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

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

2024 Harvest Schedule

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• 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

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.
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
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
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
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; opotype 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; op type 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
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.

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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
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
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.

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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
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 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) ✗
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)   ✗
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
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
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)
Number of Prior Cardiac Operations

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

VAD procedure (OpType VAD with CPB, incision type other)
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)
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
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
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 @ 12pm CT - Cancelled

- CHSD Hot Topics
  - 12/5/23 @ 10am CT
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THANK YOU FOR JOINING!