STS National Database:

ACSD Monthly Webinar

December 4, 2024



Agenda

Welcome and Introductions

STS Updates

Previous CV Interventions



## STS Updates

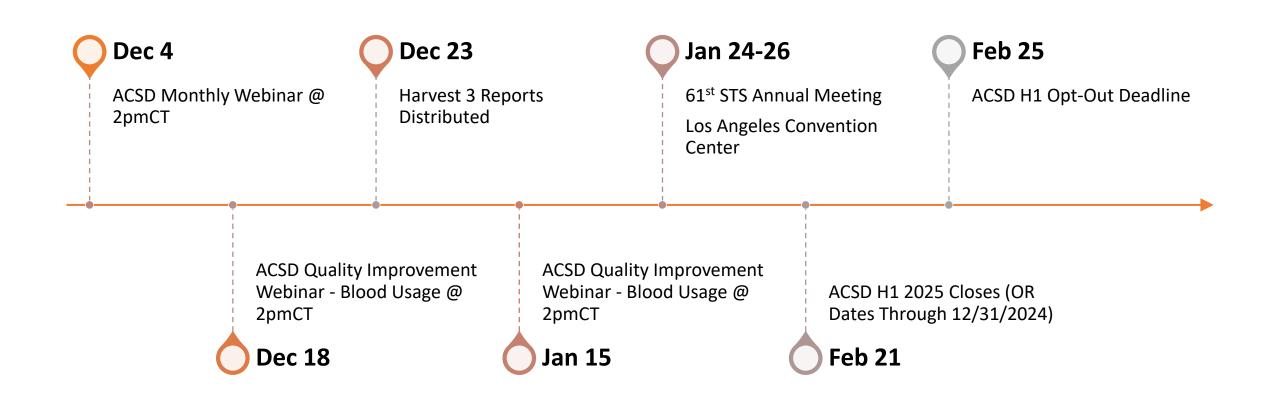
# December Training Manual Posted

Updated Procedure ID Chart Posted

Harvest 3 Multiplier Table Posted



## Important Dates



#### 2025 Harvest Dates

Report

Posting

Spring 2025

Summer

Fall 2025

Winter 2025

2025







Analysis for each harvest is based on a 36-month window.

Don't Forget
Our New
Facebook
Group!





# Data Manager Collaborative (DMC)

- Formerly the Data Manager Mentorship Program
- Scan the QR code to sign up!



# Regional Groups

#### Regional Database Activities

STS National Database regional groups offer a collaborative networking environment for peer-to-peer support and non-clinical guidance related to data abstraction.

Currently, there are 16 regional groups covering 38 states:

- California
- · Central Southeast Region (Arkansas, Kentucky, & Tennessee)
- Florida
- Gulf States (Alabama, Louisiana, & Mississippi)
- Maryland
- Michigan
- Mid-Atlantic (Delaware, New Jersey, New York, & Pennsylvania)
- Minnesota (Minnesota & Eastern North Dakota)
- Northwest Region (Alaska, Hawaii, Idaho, Oregon, Montana, & Washington)
- Ohio
- Rocky Mountain Region (Arizona, Colorado, New Mexico, Utah, & Wyoming)
- Southeastern (Georgia, North Carolina, & South Carolina)
- Southern New England Region (Connecticut, Massachusetts, & Rhode Island)
- Texas/Oklahoma
- Virginia
- Wisconsin

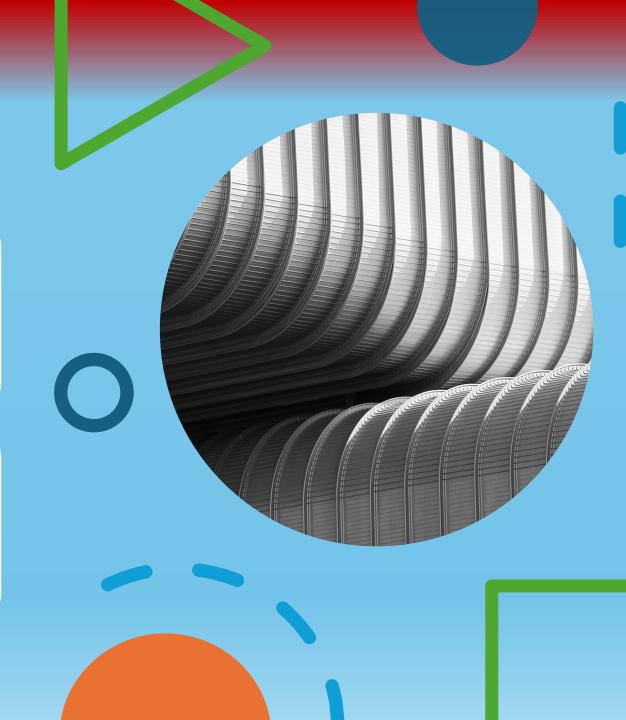
# Previous CV Interventions





Seq 775 Previous PCI, and Seq 780 PCI Performed within this Episode of Care and Seq 800 PCI Interval are in the Risk Model

