STS ACSD FAQ's July 2021 Version 4.20.2

Seq. Number	Short Name	Update
415	PFT	Time Frame: Do not use values obtained more than 12 months prior to the date of surgery. Update July 2021 – Code the study closest and prior to OR Entry.
911	HeartFail	Update July 2021 – Provider diagnosis of HFpEF (diastolic HF), HFrEF (systolic HF), HFmrEF (mid-range HF) can be used to code heart failure.
1970	Incidenc	Update Nov 2020 - Prior epicardial ablation procedure that needs a CABG, code as first reop since an ablation enters the pericardial space and involves operating on the heart tissue. Update April 2021 – Prior epicardial ablation can cause scarring and increase risk of subsequent procedures. Update July 2021 - An epicardial ablation done via a pericardial incision counts towards incidence. An endocardial ablation done via a transcatheter approach does not.
2120 / 6500	OpCAB / OCarCongDiag1	Update Nov 2020 – CABG only for anomalous coronary artery will be coded as a CABG with no congenital procedure performed. If unroofing of the anomalous coronary artery is performed at the time of the CABG, then code as CABG plus congenital procedure. Update July 2021 For example: If you do a CABG for the anomalous vessel (no unroofing) then this is a CABG, not congenital. If you do, CABG plus unroofing then code CABG and congenital. If you just do unroofing (no CABG) then this is a congenital case.
2730	CABProximalSite01	Other – Update July 2021 includes Y-graft
3776	ECMO	The Hemolung RAS provides ultra-low-flow, Veno-venous extracorporeal carbon dioxide removal (ECCO2R) using a single, 15.5 French dual lumen catheter inserted percutaneously in the femoral or jugular vein. Low-flow ECCO2R with the Hemolung RAS provides partial lung support independently of the lungs.



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6755	COpReBld	Intent/Clarification: Update July 2021 - Indicate whether the patient was re-explored for bleeding in the mediastinum (thoracic cavity) or the abdominal cavity with or without tamponade either in the ICU or returned to the operating room.
7377	VolAgentTiming	Intent/Clarification: Time frame of administering a volatile agent is after OR entry and prior to CPB initiation. This information will either come from intraoperative anesthesia record or perfusion record. Leave blank if the information is unavailable. Update July 2021 – The volatile agent does not need to be given during the entire time period for the below selections. Code "Yes ' if the volatile agent is used anytime in the selections below:
7414	MultimodAnalges	Acetaminophen (IV or PO, or Update July 2021 PR or suppository route)



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Seq. Number	Short Name	Update
365	DiabCtrl	Update June 2021 – The intent is to capture the prescribed level of medication the patient needs to control his/her Diabetes. For example, when a patient is prescribed insulin for Diabetes control but is non-compliant, you are to capture insulin as the control method.
575 / 7695	Hct / PostHCT	Update June 2021 - Capture only measured hematocrit levels, not calculated values. If you do not have measured lab values, you may use calculated values, however, the Data Manager should not calculate the value, it must be calculated and documented in the medical record.
972	AFibRecOREntry	Update June 2021 prior to induction to determine if the patient is in Afib, Afib / flutter, or A-flutter at the time of entry to OR. If there is no documentation on the anesthesia record prior to induction, then use the rhythm documented closest to OR entry to determine if patient in Afib, Afib / flutter, or A-flutter.
1545	HDEF	Update June 2021 – In the Risk Model, EF values that are less than 10% get inputed to 40%. If your patient has an EF value < 10% enter the EF as 10% in the Database.
2100	ОРАрр	Thoracotomy - Update June 2021 includes right or left parasternal thoracotomy, limited or mini thoracotomy
2100	ОРАрр	Port Access – Update June 2021 includes port access for valve procedures and robotic procedures
2100	ОРАрр	Other – includes Update June 2021 right or left parasternal thoracotomy, transverse sternotomy, Update June 2021 limited or mini thoracotomy, sub-costal approach, Update March 2021 cut-down to access the femoral artery.
2285	AbxTiming	Intent/Clarification: The antibiotic must be initiated / started within one hour prior to surgical incision (two hours if receiving





