



Society of Thoracic Surgeons

Congenital Heart Surgery Database
Monthly Webinar

February 18, 2025

Agenda

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



STS Updates

- February Training Manual posted
- 2025 Harvest Schedule has been posted
 - Spring 2025 close date: **March 21, 2025**
 - Fall 2025 close date: **September 26, 2025**
- Primary Procedure Mismatch Report Update
 - New process effective January 1, 2025
 - **Updated Prim Proc Mismatch Report tentatively scheduled to be available on Friday, February 28.**
 - Replacing “Exception 1” aka “PSF rule”
 - New rule to be implemented in the S25 analysis
 - STS Education provided in the November 2024 Monthly Webinar
- CHSD Risk Adjusted Report Calculation Resource
 - Located in IQVIA Library Updated 12/13/2024

AQO 2025

- **CHSD and GTSD Sessions: Thursday, October 2nd**
- ACSD Session: Friday, October 3rd
- Grand Hyatt San Antonio Riverwalk
- AQO Session Proposal deadline is April 18th
 - [Learn more about submitting a session proposal.](#)
- Both In Person and Virtual options will be available
- Cost information will be shared as soon as it's available

Home > Calendar of Events > 2025 Advances in Quality & Outcomes: A Data Managers Meeting

Event

2025 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.



**ADVANCES
IN QUALITY
& OUTCOMES:**
A Data Managers Meeting

OCTOBER 2-3, 2025 • SAN ANTONIO, TX

 Date(s)	 Location	 Audience
Oct 2—3, 2025	San Antonio, TX	Allied Health Data Manager





Education Discussion Topics

- Primary Procedure
Mismatch Report Update
- Analysis Update:
Overlapping Episodes of
Care

Recap – Primary Procedure Determination

PROCEDURE SPECIFIC FACTOR RULE UPDATE

- Presented 11/19/24 webinar – refer to STS website
- Updated in the Training Manual in December
- Roll out in the Spring 2025 harvest:
 - Applied retrospectively for surgery dates Jan 2021 – forward
 - IQVIA primary procedure mismatch report nearing completion

Procedure Specific Factor Rule Update

If a procedure in Column B is performed as part of a multi-component procedure that includes a procedure from Column C, the primary procedure will be from Column B unless the operation includes an additional simultaneous procedure with a higher STAT score.

Primary Procedure Mismatch Report

- Report functionality unchanged
- Recommended to update to the determined STS primary procedure
- STS notifications once the report releases

Mismatch Example

Current Coding:

Priority	Procedure	Harvest Code	STAT Level	STAT Score
1	Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)	1670	2	0.3
2	PA banding (PAB)	1640	4	1.2
3	ASD creation/enlargement	60	2	0.4
4	Shunt, Ligation and takedown	1630	2	0.3

Per the pre-existing rules for determining primary procedure, the BDCPA was the primary procedure

Mismatch Example Continued

Primary Procedure Mismatch Report:

Primary Procedure Mismatch Record Details

Participant Primary	Participant Primary Procedure Description	STS Primary	STS Primary Procedure Description	Acce
1670	Bidirectional cavopulmonary anastomosis (BD...	1640	PA banding (PAB), Placement of ...	https

Per the new rules, procedure (1640) PA banding (PAB) is the new determined primary procedure

