STS National Database™

Trusted. Transformed. Real-Time.

Society of Thoracic Surgeons

Congenital Heart Surgery Database
Monthly Webinar

November 21, 2023

Agenda

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

STS Updates

2024 Harvest Schedule

- November Training Manual/FAQ Summary posted
- Fall 23 Harvest Analysis
  - Expected to be released early December
- 2024 Harvest Schedule is posted on STS website

CHSD				
Harvest	Close	Opt-Out	Includes procedures performed through	Report Posting
Spring 2024	March 22	March 26	December 31, 2023	Summer 2024
Fall 2024	September 27	October 1	June 30, 2024	Winter 2024

AQO 2023

- AQO 2023
  - Did not attend and want to purchase content?
  - Deadline to claim Continuing Education Credit is **Friday, December 29th**
  - Need assistance obtaining your credit? Please contact **learn@corexcel.com**
- AQO Hot Topics Webinar
  - Scheduled for **December 5 @ 11amET/10amCT**
  - Agenda finalized

🗓 Event

2023 Advances in Quality & Outcomes: A Data Managers Meeting

Discussions on valuable research and important clinical findings with the goal of improving data collection and patient outcomes.

Purchasing Coming Soon

ADVANCES IN QUALITY & OUTCOMES:
A Data Managers Meeting
SEPTEMBER 26-29, 2023 ■ VIRTUAL

STS National Database
Trusted. Transformed. Real-Time.

6.23.2 Data Manager Education

November 21, 2023

Discussion Topics

TM Updates:

- Number of Prior Cardiac Operations

- Number of Prior CPB Cardiac Operations

Prior Operation Count Change – *Why?*

- Prior sternotomy procedure risk not adequately captured in current count

  e.g., patients undergoing heart transplant who were previously implanted with a VAD

Prior Operation Count Change – *What?*

Number of Prior Cardiac Operations

Prior procedure (2830) VAD implantation where the:

- Optype is VAD

- Incision type is any but other

Prior procedure (2860) ECMO cannulation where the:

- Optype is ECMO

- Incision type is any but other

Prior Operation Count Change – *TM Update*

Number of Prior Cardiac Operations

Indicate the number of surgical procedures performed prior to this procedure based on the criteria below:

- Any prior surgery with OpType (1) CPB Cardiovascular

- Any prior surgery with OpType (2) No CPB Cardiovascular

- Any prior surgery where the procedure is (2830) VAD, Implant *if and only if* the OpType is (6) VAD with CPB or (7) VAD without CPB *and* the Incision Type (IncisionTypeMulti) is *not* (6) Other

- Any prior surgery where the procedure is (2360) ECMO cannulation *if and only if* the OpType is (3) ECMO *and* the Incision Type (IncisionTypeMulti) is *not* (6) Other

Prior Operation Count Change – *What?*

Number of Prior CPB Cardiac Operations

Any procedure where the:

- Optype is VAD with CPB

Prior Operation Count Change – *TM Update*

Number of Prior CPB Cardiac Operations

Indicate the number of surgical procedures performed prior to this procedure based on the criteria below:

- Any prior surgery with OpType (1) CPB Cardiovascular

- Any prior surgery with the OpType is (6) VAD with CPB

Prior Operation Count Change - *Logistics*

- Operations on or after January 01, 2024

  Do not go back and recode previous operations

- Must have documentation to count a procedure

  - e.g., ECMO cannulation documented via median sternotomy

Do the following count as prior cardiac operations?

- Impella device placed in the cath lab by interventional cardiology?

Do the following count as prior cardiac operations?

- Impella device placed in the cath lab by interventional cardiology? *No, not a surgical procedure; incision type other*

?

Do the following count as prior cardiac operations?

- Impella device placed in the cath lab by interventional cardiology? *No, not a surgical procedure; incision type other*

- Central cannulation for ECMO during the index operation?

?

Do the following count as prior cardiac operations?

- Impella device placed in the cath lab by interventional cardiology? *No, not a surgical procedure; incision type other*

- Central cannulation for ECMO during the index operation? *No, not a prior operation; optype not ECMO*

Do the following count as prior cardiac operations?

- Impella device placed in the cath lab by interventional cardiology? *No, not a surgical procedure; incision type other*

- Central cannulation for ECMO during the index operation? *No, not a prior operation; optype not ECMO*

- Berlin heart placement prior to transplant?

?

Do the following count as prior cardiac operations?

- Impella device placed in the cath lab by interventional cardiology? *No, not a surgical procedure; incision type other*

- Central cannulation for ECMO during the index operation? *No, not a prior operation; optype not ECMO*

- Berlin heart placement prior to transplant? *Maybe, need to know the incision type and operation type*

?

Do the following count as prior cardiac operations?