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		Vancomycin or fluoroquinolone). Update June 2021 - This can include a dose given at the same time as incision in OR. If no incision is required, then it must be started by the start of procedure
2290	AbxDisc	Intent/Clarification: Update June 2021 - The timeframe (within 48 hours) begins at the "surgical end time" - the time the patient leaves the operating room.
2405 / 2410	CircArr / DHCATm	Update June 2021 - Capture any episodes of deep hypothermic or moderate hypothermic circulatory arrest.
2515	IBldProd	Update June 2021 - Do NOT include Predonated autologus blood, Cell saver blood, Pump residual blood, Chest tube recirculated blood.
2567 / 2572 / 2577 / 6631 / 6636	PRepAPVL / PRepMPVL / PRepTPVL / POpAortParaLk / POpMitParaLk	With prosthetic heart valves includes regurgitation through the valve (transvalvular or intravalvular) as well as paravalvular regurgitation (also known as paravalvular leak) which is a leak caused by a space between the patient's natural heart tissue and the valve replacement.
4137 / 6500	OCardASDRepTyp	Update June 2021 – Capture ostium primum ASD in Section M3 Congenital Code 120 AVC (AVSD), Partial (incomplete) (PAVSD) (ASD, primum).
6690	SurSInf	Update June 2021 - The intent is to capture the infections / non-infectious sternal dehiscence (SEQ 6695-6749) listed on the Data Collection Form. Sites are not to capture infections / dehiscence that does not fit into one of the categories under 6690. For example, patient has a wound infection on on a secondary incision that was not a sternal, thoracotomy, conduit harvest site or cannulation site incision, code No to SEQ 6690.
6774	CAortReint	Intent/Clarification: Update June 2021 - Include patients that return to an OR suite or an OR suite equivalent for an unplanned postoperative aortic intervention.





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7001	Mt30Stat	Update June 2021 - The time of OR exit or the time of death is not used for counting days for mortality. Mortality is counted by days, not hours as follows: Day of surgery = Day 0. First post-op day = Day 1, Second post-op day = Day 2.
7010	DisLoctn	Other – Includes prison, jail, homeless shelter, Update June 2021 Drug Rehab
7140	Readmit	Update June 2021 - The time of hospital discharge or the time of death is not used for counting days for readmission. Readmission is counted by days, not hours as follows: Day of discharge = Day 0. First discharge day = Day 1. Second discharge day = Day 2.



STS ACSD FAQ's May 2021 Version 4.20.2

Seq. Number	Short Name	Update
960/961/971	Cardiac Arrhythmia - AFlutter / Cardiac Arrhythmia - Atrial Fibrillation / Atrial Fibrillation - Type / Patient in A-fib at OR Entry	FAQ May 2021 – My patient has a remote history of Afib and is in Aflutter on entry to the OR. When I code remote to Afib in SEQ 961, "Patient in A-fib at OR Entry" Seq 972 grays out, even if you code recent to Aflutter in SEQ 960. I am NOT able to capture the Aflutter entering the OR. How should this scenario be coded? Answer - For this scenario, code Aflutter and Afib as recent in SEQ 960 & 961, code Paroxysmal Afib type in SEQ 971, and code Yes to Afib at OR entry SEQ 972. This issue will be addressed in the next upgrade.
2123	Aorta Procedure Performed	Update May 2021 - Aortoplasty done in conjunction with CABG to reduce the size of the ascending aorta is considered part of the closure and is not coded as an additional procedure.
2290	AbxDisc	"Appropriate Antibiotic Discontinuation", when the patient receives antibiotics for more than 48 hours after exit from OR because the chest is not closed during the Index case? Answer - In this scenario, if there is clear documentation recommending continuation of antibiotics, then you can code exclusion to antibiotic discontinuation.
2637	VenousCondUsed	Update May 2021 – Includes Cryo Vein
General Info Coronary Grid		If endarterectomy only (no graft) is performed on a coronary artery code "Yes' to CAB done and leave proximal site, conduit, and distal position blank. Update May 2021 Code None for distal site. Leave distal site blank.
3630	VSMilmSz	Update May 2021 – For implanted MitraClip, which is only one size, leave the implant size blank.
3675	VSTrlmSz	Intent/Clarification: Update May 2021 – For implanted TricuspidClip, which is only one size, leave the implant size blank.
4969	VSAVCorReimp	FAQ May 2021 – A question about coding of the following procedure "CORONARY ARTERY