Mismatch Example Continued

Rule #	Column B	Column C
1a.	<ul style="list-style-type: none"> • 1670 = Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn) • 1680 = Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn) • 1690 = Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn) • 1700 = HemiFontan • 2330 = Superior Cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty • 2130 = Superior Cavopulmonary anastomosis(es) + PA reconstruction • 3160 = Kawashima operation (superior cavopulmonary connection in setting of interrupted IVC with azygous continuation) 	<ul style="list-style-type: none"> • 1330 = PDA Closure, Surgical • 1630 = Shunt, Ligation and takedown • 1650 = PA debanding • 70 = ASD Partial Closure • 60 = ASD Creation Enlargement • 80 = Atrial Septal Fenestration • 3200 = PA band adjustment • 530 = PA, reconstruction (plasty), Main (trunk) • 540 = PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation) • 630 = Valve excision, Pulmonary or Neo-Pulmonary (without replacement) • 640 = Valve closure, Semilunar • 1790 = Ligation, Pulmonary artery • 3180 = Intravascular stent removal • 3220 = Removal of transcatheter delivered device from heart • 3210 = Removal of transcatheter delivered device from blood vessel • 1490 = Arrhythmia surgery - atrial, Surgical Ablation • 1500 = Arrhythmia surgery - ventricular, Surgical Ablation • 460 = Valvuloplasty, Tricuspid or Non-systemic Atrioventricular Valve • 2280 = Valvuloplasty converted to valve replacement in the same operation, Tricuspid or Non-systemic Atrioventricular Valve • 470 = Valve replacement, Tricuspid or Non-systemic Atrioventricular Valve • 480 = Valve closure, Tricuspid or Non-systemic Atrioventricular Valve (exclusion, univentricular approach) • 490 = Valve excision, Tricuspid or Non-systemic Atrioventricular Valve (without replacement) • 500= Valve surgery, Other, Tricuspid or Non-systemic Atrioventricular Valve

Mismatch Example Continued

Rule #	Column B	Column C
1a.	<ul style="list-style-type: none"> • 1670 = Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn) • 1680 = Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn) • 1690 = Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn) • 1700 = HemiFontan • 2330 = Superior Cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty • 2130 = Superior Cavopulmonary anastomosis(es) + PA reconstruction • 3160 = Kawashima operation (superior cavopulmonary connection in setting of interrupted IVC with azygous continuation) 	<ul style="list-style-type: none"> • 1330 = PDA Closure, Surgical • 1630 = Shunt, Ligation and takedown • 1650 = PA debanding • 70 = ASD Partial Closure • 60 = ASD Creation Enlargement • 80 = Atrial Septal Fenestration • 3200 = PA band adjustment • 530 = PA, reconstruction (plasty), Main (trunk) • 540 = PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation) • 630 = Valve excision, Pulmonary or Neo-Pulmonary (without replacement) • 640 = Valve closure, Semilunar • 1790 = Ligation, Pulmonary artery • 3180 = Intravascular stent removal • 3220 = Removal of transcatheter delivered device from heart • 3210 = Removal of transcatheter delivered device from blood vessel • 1490 = Arrhythmia surgery - atrial, Surgical Ablation • 1500 = Arrhythmia surgery - ventricular, Surgical Ablation • 460 = Valvuloplasty, Tricuspid or Non-systemic Atrioventricular Valve • 2280 = Valvuloplasty converted to valve replacement in the same operation, Tricuspid or Non-systemic Atrioventricular Valve • 470 = Valve replacement, Tricuspid or Non-systemic Atrioventricular Valve • 480 = Valve closure, Tricuspid or Non-systemic Atrioventricular Valve (exclusion, univentricular approach) • 490 = Valve excision, Tricuspid or Non-systemic Atrioventricular Valve (without replacement) • 500 = Valve surgery, Other, Tricuspid or Non-systemic Atrioventricular Valve

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Mismatch Example Continued

If a procedure in Column B is performed as part of a multi-component procedure that includes a procedure from Column C, the primary procedure will be from Column B *unless* the operation includes an additional simultaneous procedure with a higher STAT score.

Rule #	Column B
1a.	<ul style="list-style-type: none">• 1670 = Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn) (0.3, 2)

(1640) PA banding (1.2, 4)

The PA banding procedure is primary as it is not listed in Column C and has a higher STAT score than the BDCPA procedure.

