Society of Thoracic Surgeons

Congenital Heart Surgery Database
User Group Call

August 1, 2023
Agenda

• Welcome and Introduction
• STS Update
• STS Data Manager Education (Chasity Wellnitz and Leslie Wacker, CHSD Consultants)
• Q&A
STS Updates

• 6.23.2 Training Manual is posted!

• STS Website and IQVIA Library Cleanup Underway
  • Purpose is to maintain version control
  • Moving forward Additional Resources will be included in the Analyses Overview and Training Manual
    • Rules to Determine Primary Diagnosis and Primary Procedure
    • STS Combination Procedure Codes

• Appendix C: STAT Categories
  • Will be moved to Version 6.23.2 page (currently resides under v3.41 page)
  • Minor updates to include update reference to 6.23.2 and the highlighting of all combination procedures
    • Refer to Combination Procedures listed in TM and Analyses Overview for all possible component procedures
    • NO CHANGES TO ANY SCORES OR CATEGORIES

• Fall 2023 Harvest: Includes Surgery dates 7/1/2019 - 6/30/2023
  • Harvest Closes September 15th @ 11:59pmET
  • Opt Out no later than September 19th
6.23.2 Data Manager Education

Aug 1, 2023
Discussion Topics

- Forget what you thought you knew
- Recent changes to TM
- Changes to the FAQ process
Forget what you thought you knew...

• V3.41 definitions are NOT always the same

• Admissions that span across both versions WILL utilize separate definitions

• Please collect every field to the best of your ability, but remember: *only the INDEX operation is analyzed*

• Fields may have moved, changed, or have a different meaning

• **ALWAYS refer to the Training Manual**
Forget what you thought you knew...

- Fields stored in tables (preop factors, diagnoses, procedures, etc.) have changed to multi-select
- Existing fields have updated definitions and time frames
- The same “number” could mean something different
Forget what you thought you knew…

This patient was supported with mechanical ventilation to treat cardiorespiratory failure during the hospitalization of this operation and prior to OR Entry Date and Time. Pre-operative non-invasive ventilation should NOT be coded as pre-operative mechanical ventilation. The intent of the field is to capture patients on support with a mechanical ventilator for cardiorespiratory failure via intubation or tracheostomy. Hi-flow gases, Vapotherm, and other “non-invasive” forms of respiratory support (up to and including BiPap without an endotracheal tube) would not meet this definition.

<table>
<thead>
<tr>
<th>470</th>
<th>Invasive Mechanical ventilation to treat cardiorespiratory failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defined: Invasive mechanical ventilation to treat cardiorespiratory failure is defined as the delivery of positive pressure to the lungs utilizing an endotracheal tube or tracheostomy tube in a patient with cardiorespiratory failure.</td>
<td></td>
</tr>
<tr>
<td>Timeframe: at the time of or within 72-hours prior to OR entry date/time.</td>
<td></td>
</tr>
</tbody>
</table>
Forget what you thought you knew...

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Esophagostomy present</td>
<td>Trachostomy present</td>
</tr>
<tr>
<td>Gastrostomy present</td>
<td>Asthma</td>
</tr>
<tr>
<td>Hepatic dysfunction</td>
<td>Bronchopulmonary Dysplasia (BPD)</td>
</tr>
<tr>
<td>Necrotizing enterocolitis, Treated medically</td>
<td>ICD (AICD) [(automatic) implantable cardioverter defibrillator] present</td>
</tr>
<tr>
<td>Necrotizing enterocolitis, Treated surgically</td>
<td>Pacemaker present</td>
</tr>
<tr>
<td>Coagulation disorder, Hypercoagulable state</td>
<td>Tobacco use</td>
</tr>
<tr>
<td>Coagulation disorder, Hypocoagulable state not secondary to medication (intracranial hypercoagulable state)</td>
<td>Transferred from another hospital after undergoing cardiac surgical operation at that hospital during this episode of care.</td>
</tr>
<tr>
<td>Coagulation disorder, Hypocoagulable state secondary to medication</td>
<td>Admitted from home after having a cardiac surgical operation within the past 30 days</td>
</tr>
<tr>
<td>Dyspnea</td>
<td>Preoperative dysrhythmia requiring anti-dysrhythmia medications</td>
</tr>
<tr>
<td>Endocarditis++</td>
<td>illicit drug use within 1 year++</td>
</tr>
<tr>
<td>Immuno compromised</td>
<td>Mediastinal radiation++</td>
</tr>
<tr>
<td>Family History of Coronary Artery Disease++</td>
<td>Heart Failure</td>
</tr>
<tr>
<td>Chronic Lung Disease, controlled with prednisone</td>
<td>Cardiac Dysrhythm</td>
</tr>
<tr>
<td>Hypertension++</td>
<td>Sleep Apnea++</td>
</tr>
<tr>
<td>Liver Disease++</td>
<td>Liver Cirrhosis</td>
</tr>
<tr>
<td>Cancer Within 5 Years++</td>
<td>Peripheral Arterial Disease +</td>
</tr>
<tr>
<td>Syncope++</td>
<td>Unresponsive State++</td>
</tr>
<tr>
<td>Cerebrovascular Disease++</td>
<td>Prior Myocardial Infarction</td>
</tr>
<tr>
<td>Other preoperative factors (if Other Preoperative Factors, Specify)</td>
<td>Other preoperative factors (if Other Preoperative Factors, Specify)</td>
</tr>
</tbody>
</table>

---

- Endocarditis Type: [ ] Active [ ] Treated
- [ ] Allergies
- [ ] Culture
Forget what you thought you knew...

• The same field number may mean something else
Forget what you thought you knew...

- The same field number may mean something else
Forget what you thought you knew...