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		RE-IMPLANTATION USING HOMOGRAFT- Human arterial homograft (8 mm femoral artery) Left and Right biologic Cabrol extension" would the Cabrol extension with a femoral artery be captured as SVG Cabrol or Classic Cabrol or left blank? Answer – In this scenario, leave blank
6625	POpTTEch	Update May 2021 - For SEQ 6625 (POpTTEch), do not include post-op echo measurements obtained during a re-operation. For example, a patient is taken to the OR in the post op period for mediastinal exploration. During the post-op Re-op procedure, the patient had TEE by Anesthesia – this is the only echo performed post index procedure. Code NO to SEQ 6625 (POpTTEch).
6650	POpEFD	Update May 2021 - For SEQ 6650 (POpEFD), do not include post-op echo measurements obtained during a re-operation. For example, a patient is taken to the OR in the post op period for mediastinal exploration. During the post-op Re-op procedure, the patient had TEE by Anesthesia – this is the only echo performed post index procedure. Code NO to SEQ 6650 (POpEFD).
7413	MultimodAnalgesGiven	Update May 2021 - Indicate whether multimodal analgesics were given to the patient from 2 hour prior to OR Entry to 24 hours post OR Exit. Update Jan 2021 - Indicate whether multimodal analgesics were given to the patient from 1 hour prior to OR Entry to 24 hours post OR Exit.



STS ACSD FAQ's April 2021 Version 4.20.2

Seq. Number	Short Name	Update
305	AdmitDt	Update April 2021 – In the event of multiple admit
		dates in the medical record, use the date that the
		patient first becomes an inpatient.
492	ImmSupp	FAQ April 2021 - Would Immuno Complex from endocarditis be captured as "yes" to SEQ 492? The patient is on no immunosuppresent medications. Patient has active strep species endocarditis. Answer - Do not code this patient as immunosuppressed in SEQ 492. Capture endocarditis as a pre-op risk factor in SEQ 385.
500	Cancer	Intent/Clarification: Capture cancers (Update April 2021 excluding basal cell or squamous cell carcinoma) that have or will require surgical intervention, chemotherapy and or radiation therapy.
675	PrValve	FAQ April 2021 - If the patient had a failed Mitral Clip procedure on 2/16/2021 and then had a Mitral Valve Replacement on 2/19/21. Do I capture previous transcatheter Mitral Valve repair in SEQ 675? No clips were deployed. It is noted as a failed procedure. Answer – In this scenario, do not code as prior MV intervention since no devices were deployed.
805	POC	Intent/Clarification: If the patient had any other procedure involving the heart and/or great vessels not mentioned above, choose this field. Update April 2021 - Do not capture aborted or unsuccessful procedures.
1150	CarCathDt	Update April 2021 – Timeframe – Capture the date of the Diagnostic Cath that is closest to surgery.
1570	PASYSMeas	If PA systolic pressure is not available, it is acceptable to code the peak RV systolic pressure (RVSP). RVSP and PA systolic pressures will be the same if there is no pulmonary valve disease or outflow obstruction. Update April 2021 - Do not use the RVSP when the pulmonary regurgitation is mild, moderate, or severe as this will affect the RVSP.
1585 /1590	AorticValveRegu rg/Aortic Valve Regurgitation Degree	FAQ April 2021 - A patient is being worked up for a redo AVR. The pre-op TEE reveals that the prosthetic valve is functioning properly with no intra-valvular insufficiency, but notes severe para-valvular insufficiency. How do I code AV regurgitation?



