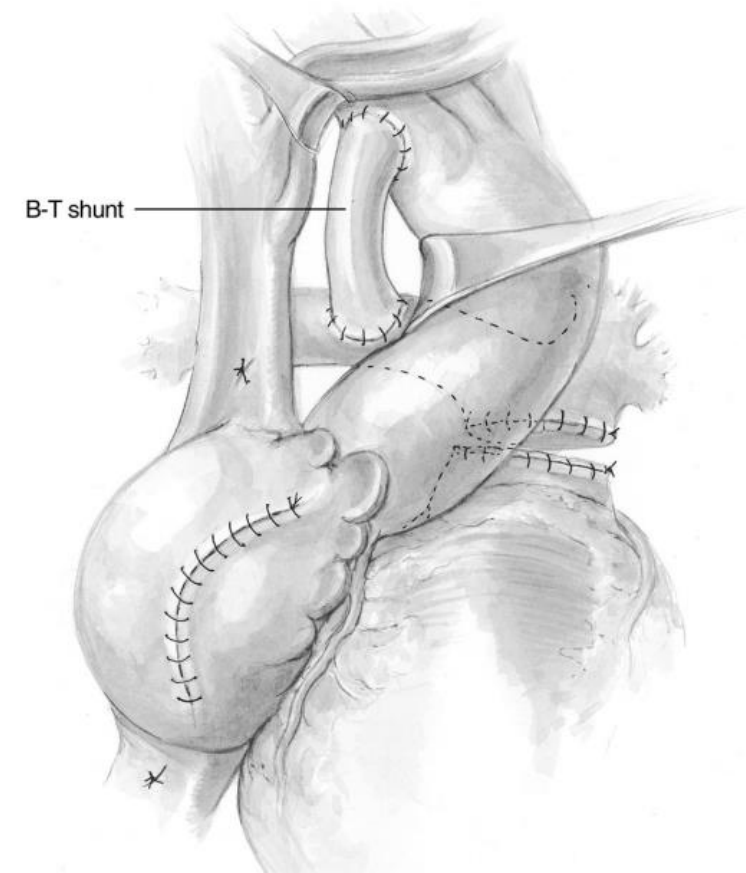 - Reduction right atrioplasty
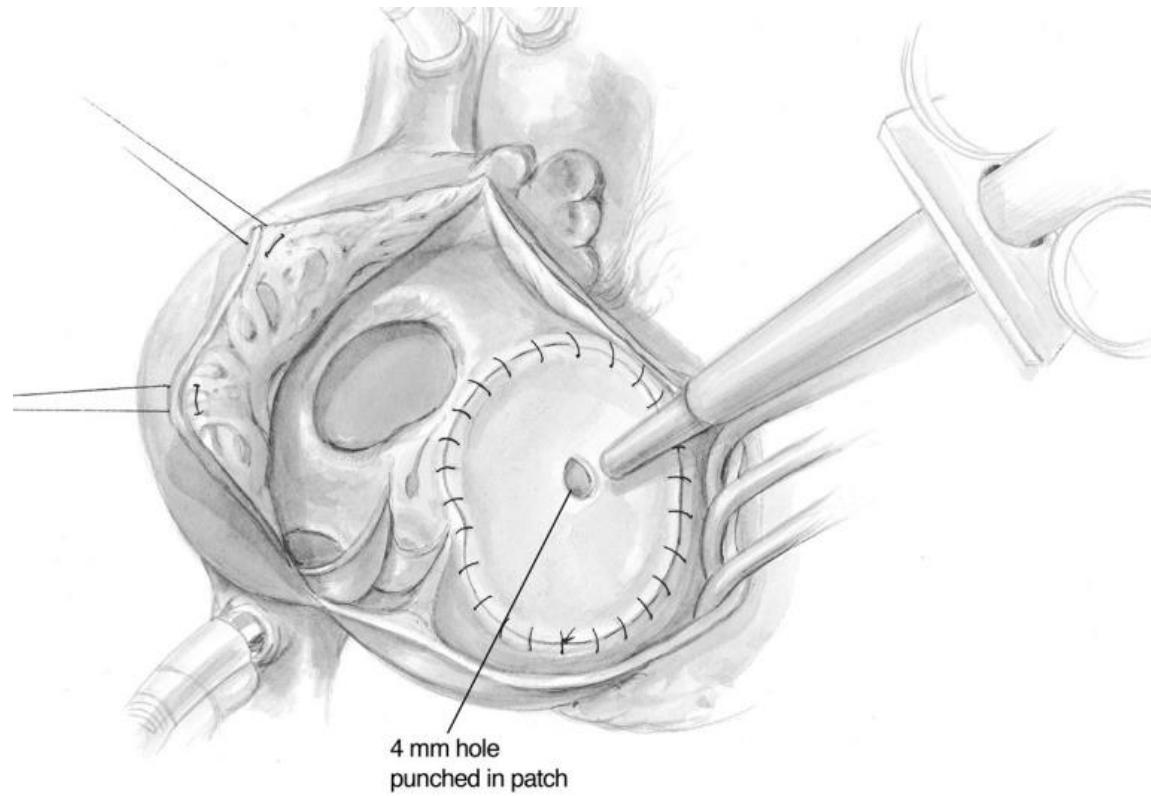 - RVOT procedure