Seq 775 Previous PCI, and Seq 780 PCI Performed within this Episode of Care and Seq 800 PCI Interval were 2023 Audit fields





If a patient came in for a PCI, but it was unsuccessful due to the CTO wire getting stuck in the coronary arterial system is this get captured as a PCI performed?

A. Yes

B. No



If a patient came in for a PCI, but it was unsuccessful due to the CTO wire getting stuck in the coronary arterial system is this get captured as a PCI performed?

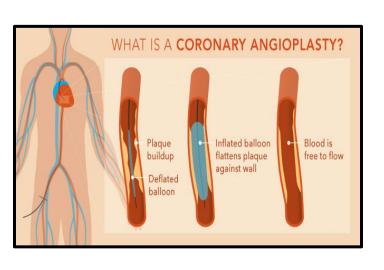
#### A. Yes

B. No

A CTO (chronic total occlusion) interventional wire was passed in an attempt to open the CTO - this is an attempted PCI.

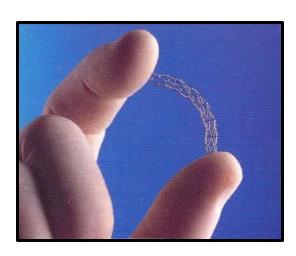
An attempted, even if unsuccessful, PCI should be coded as a Previous CV intervention-PCI.

Percutaneous coronary intervention (PCI) is the placement of an angioplasty or interventional guide wire, balloon, or other device (e.g., stent, atherectomy, brachytherapy, or thrombectomy catheter) into a native coronary artery or coronary artery bypass graft for the purpose of mechanical coronary revascularization.



# Prior Coronary Intervention PCI can be:

- Angioplasty (PTCA)
  - > Stent
- Angioplasty and stent
  - > Thrombectomy
    - > Atherectomy
  - > Brachytherapy
  - > Attempted PCI



# How to Read a Cath Log

	Case Start	
	2% Lidocaine To Right Inquinal Region	St
2%Lidocaine hydrochloride Subcut 15 ml	LOcal	_
	Ultrasound guided vascular access	_
Procedure: Ultrasound Guided access		
	Percutaneous Puncture To RFA	
	Sheath Inserted Into RFA	
35 180J GW 0.035 180 FCJ		
11cm Sheath x 5Fr		_
	Catheter Inserted By Guidewire	Di
5FR JL4 CATHETER		Gı
150mL ISOVUE 370 (76% IOPAMIDOL)		
	Coronaries	
	Left Coronary System Injected & Multiple Views Taken	Co
	Catheter Removed	Sh
	Catheter Inserted By Guidewire	
5FR 3 DRC CATHETER		
HR 80 bpm; 124/76/90 NBP; LOC 2; RR 22/min	0/10 chest pain	
	Right Coronary System Injected & Multiple Views Taken	
	Guidewire inserted	
	Procedure: Ultrasound Guided access  35 180J GW 0.035 180 FCJ 11cm Sheath x 5Fr  5FR JL4 CATHETER 150mL ISOVUE 370 (76% IOPAMIDOL)  5FR 3 DRC CATHETER	2% Lidocaine To Right Inguinal Region (Local Infiltration)  2%Lidocaine hydrochloride Subcut 15 ml  LOcal  Ultrasound guided vascular access  Percutaneous Puncture To RFA  Sheath Inserted Into RFA  35 180J GW 0.035 180 FCJ  11cm Sheath x 5Fr  Catheter Inserted By Guidewire  5FR JL4 CATHETER  150mL ISOVUE 370 (76% IOPAMIDOL)  Coronaries  Left Coronary System Injected & Multiple Views Taken  Catheter Inserted By Guidewire  5FR 3 DRC CATHETER  HR 80 bpm; 124/76/90 NBP; LOC 2; RR 22/min  Right Coronary System Injected & Multiple Views Taken