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		0 1 050 (505)
		Answer – Code SEQ 1585 as Yes and code SEQ
4040	VDA a Duina Et	1590 as severe in this scenario.
1646	VDAoPrimEt	FAQ April 2021 - What is the best choice for AV
		etiology in a patient who has Marantic endocarditis
		(NBTE)?
1070	Incidono	Answer - Code Aortic Disease, Inflammatory
1970	Incidenc	Update Nov 2020 - Prior epicardial ablation procedure
		that needs a CABG, code as first re-op since an
		ablation enters the pericardial space and involves
		operating on the heart tissue. Update April 2021 –
		Prior epicardial ablation can cause scarring and
2123	AortProc	increase risk of subsequent procedures. Update April 2021 - An aortic endarterectomy is
2123	AOITETOC	considered part of the CABG procedure and should not
		be coded elsewhere.
2515	IBldProd	This includes RBCs, The intent is to track postoperative
2010	ibidi 10d	blood utilization. Blood products refer to RBC (Update
		April 2021 includes whole blood), FFP, Platelets or
		Cryoprecipitate.
3510	VSLeafResTypM	FAQ April 2021 - For mitral valve repair that is
00.0	ult	described this way: "The flail segment was resected in
		a quadrangular fashion. Primary midline repair was
		constructed using a modified sliding valvuloplasty
		technique." How should this be coded.
		Answer - Quadrangular Alone and Resection with
		Sliding Valvuloplasty.
4505	PatGenHist	FAQ April 2021 - Should Takayasu's arteritis be
		captured in the genetic history field for aorta cases? If
		so, how should it be captured.
		Answer - Takayasu arteritis would be considered an
		inflammatory vasculitis and not a genetically triggered
		thoracic aortic condition. Code "NONE" for SEQ 4505.
6880	DialDur	FAQ April 2021 – Patient developed renal failure post
		op and required dialysis. Nephrologist had dialysis set
		up at discharge, patient refused dialysis after
		discharge. My question is, the intent for post discharge
		dialysis was there and scheduled, but since the patient
		refused what do I code for "dialysis required after
		hospital discharge"?
		Answer - Code Yes in this scenario. The intent of SEQ
		6880 is to separate patients with possible long-term
		dialysis from those that recovered kidney function prior
		to discharge.





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General Information Discharge Medication		April 2021: If medications are not appropriate for a patient on comfort measures only and discharged to hospice, code contraindicated as not all centers withhold medications for patients going to hospice
7220	TempYN2	Update April 2021 - You can leave this blank if not a mitral valve case, however, it will show up as missing on your DQR since it does not have a Parent Field.
7325	PainScorePre	Intent/Clarification: Pain score, which is a quality metric, is routinely assessed as part of preoperative holding area check in list. This information should be obtainable from a progress note or similar documentation completed by preoperative nurse closest to the OR Entry time. Update April 2021 – Timeframe capture the pain score closest to surgery.
7570	ArcAthMo	Intent/Clarification: Update April 2021 - Indicate if there was atheroma mobility within the aortic arch



STS ACSD FAQ's March 2021 Version 4.20.2

Seq. Number	Short Name	Update
1135	MedLipid	Update March 2021 Capture those who are prescribed to take medications on a regular schedule and are presumed to be at a therapeutic level, patients who receive a lipid-lowering medication within 24 hours prior to entry into the OR.
2100	ОРАрр	Percutaneous - Update March 2021 Needle/wire access via a skin puncture
2100	ОРАрр	Other – includes right or left parasternal thoracotomy, transverse sternotomy, limited or mini thoracotomy, sub-costal approach, Update March 2021 cut-down to access the femoral artery
2629	NoIMARsn	No (bypassable) Left Main or LAD disease: 1) There is no hemodynamically significant Left Main (<50%) or LAD (<70%) stenosis necessitating a bypass to the LAD or 2) The LAD system is not graftable due to diffuse disease or calcification that cannot be addressed surgically
5068	EndovasPercAcc	The intent is to capture needle access; no incision is required; a stab wound may be required for sheath placement. Update March 2021 cut-down to access the femoral artery is coded as NO to percutaneous access.
5437	IntraOpAngVol	The volume of contrast Update March 2021 in ml used during the intraoperative angiogram documented in the perioperative record, the operative dictation, or the Cath Lab event log.
6778	COpReOth	Return to the OR for removal of Impella or IABP Update March 2021 or ECMO decannulation is not a reoperation for other cardiac. This is an expectation and not a complication.
7003	DischMtPtTrnfAc uteHosp	This is for internal tracking purposes so that the participant will know when the patient left their hospital and transferred to another acute care hospital. Update March 2021 – Acute Care Rehabilitation is not considered an acute care hospital. Patients discharged to Acute Care Rehabilitation are considered to be discharged from the acute care inpatinet hospital setting, even if the Acute Care Rehabiliation occurs at the same hospital as the acute care inpatient hospital stay.
7005	DischMtPtAcute HospStill	This field refers to patient's that are in the hospital at the 30-day mark that were never discharged. It is