Normal heart

Right atrium

Tricuspid valve

Ebstein's anomaly

Atrial septal defect

Right atrium

Displaced tricuspid valve allows blood back into right atrium

A.D.A.M.

https://medlineplus.gov/ency/imagepages/19884.htm

4 mm hole
punched in patch

B-T shunt

Reemtsen BL, Starnes VA: fenestrated right ventricular Exxclusion (Starnes' Procedure) for severe neonatal Ebstein's anomaly. *Operative Techniques in Thorac and Cardiovas Surg*. 2008;13(2):91-100. https://doi.org/10.1053/j.optechstcvs.2008.03.002

Ebstein Anomaly Repairs in the CHSD

(465) Ebstein's repair

To assure an accurate count of repairs of Ebstein's anomaly of the tricuspid valve, this procedure code was included. Repair of Ebstein's anomaly may include, among other techniques, repositioning of the tricuspid valve, plication of the atrialized right ventricle, or right reduction atrioplasty. Often associated ASD's may be closed, and arrhythmias addressed with surgical ablation procedures. These procedures should be entered as separate procedure codes.

(480) Valve closure, Tricuspid (exclusion, univentricular approach

In a functional single ventricle heart, the tricuspid valve may be closed using a patch, thereby excluding the RV. Tricuspid valve closure may be used for infants with Ebstein's anomaly and severe tricuspid regurgitation or in patients with pulmonary atresia-intact ventricular septum with sinusoids

Starnes Procedure Coding

Coding Clarification:

- Starnes Procedure
  - Code procedure (480) Valve closure, Tricuspid (exclusion, univentricular approach

- Code other procedures separately:
  - Systemic to pulmonary artery shunt
  - Atrial septectomy
  - RVOT procedures

Next Steps...

Starnes Procedure Coding

TM Updates

- Clarify definition

Recoding of Data

- Small number of procedures likely coded incorrectly
- Site specific decision to recode previous procedures

Audit Policy Update:

Audits in the STS databases

STS Database Audits

- Purpose
  - Data accuracy
  - Education opportunity

- Requirement participation agreement
  - Approximately 10% sites within each database audited annually

Policy posted on the STS website

https://www.sts.org/about-sts/policies/sts-national-database-audit-policy

STS Database Audit – Site Selection

Random selection of sites from the eligible audit pool

Audit Pool Inclusions

- Active participant for all 12-months of the audited time period

- Capture specified minimum number of procedures during the audit time period (CHSD = 30 index ops)

Audit Pool Exclusions

- Sites successfully completed an audit within the previous 3 years

- Sites identified as not meeting expectations during a recent audit

2022 CHSD Audit

- 20 randomly selected index operations

- All mortalities related to an index operation

- Case log review

Surgical Dates:

07/01/20
Thru
06/30/21

CHSD – Random Case Audit Fields

Fundamental diagnosis (374)

Primary diagnosis

Diagnosis (890)

Primary procedure

Procedure (930)

Operation type (1056)

Gender (340)

Premature birth (<1yr) (350)

Gestational age (1yr) (370)

NCAA (530)

Chromosomal abnormality (570)

Syndromes (610)

Date of Admission (780)

Location from which patient was admitted (781)

Date of surgery (790)

Height (800)

Weight (810)

Age at time of surgery (820)

Number of cardiothoracic operations (1090)

Date of hospital discharge (4220)

Discharge location (4240)

Date of database discharge (4250)

Mortality status at hospital discharge (4230)

Mortality status at database discharge (4260)

Mortality 30-day status (4300)

COVID date (6723)

COVID diagnosis (6724)

Preoperative factors (select)

Complications (select)

CHSD – Random Case Audit Fields

Select Preoperative Factors

- Mechanical circulatory support

- Shock, Persistent at time of surgery

- Shock, Resolved at time of surgery

- Hepatic dysfunction

- Necrotizing entero-colitis, Treated medically

- Sepsis

- Coagulation disorder, Hypocoagulable state secondary to medication

- Preoperative neurological deficit

- Renal dysfunction

- Renal failure requiring dialysis

- Mechanical ventilation to treat cardiorespiratory failure

# CHSD – Random Case Audit Fields

Select Complications

- Unplanned interventions (22, 24, 26, 240)