Analysis Update – Overlapping Episodes of Care

Background:

- Sites questioned which case is analyzed when a patient has two index operations within 30 days of each other, over 2 separate admissions.
- Currently, both operations are analyzed. If the patient expires, then the second case is a mortality and the first is a survival.
- Currently, postop events are followed through 30 days, creating overlap/duplicate capture
- Task Force reviewed examples

Analysis Update – Overlapping Episodes of Care

Example:

- Patient admitted and has operation on January 1
- Patient discharges to home on POD 8

- Patient is readmitted and has another cardiac operation on January 20

Analysis Update – Overlapping Episodes of Care

Example:

- Patient admitted and has operation on January 1
- Patient discharges to home on POD 8

- Patient is readmitted and has another cardiac operation on January 20

EOC #1

Follow up period
ends January 31

EOC #2

Follow up period
ends February 17

Analysis Update – Overlapping Episodes of Care

EOC #1

Follow up period
ends January 31

- (360) Unplanned readmission to the hospital within 30 days of surgery or intervention
- (22) Unplanned cardiac reoperation during the postoperative or postprocedural time period

Analysis Update – Overlapping Episodes of Care

EOC #1

Follow up period
ends January 31

- (360) Unplanned readmission to the hospital within 30 days of surgery or intervention
- (22) Unplanned cardiac reoperation during the postoperative or postprocedural time period

EOC #2

Follow up period
ends February 17

- (17) No intra or post operative events (No events during the relevant intra/post operative time period)

Analysis Update – Overlapping Episodes of Care

Example:

- Patient admitted and has operation on January 1
- Patient discharges to home on POD 8

EOC #1

Follow up period
ends January 31

- Patient is readmitted and has another cardiac operation on January 20 ***the patient is unable to come off bypass, converts to ECMO, has another reoperation, and ultimately the family withdraws care on January 25***

EOC #2

Follow up period
ends February 17

Analysis Update – Overlapping Episodes of Care

EOC #1

Follow up period
ends January 31

- (360) Unplanned readmission to the hospital within 30 days of surgery or intervention
- (22) Unplanned cardiac reoperation during the postoperative or postprocedural time period
- (40) Postoperative/Postprocedural mechanical circulatory support (IABP, VAD, ECMO, or CPS)
- Operative Mortality

Analysis Update – Overlapping Episodes of Care

EOC #1

Follow up period
ends January 31

- (360) Unplanned readmission to the hospital within 30 days of surgery or intervention
- (22) Unplanned cardiac reoperation during the postoperative or postprocedural time period
- (40) Postoperative/Postprocedural mechanical circulatory support (IABP, VAD, ECMO, or CPS)
- Operative Mortality

EOC #2

Follow up period
ends February 17

- (22) Unplanned cardiac reoperation during the postoperative or postprocedural time period
- (40) Postoperative/Postprocedural mechanical circulatory support (IABP, VAD, ECMO, or CPS)
- Operative Mortality

Analysis Update – Overlapping Episodes of Care

EOC #1

Follow up period
ends January 31

- (360) Unplanned readmission to the hospital within 30 days of surgery or intervention
- (22) Unplanned cardiac reoperation during the postoperative or postprocedural time period
- (40) Postoperative/Postprocedural mechanical circulatory support (IABP, VAD, ECMO, or CPS)
- ~~Operative Mortality~~

EOC #2

Follow up period
ends February 17

- (22) Unplanned cardiac reoperation during the postoperative or postprocedural time period
- (40) Postoperative/Postprocedural mechanical circulatory support (IABP, VAD, ECMO, or CPS)
- Operative Mortality

Analysis Update – Overlapping Episodes of Care

EOC #1

Follow up period
ends January 31

- (360) Unplanned readmission to the hospital within 30 days of surgery or intervention
- (22) Unplanned cardiac reoperation during the postoperative or postprocedural time period
- (40) Postoperative/Postprocedural mechanical circulatory support (IABP, VAD, ECMO, or CPS)
- Operative Mortality

EOC #2

Follow up period
ends February 17

- (22) Unplanned cardiac reoperation during the postoperative or postprocedural time period
- (40) Postoperative/Postprocedural mechanical circulatory support (IABP, VAD, ECMO, or CPS)
- Operative Mortality

Analysis Update – Overlapping Episodes of Care

Summary:

- If 2 index operations within 2 separate EOC occur within 30 days, the first index operation will be analyzed.
- Functionally, this works the same as subsequent operations within one EOC
- Beginning with Spring 25 harvest, applied retrospectively
- Exclusion criteria will be updated in Analysis Overview

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 Webinars

- 3/18/25 @ 12pmCT
- 4/15/25 @ 12pmCT

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