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7010	Discharge Location	provided so sites do not get marked as missing on the required mortality fields for their composite scores/STAR ratings. Update March 2021 – Acute Care Rehabilitation is not considered an acute care hospital. Patients discharged to Acute Care Rehabilitation are considered to be discharged from the acute care inpatinet hospital setting, even if the Acute Care Rehabilitation occurs at the same hospital as the acute care inpatient hospital stay. Extended Care/Transitional Care Unit /Rehab – Includes short-term inpatient and outpatient rehab facilities and long-term acute care hospital and Update March 2021 Acute Care Rehabilitation facilities (LTACH, LTAC, LTCH). Long-term acute care hospital is not part of the acute care stay. May include Skilled Nursing Facilities (SNF). Skilled Nursing Facilities (SNF) are nursing facilities with staff and equipment to give skilled nursing care and, in most cases, skilled rehabilitative care services. You will need to investigate the intent of discharge, If the intent of discharge is for a
		the intent of discharge. If the intent of discharge is for a patient from the hospital to go to a SNF for rehabilitation and to eventually discharge home, then Code as Extended Care/Transitional Care/Rehab.
7413	MultimodAnalges	FAQ March 2021 – Do we capture the use of a
	Given	Lidocaine patch post-op in the multimodal analgesic category?
		Answer – No, do not capture the use of a Lidociane patch.



STS ACSD FAQ's February 2021 Version 4.20.2

Seq. Number	Short Name	Update
665	PrCVInt	Update Feb 2021 - If a patient has had multiples of the same type of intervention, coding once for each separate intervention is acceptable. For example, patient has had multiple previous percutaneous MV repairs, code percutaneous MV repair one time in the grid
4139 / 4142	OCarAAMeth / OCarAAppAmp	Update Feb 2021 - Amputation refers to surgical resection by either a cutting stapler or scissors. If an epicardial stapler is placed without amputation, the data manager should code SEQ 4139 epicardial staple. If the operative note says "amputated" code as amputated. For example: Surgeon's documentation: "We first amputated the left atrial appendage flush to the left atrium using a cutting epicardial stapler". Code as amputated. Surgeon documents "LAA amputated to "prevent future complications of AFib" with epicardial stapler". Code as amputated.
4139	OCarAAMeth	Epicardial Staple - Includes Update Feb 2021-Stapler (cutting) and Stapler (noncutting).
4531	PriorRepTyArch	FAQ Feb 2021 - What do you code when a patient has had a prior open and endovascular repair in the arch. The STS Database only allows one answer, either prior open or Endo repair? Answer – Since you can only select one choice, it is more important to know what intervention is being done now. For example, if the current procedure is a distal endovascular intervention for a type II endoleak related to the arch TEVAR, select prior endovascular intervention. If the current procedure is a new root replacement in the setting of prior ascending/hemiarch, select prior open surgery. That way, you're capturing what was the previous procedure that's most relevant to the indication or difficulty of doing the present procedure.
7413	MultimodAnalges Given	FAQ Feb 2021 - HYDROcodone-acetaminophen (NORCO) tablet is frequently used in our facility. This selection of combination drug is not included as a choice for Multimodal Analgesics. Should we choose Norco as multimodal analgesics since it is a combination of acetaminophen? Answer – Code No in





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this scenario. Medications that contain opioids are not
captured in this field.