- Renal failure (223, 224, 230)

- Postoperative/postprocedural mechanical circulatory support (40)

- Arrhythmia necessitating pacemaker, Permanent pacemaker (74)

- Paralyzed diaphragm (300)

- Unexpected cardiac arrest (30)

- Neurological deficit, Neurological deficit persisting at discharge (320)

CHSD – Mortality Audit Fields

- Date of surgery (790)

- Date of admission (780)

- Date of hospital discharge (4220)

- Age at time of surgery (820)

- Gender (340)

- Operation type (1056)

- Date of database discharge (4250)

- Mortality status at hospital discharge (4230)

- Mortality status at database discharge (4260)

- Mortality 30-day status (4300)
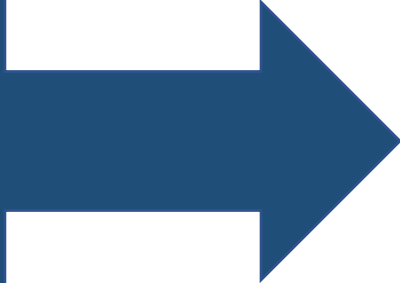
- Mortality date (490)

Audit Scoring

- Data accuracy (data fields)

- Data completeness (data fields)

- Data completeness (case log)
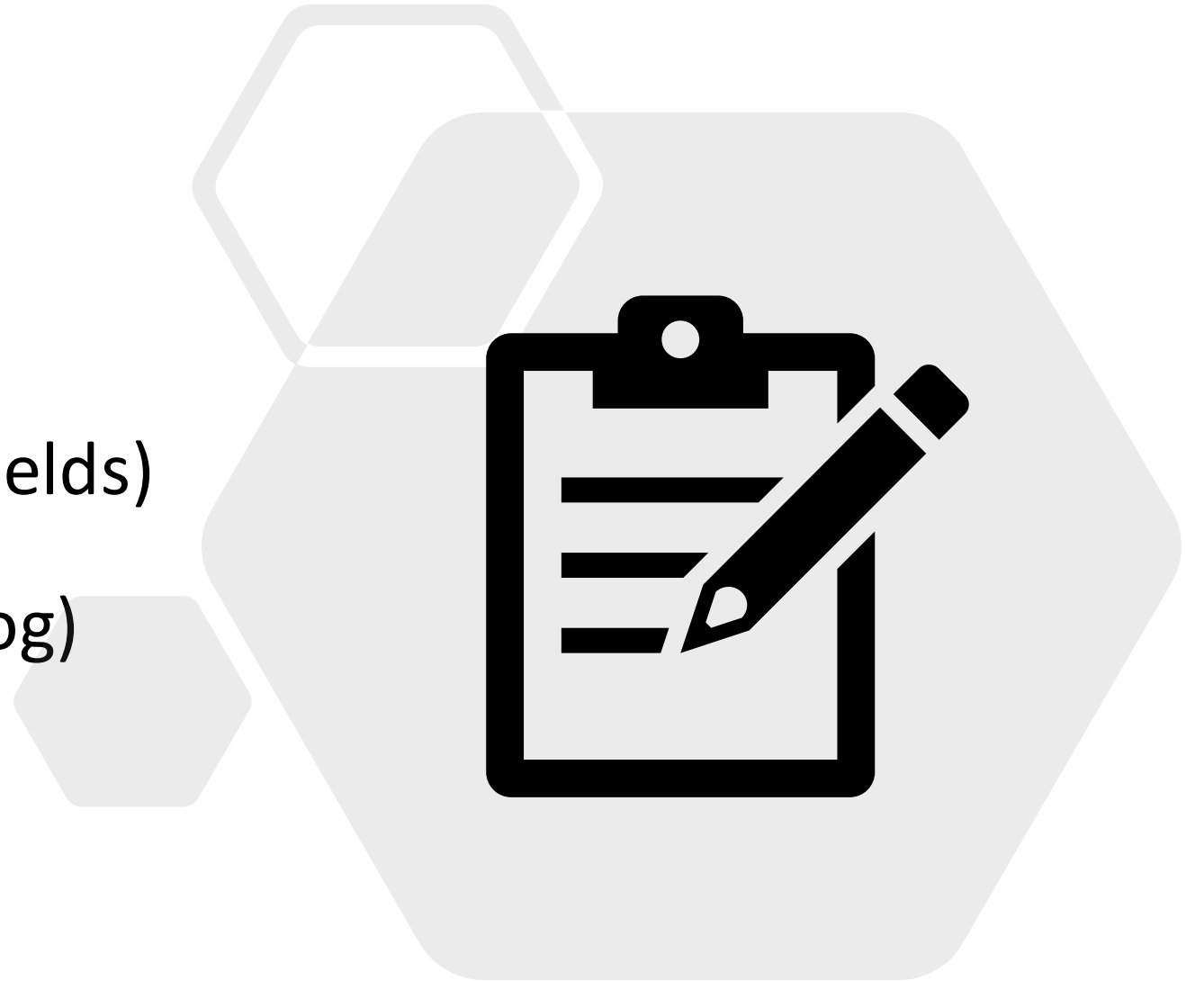
Audit Scoring Continued