- The same field number may mean something else
Demographics update

• Associated with the event version when patient is created

  Patient born, admitted, has surgery on 6/1/23 V3.41

  Event Version: 3.41 Demo Version: 3.41

  Patient returns for surgery on 7/5/23 V6.23

  Event Version: 6.23 Demo Version: 3.41

• This mismatch is OK; also ok to update with new events (but not required after v3.0)

• There is no penalty either way
Demographics update

Patient born, admitted, has surgery on 6/1/23 V3.41

Event Version: 3.41
Demo Version: 3.41

Patient returns for surgery on 7/5/23 V6.23

Event Version: 6.23
Demo Version: 3.41

• Fields are associated with the version
Demographics update

- Patient born, admitted, has surgery on 6/1/23 V3.41

- Event Version: 3.41  Demo Version: 3.41

- Patient returns for surgery on 7/5/23 V6.23

- Event Version: 6.23  Demo Version: 3.41

- Fields are associated with the version

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**I. DIAGNOSIS**

Select **ALL** diagnosis that apply;

CIRCLE the **ONE PRIMARY** diagnosis for this operation; Select the **ONE FUNDAMENTAL** diagnosis for this patient;

<table>
<thead>
<tr>
<th>Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASD</td>
</tr>
<tr>
<td>10= PFO</td>
</tr>
<tr>
<td>20= ASD, Secundum</td>
</tr>
<tr>
<td>30= ASD, Sinus venosus</td>
</tr>
<tr>
<td>40= ASD, Coronary sinus</td>
</tr>
<tr>
<td>50= ASD, Common atrium (single atrium)</td>
</tr>
<tr>
<td>2150= ASD, Postoperative interatrial communication <em>(CANNOT BE FUNDAMENTAL)</em></td>
</tr>
<tr>
<td>71= VSD, Type 1 (Subarterial) (Supracristal) (Coronental defect) (Infundibular)</td>
</tr>
<tr>
<td>NA</td>
</tr>
</tbody>
</table>
Changes to TM

- Preoperative Labs / Testing
  - Platelets (>6575 days)
### Changes to TM

**Long Name:** Platelet Count

<table>
<thead>
<tr>
<th>SeqNo:</th>
<th>830</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Name:</td>
<td>Platelets</td>
</tr>
<tr>
<td>Database Table Name:</td>
<td>Operations</td>
</tr>
<tr>
<td>Data Source:</td>
<td>User</td>
</tr>
<tr>
<td>Format:</td>
<td>Integer</td>
</tr>
<tr>
<td>Definition:</td>
<td>Indicate the platelet count in mL closest to the date and time prior to surgery.</td>
</tr>
<tr>
<td>Low Value:</td>
<td>1000</td>
</tr>
<tr>
<td>High Value:</td>
<td>900000</td>
</tr>
<tr>
<td>ParentLongName:</td>
<td>Preoperative Labs Available</td>
</tr>
<tr>
<td>ParentShortName:</td>
<td>PreopLabsAvail</td>
</tr>
</tbody>
</table>

#### Intent/Clarification:
If preoperative labs available, indicate the platelet count.

#### Time Frame:
Use the lab results closest to and prior to OR entry date/time, within 30-days prior to OR entry date/time.

#### Coding Notes:
- Utilize the surgical hospital laboratory report first. If unavailable, then additional source documents may be referenced for lab results.

#### Description:
Platelets (PLT) are a blood component instrumental in clot formation. The unit of measurement for Platelets is \( \times 10^3 / \mu l \) or \( 103 / \mu l \) (1000 \( \mu l \)) or 103 /mm3 (1000/mm3) or K/\( \mu l \) or K/mm3.

#### PLT
**3/18/2023 06:59 (Collected)**
- **676** K/\( \mu l \)
  - Ref range: 150 - 400 K/\( \mu l \)
  - Resulting Lab: MICHIGAN MEDICINE PATHOLOGY AND CLINICAL LABORATORIES

#### PLT
**7/22/2023 03:03 (Collected)**
- **78** K/\( \mu l \)
  - Ref range: 150 - 400 K/\( \mu l \)
  - Resulting Lab: MICHIGAN MEDICINE PATHOLOGY AND CLINICAL LABORATORIES
Changes to TM

- Preop Factors
  - Stroke, CVA, or Intracranial hemorrhage > Grade 2

<table>
<thead>
<tr>
<th>Code:</th>
<th>Value (Display Condition):</th>
<th>Definition / Intent / Clarification:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>component extending beyond the germinal matrix.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Timeframe:</strong> anytime between birth and OR entry date/time.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Code this factor:</strong> If the patient has documented history of a stroke and/or Intraventricular hemorrhage grade II or greater during their lifetime.</td>
</tr>
</tbody>
</table>
Preop Factors

- Stroke, CVA, or Intracranial hemorrhage > Grade 2
Changes to FAQ submissions

1. Submit FAQ
2. Chasity and Leslie triage (weekly)
3. CORE group meeting (monthly – second Tuesday)
Changes to FAQ submissions

1. Submit FAQ

2. Chasity and Leslie triage (weekly)

3. CORE group meeting (monthly – second Tuesday)

   - Answer directly / more information needed (weekly)
   - Send to surgeons / anesthesia (monthly)
   - CORE group meeting / discussion (monthly)
In Summary

Use the Training Manual for every case

Forget what you thought you knew

Available for help always!
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!
Upcoming CHSD Webinars

Monthly Webinar
• August 15 @ 12pm CT

User Group Call
• September 5 @ 12pm CT
Contact Information

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

- Ljones@sts.org

Tech Support
Analysis Report/Data Submission Questions

- STSDB_helpdesk@sts.org

Database Operational Questions

- STSDB@sts.org
THANK YOU FOR JOINING!