Start of Cath

Diagnostic Guidewire

Coronary Shots

# How to Read a Cath Log

9:34:38 AM	1.34.U/ AM	DEK MIGTAIL-140 CATHETEK	
3:34:38 AM LV: 118/10/21, Max dP/dt = 5424, HR = 82, I  3:34:38 AM LV: 118/10/21, Max dP/dt = 5424, HR = 82, I  3:34:47 AM AO: ***/***/35, HR = 82, I  3:34:50 AM	9:34:38 AM	Snapshot: LV: 118/10/21	
3:34:38 AM	9:34:38 AM	Snapshot: LV: 118/10/21	
3:34:47 AM	9:34:38 AM	LV: 118/10/21, Max dP/dt = 5424, HR = 82, I	
9:34:47 AM       Snapshot: AO : ***/***/35         9:34:50 AM       Left Ventricle         9:34:56 AM       LV (settings): 13/30/750/0.5         9:35:28 AM       Interventional         9:35:37 AM       Sheath Exchanged By Guidewire         9:35:57 AM       10cm Sheath x 6Fr         9:36:14 AM       6 Fr. XB 3.0 SH         9:37:44 AM       HR 84 bpm; 125/67/87 NBP; RR 9/min         9:38:26 AM       Heparin IV Bolus (Pre-PCI)         9:38:32 AM       Heparin IV 8,000 units         9:38:40 AM       Sheath Exchanged By Guidewire         9:38:48 AM       Guide Catheter Inserted         9:39:03 AM       Coronary guiding injection(s)	9:34:38 AM	LV: 118/10/21, Max dP/dt = 5424, HR = 82, I	
Left Ventricle	9:34:47 AM	AO : ***/***/35, HR = 82, I	
334:56 AM	9:34:47 AM	Snapshot: AO: ***/***/35	
Signature   Sign	9:34:50 AM		Left Ventricle
Interventional   Sheath Exchanged By Guidewire	9:34:56 AM		LV (settings): 13/30/750/0.5
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Guide Catheter Inserted Groonary guiding injection(s)	9:38:32 AM	Heparin IV 8,000 units	
3:39:03 AM Coronary guiding injection(s)	38:40 AM		Sheath Exchanged By Guidewire
	):38:48 AM		Guide Catheter Inserted
9:39:04 AM Interventional Guidewire Inserted	3:39:03 AM		Coronary guiding injection(s)
	9:39:04 AM		Interventional Guidewire Inserted

LV gram

Start of PCI





Successful IVUS of left main coronary artery confirming concentric soft plaque with 80% focal stenosis. Is this coded as a prior PCI?

A. Yes

B. No



Successful IVUS of left main coronary artery confirming concentric soft plaque with 80% focal stenosis. Is this coded as a prior PCI?

- A. Yes
- B. No

No, even though IVUS has to be performed by an interventional cardiologist, it is a diagnostic procedure and is not considered a PCI.

#### FFR versus iFR versus IVUS

**Fractional flow reserve (FFR)** is a technique used in coronary catheterization to measure pressure differences across a coronary artery stenosis to determine the likelihood that the stenosis impedes oxygen delivery to the heart muscle.

#### Instant wave-free ratio (iFR)

Like FFR, iFR is performed with pressure wires that are passed distal to the coronary stenosis. The enhancement over FFR is that iFR is measured at rest, without the need for pharmacological vasodilators or stressors.

Intravascular ultrasound (IVUS) - uses sound waves to assess and characterize coronary lesions.





If a rotational atherectomy of the RCA was performed is this considered an "other previous cardiac intervention" or is it considered a "prior PCI"?

- A. Prior PCI
- B. Other cardiac intervention not listed

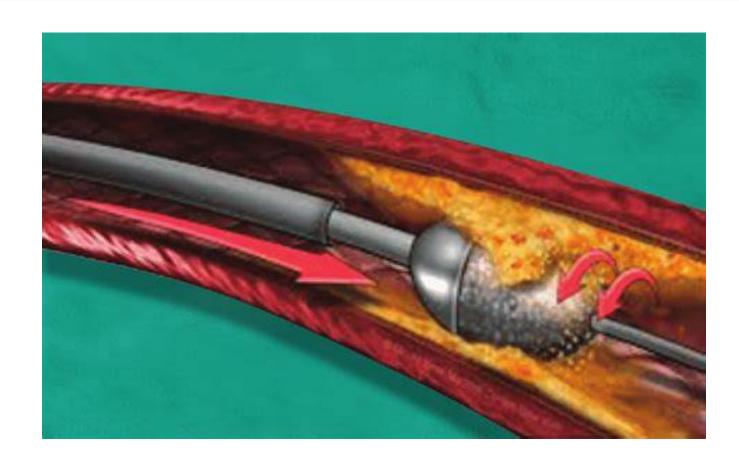


If a rotational atherectomy of the RCA was performed is this considered an "other previous cardiac intervention" or is it considered a "prior PCI"?