- Impella device placed in the cath lab by interventional cardiology? *No, not a surgical procedure; incision type other*

- Central cannulation for ECMO during the index operation? *No, not a prior operation; optype not ECMO*

- Berlin heart placement prior to transplant? *Maybe, need to know the incision type and operation type*

- VAD implantation through an already open sternum, op type VAD with CPB?

?

Do the following count as prior cardiac operations?

- Impella device placed in the cath lab by interventional cardiology? *No, not a surgical procedure; incision type other*

- Central cannulation for ECMO during the index operation? *No, not a prior operation; optype not ECMO*

- Berlin heart placement prior to transplant? *Maybe, need to know the incision type and operation type*

- VAD implantation through an already open sternum, op type VAD with CPB? *No, incision type is other*

?

Case Scenarios – Q1

Patient is admitted for Norwood with planned delayed sternal closure. On POD 3, the chest is successfully closed without complication. On POD 7, the patient suffers cardiac arrest and is centrally cannulated to ECMO. He decannulates a week later and the chest is closed again on POD 16.

Using the CURRENT rules, how many prior CT operations has this patient undergone?

a)   1
b)   2
c)   3
d)   4

Case Scenarios

Patient is admitted for Norwood with planned delayed sternal closure. On POD 3, the chest is successfully closed without complication. On POD 7, the patient suffers cardiac arrest and is centrally cannulated to ECMO. He decannulates a week later and the chest is closed again on POD 16.
Using the CURRENT rules, how many prior CT operations has this patient undergone?

a) 1
b) 2
c) 3
d) 4

Case Scenarios

Patient is admitted for Norwood with planned delayed sternal closure. On POD 3, the chest is successfully closed without complication. On POD 7, the patient suffers cardiac arrest and is centrally cannulated to ECMO. He decannulates a week later and the chest is closed again on POD 16.

Using the CURRENT rules, how many prior CT operations has this patient undergone?

a) 1
b) 2
c) 3 – Norwood, delayed sternal closure, delayed sternal closure
d) 4

Case Scenarios – Q2

Patient is admitted for Norwood with planned delayed sternal closure. On POD 3, the chest is successfully closed without complication. On POD 7, the patient suffers cardiac arrest and is centrally cannulated to ECMO. He decannulates a week later and the chest is closed again on POD 16.

The patient recovers well, discharges to home and is electively admitted on January 3 for a Glenn. How many prior CT operations has the patient undergone?

a) 1
b) 2
c) 3
d) 4

Case Scenarios

Patient is admitted for Norwood with planned delayed sternal closure. On POD 3, the chest is successfully closed without complication. On POD 7, the patient suffers cardiac arrest and is centrally cannulated to ECMO. He decannulates a week later and the chest is closed again on POD 16.

The patient recovers well, discharges to home and is electively admitted on January 3 for a Glenn. How many prior CT operations has the patient undergone?

a)   1
b)   2
c)   3
d)   4

Case Scenarios

Patient is admitted for Norwood with planned delayed sternal closure. On POD 3, the chest is successfully closed without complication. On POD 7, the patient suffers cardiac arrest and is centrally cannulated to ECMO. He decannulates a week later and the chest is closed again on POD 16.

The patient recovers well, discharges to home and is electively admitted on January 3 for a Glenn. How many prior CT operations has the patient undergone?

a) 1
b) 2
c) 3
d) 4 – Norwood, ECMO cannulation, delayed sternal closure, delayed sternal closure

Prior Operation Count Change – *What?*

Number of Prior Cardiac Operations

Prior procedure (2830) VAD implantation where the:

- Optype is VAD

- Incision type is any but other

Prior procedure (2860) ECMO cannulation where the:

- **Optype is ECMO**

- **Incision type is any but other**

Case Scenarios – Q3

Patient undergoes a heart transplant on January 1. In November, the patient received a VAD implant on CPB and the chest was left open, later the patient has a VAD procedure again on CPB, and the chest is finally closed a few days later.

For the January 1 operation, how many prior CT operations has the patient undergone?

a) 1
b) 2
c) 3
d) 4

Case Scenarios

Patient undergoes a heart transplant on January 1. In November, the patient received a VAD implant on CPB and the chest was left open, later the patient has a VAD procedure again on CPB, and the chest is finally closed a few days later.

For the January 1 operation, how many prior CT operations has the patient undergone?

a) 1
b) 2
c) 3
d) 4

Case Scenarios

Patient undergoes a heart transplant on January 1. In November, the patient received a VAD implant on CPB and the chest was left open, later the patient has a VAD procedure again on CPB, and the chest is finally closed a few days later.

For the January 1 operation, how many prior CT operations has the patient undergone?

a) 1 – VAD implant
b) 2
c) 3
d) 4

Prior Operation Count Change – *What?*

Number of Prior Cardiac Operations

Prior procedure (2830) VAD implantation where the:

- **Optype is VAD**

- **Incision type is any but other**

Prior procedure (2860) ECMO cannulation where the:

- Optype is ECMO

- Incision type is any but other

Why?