Thresholds differ for each section, i.e., complication and mortality sections

- Exceeds expectations
- Meets expectations
- Does not meet expectations

Audit Scoring – <u>Overall Site Accuracy</u>

- ≥ 98% exceeds expectations

- 90.0% - 97.9% meets expectations

- ≤ 89.9% does not meet expectations

A site achieving ≤ 89.9% for overall site accuracy will require a re-audit

Audit Scoring - <u>Complications</u>

- ≥ 98% meets expectations
- 90.0% - 97.9% does not meet expectations

A site achieving ≤ 89.9% for complication accuracy will require a re-audit

Audit Scoring - <u>Mortality</u>

- ≥ 98% meets expectations
- 90.0% - 97.9% does not meet expectations

A site achieving ≤ 89.9% for mortality accuracy will require a re-audit

Audit Scoring – <u>Mortality Post Procedure Status Verification</u>

- 100% meets expectations

A site achieving ≤ 99.9% for mortality post-procedure verification will require a re-audit

Mortality Verification

Variables for post-procedure verification

- Mortality 30-day status
- Mortality status at database discharge

Must provide documentation of where these fields were obtained. EHR documentation is best.

Submit all documentation of post procedure status

Status at 30 days after surgery: Mt30Stat (4300) ☐ Alive ☐ Dead ☐ Unknown

30 Day Status Method of Verification: Mt30StatMeth (4310)

    ☐ Evidence of life or death in Medical Record   ☐ Contact w/ patient or family

    ☐ Contact w/ medical provider   ☐ Office visit to provider ≥ 30 days post op   ☐ SSDMF   ☐Other

Date of Database Discharge: DBDischDt (4250) *(mm/dd/yyyy)* __ __ / __ __ / __ __ __ __

Mortality Status at Database Discharge: MtDBDisStat (4260) ☐ Alive   ☐ Dead   ☐ Unknown

Must show source for this information:

- Upload documents from medical record
- If unavailable, tracking log can be submitted

Tracking Log for Audit

Acceptable without any other source of documentation

- Source used
- Date source identified
- Detailed information

12/01/21: Phone call to patient's mother, Dawn. Reported patient doing well, returned to school.

08/07/22: Spoke with patient's pediatrician, Dr. Garcia. Last appointment on 08/01/22, no concerns, gaining weigh appropriately.

Tracking Log Continued

- Can be within the database (vendor specific)

- Can be outside of the software (i.e., Excel etc.)

Must be able to upload for audit
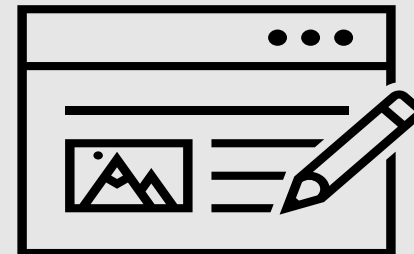
Scenario:

I've been selected for audit – what are next steps....

DON'T PANIC!

Audit Prep

- Follow the instructions on the audit notification

- Note the timeline/due dates

- Ask questions

- ***Get Organized!***

    Make a plan!

    Start early!

Audits – in Summary

- Read the audit policy on the STS website

- Cannot update data for audit – auditors already took a snapshot of data

- Can document source for mortality validation

IQVIA Update
Joe Brower

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.

Analysis Report Questions

- Please contact IQVIA Support
  - chsdtechsupport@iqvia.com

- STS/DCRI will be looped in as needed when tickets are escalated to Tier 2

Contact Information

Leigh Ann Jones, STS National Database Manager, Congenital and General Thoracic

- Ljones@sts.org
- 312-202-5822

Database Operational Questions

- STSDB@sts.org

Upcoming CHSD Webinars

User Group Call

- July 5 @ 12pm CT – canceled
- August 2 @ 12pm CT

Monthly Webinar

- July 19 @ 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!

THANK YOU FOR JOINING!