#### A. Prior PCI

B. Other cardiac intervention not listed

Rotational atherectomy (RA) is a technology that enables percutaneous coronary intervention for complex, calcified coronary lesions. RA works on the principle of 'differential cutting' and preferentially ablates hard, inelastic, calcified plaque.



Patient had a stent placed to his mid RCA in 2014. He was admitted with a STEMI and was taken emergently to the cath lab where a balloon angioplasty was performed on his occluded proximal LAD. A stent could not be passed. PLAD 100% stenosis reduced to 80%. Stable without chest pain after PCI. RCA stent patent. LM no disease. CX 20%.

Had LIMA – LAD the next day.

How do you code Previous PCI Indication for Surgery?

- A. PCI Complication
- B. PCI Failure without Clinical Deterioration
- C. PCI Failure with Clinical Deterioration
- D. PCI for STEMI, multivessel disease

Patient had a stent placed to his mid RCA in 2014. He was admitted with a STEMI and was taken emergently to the cath lab where a balloon angioplasty was performed on his occluded proximal LAD. A stent could not be passed. PLAD 100% stenosis reduced to 80%. Stable without chest pain after PCI. RCA stent patent. LM no disease. CX 20%.

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How do you code Previous PCI Indication for Surgery?

#### B. PCI failure without clinical deterioration

PCI failure without clinical deterioration - PCI failed to yield expected and/or desired results, patient condition did not deteriorate, includes attempts to cross with the wire but unsuccessful



Patient had a stent placed to his mid RCA in 2014. He was admitted with a STEMI and was taken emergently to the cath lab where a balloon angioplasty was performed on his occluded proximal LAD. A stent could not be passed. PLAD 100% stenosis reduced to 80%. Stable without chest pain after PCI. RCA stent patent. LM no disease. CX 20%.

Had LIMA – LAD the next day.

How do you code PCI stent seq 790?

A. Yes

B. No



Patient had a stent placed to his mid RCA in 2014. He was admitted with a STEMI and was taken emergently to the cath lab where a balloon angioplasty was performed on his occluded proximal LAD. A stent could not be passed. PLAD 100% stenosis reduced to 80%. Stable without chest pain after PCI. RCA stent patent. LM no disease. CX 20%.

Had LIMA – LAD the next day.

How do you code PCI stent seq 790?

#### A. Yes

B. No

PCI Stent Seq 790 indicate if an intracoronary stent was <u>used during any</u> of the previous Percutaneous Cardiac Interventions (PCI).



Patient had a stent placed to his LAD in 2020.

0800 was admitted with a STEMI 100% ISR of LAD. The interventional guideline could not pass the lesion.

0930 - patient was taken immediately to the OR for emergent surgery.

How do you code PCI Performed Within This Episode Of Care?

- A. Yes, at this facility
- B. Yes, at some other acute care facility
- C. No



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How do you code Previous PCI Interval seq 800?

- A. <= 6 Hours
- B. > 6 Hours



Patient had a stent placed to his LAD in 2020.

0800 was admitted with a STEMI 100% ISR of LAD. The interventional guideline could not pass the lesion.

0930 - patient was taken immediately to the OR for emergent surgery.

How do you code Previous PCI Interval seq 800?

**A.** <= 6 Hours

B. > 6 Hours

Indicate the interval of time between the <u>most recent PCI</u> and the current surgical procedure.



#### Resources

- STS National Database Webpage
- STSDB\_Helpdesk@sts.org (Uploader, DQR, Missing Variable, Dashboard, Password and Login )
- STS National Database Feedback Form
- Resource Documents
  - Contact Information
  - Webinar Information
  - FAQ Document
  - Go-Live Checklist
  - Tiered-level Support Document
  - Training Videos
  - Link to IQVIA
  - ckrohn@sts.org





# Open Discussion

Please use the raise-hand function.

Please use the Q&A Function.

We will answer as many questions as possible.

We encourage your feedback and want to hear from you!