Number of Prior Cardiac Operations

VAD implant (OpType VAD with CPB, incision type sternotomy) ✅

Why?

Number of Prior Cardiac Operations

VAD implant (OpType VAD with CPB, incision type sternotomy) ✅

VAD procedure (Optype VAD with CPB, incision type other) ❌

Why?

Number of Prior Cardiac Operations

VAD implant (OpType VAD with CPB, incision type sternotomy) ✅

VAD procedure (Optype VAD with CPB, incision type other) ❌

Delayed sternal closure (OpType VAD without CPB, incision type other) ❌

Case Scenarios – Q4

Patient undergoes a heart transplant on January 1. In November, the patient received a VAD implant on CPB and the chest was left open, later the patient has a VAD procedure again on CPB, and the chest is finally closed a few days later.

For the January 1 operation, how many **prior CPB** operations has the patient undergone?

a)   1
b)   2
c)   3
d)   4

Case Scenarios

Patient undergoes a heart transplant on January 1. In November, the patient received a VAD implant on CPB and the chest was left open, later the patient has a VAD procedure again on CPB, and the chest is finally closed a few days later.

For the January 1 operation, how many **prior CPB** operations has the patient undergone?

a)   1
b)   2
c)   3
d)   4

Case Scenarios

Patient undergoes a heart transplant on January 1. In November, the patient received a VAD implant on CPB and the chest was left open, later the patient has a VAD procedure again on CPB, and the chest is finally closed a few days later.

For the January 1 operation, how many **prior CPB** operations has the patient undergone?

a) 1
b) 2 – VAD implant, VAD procedure
c) 3
d) 4

Prior Operation Count Change – *What?*

Number of Prior CPB Cardiac Operations

Any procedure where:

- Optype is VAD with CPB

Why?

Number of Prior Cardiac Operations

VAD implant (OpType VAD with CPB, incision type sternotomy) ✅

Why?

Number of Prior Cardiac Operations

VAD implant (OpType VAD with CPB, incision type sternotomy) ✅

VAD procedure (Optype VAD with CPB, incision type other) ✅

Why?

Number of Prior Cardiac Operations

VAD implant (OpType VAD with CPB, incision type sternotomy) ✅

VAD procedure (Optype VAD with CPB, incision type other) ✅

Delayed sternal closure (OpType VAD without CPB, incision type other) ❌

Case Scenarios – Q5

20 year old patient returns on January 5 with conduit failure. Their H&P states "prior history of ECMO cannulation and valve replacement with homograft".

How many prior CT operations has the patient undergone?

a) 1
b) 2
c) 3
d) 4

Case Scenarios

20 year old patient returns on January 5 with conduit failure. Their H&P states "prior history of ECMO cannulation and valve replacement with homograft".

How many prior CT operations has the patient undergone?

a) 1
b) 2
c) 3
d) 4

Case Scenarios

20 year old patient returns on January 5 with conduit failure. Their H&P states "prior history of ECMO cannulation and valve replacement with homograft".

How many prior CT operations has the patient undergone?

a) 1 – prior valve surgery (do not know how the patient was cannulated to ECMO)
b) 2
c) 3
d) 4

Prior Operation Count Change – *What?*

Number of Prior Cardiac Operations

Prior procedure (2830) VAD implantation where the:

- **Optype is VAD**
- **Incision type is any but other**

Prior procedure (2860) ECMO cannulation where the:

- **Optype is ECMO**
- **Incision type is any but other**

In Summary

Prior operation count changes start with surgery dates on or after 01/01/24

Submit an FAQ when unsure - **PLEASE**

Find documentation of incision type – ***do not assume!***

Do not rely on local or vendor designed calculations

Consider giving your team a heads up

Prior Operation Count Change – *Summary*

Number of Prior Cardiac Operations

Any prior operation where OpType is CPB Cardiovascular or NO CPB Cardiovascular

Any prior operation where the primary procedure is (2830) VAD implantation and:
- Optype is VAD
- Incision type is any but other

Any prior operation where the primary procedure is (2860) ECMO cannulation and:
- Optype is ECMO
- Incision type is any but other

Number of CPB Operations

Any prior operation where OpType is CPB Cardiovascular

Any prior operation where OpType is VAD with CPB

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

- **12/19/23 @ 12pmCT - Cancelled**

CHSD Hot Topics

- 12/5/23 @ 10am CT

Contact Information

Leigh Ann Jones, STS National Database Manager, Congenital and General Thoracic	Tech Support Analysis Report/Data Submission Questions	Database Operational Questions
• Ljones@sts.org	• STSDB_helpdesk@sts.org	• STSDB@sts.org

Congenital STS Database Consultants

- Leslie Wacker   lwacker@sts.org
- Chasity Wellnitz   cwellnitz@sts.org