STS ACSD FAQ's January 2021 Version 4.20.2

Seq. Number	Short Name	Update
500	Cancer	FAQ Jan 2021 - I have a patient with melanoma skin cancer. The doctor excises the melanoma in his office in April of 2019. Do I capture melanoma as cancer in SEQ 500? Answer – Yes, capture SEQ 500 in this scenario. Melanoma is not considered a 'low-grade' skin cancer.
	Capturing of Hemodynamic/C ath/ECHO results: Valve Insufficiency	FAQ January 2021 - Can or should values from earlier echos be used to complete data variables not present on the most recent pre-op echo? For example, echo 8/29/20 which was done 1 day pre op does not mention or even address Aortic Insufficiency. An echo on 6/26/20 documents trace Aortic insufficiency. How do we code Aortic Insufficiency? Answer - Code trace Aortic Insufficiency in this scenario since the echo closest to surgery did not address Aortic Insufficiency and the next closest echo (still done within 6 months) did address the Aortic Insufficiency.
1617/1646	VDAort / VDAoPrimEt	FAQ January 2021 - How do I code supra annular stenosis when ECHO states there is NO Aortic Stenosis, but there is evidence of supravalvular Aortic Stenosis? Answer - Code YES to SEQ 1617 and in SEQ 1646 Aortic Valve Disease Primary Etiology choose "supravalvular aortic stenosis".
2123 / 2140	AortProc / OpOCard	Update Jan 2021 - Wrapping the dilated portion of the aorta to reinforce it does not constitute an "other or aorta" procedure when done in conjunction with a CABG
2525 / 6570	IBdFFPU / BdFFPU	FAQ Jan 2021 - Should we be recording convalescent plasma given to COVID positive patients anywhere in the database? Answer - Please code convalescent plasma as FFP.
2627 / 2628	LeftIMA / RightIMA	FAQ Jan 2021 - When the surgeon refers to the IMA harvesting technique as "Semiskeletonized technique", should we consider it skeletonized technique? Answer – Yes, capture as skeletonized in this scenario.
3600	MitralIntent	Update Jan 2021 – The intent is to capture repair attempts in the same operative setting, do not capture valve repairs that fail after the patient leaves the operating room. Preservation of the native valve and surrounding structures is preferable to replacement





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		when possible. The surgeon may attempt repair prior to replacement.
3638	OpTricusAnTy	Pericardium – Update Jan 2021: Pericardium includes Bovine pericardium
4139/ 4142	OCarAAMeth / OCarAAppAmp	Update Jan 2021 -If the LAA is removed from the body, choose 4142. If any part of the LAA is left in the body, choose 4139. Do not choose both.
5442	AVAVCompGrIm plModelAo	Update Jan 2021 - The intent is to capture commercial valves and commercial valve conduits in this field.
5442/5465+A7	AVAVCompGrIm plModelAo	FAQ Jan 2021 - For our Aortic Dissection patient, our surgeon created a valve conduit using a 3300TFX #23 valve and sews the valve to a composite graft 734032/10 to create his own composite graft. How do we code for this surgeon made "composite graft implant"? Answer - Enter the commercial valve in SEQ 5442 -5444 and the graft material in SEQ 5450-5470.
6690	SurSInf	Yes, Non-Infectious – Update Jan 2021 Non-Infectious only applies to SEQ 6748 - Non-Infective Surgical Wound Dehiscence
7165	ReadmPro	FAQ Jan 2021 - I have a patient who was readmitted for pleural effusions and received a thoracentesis. During that readmission, she developed abdominal pain and was transferred to another hospital where she underwent an exploratory laparotomy. Is the transfer considered a separate admission or is still part of the initial readmission? SEQ 7165 says to code the most invasive procedure, so I'm not sure whether to code the thoracentesis or the exploratory laparotomy. Answer – Apply the same concept that STS uses with the initial admission and consider this part of the initial readmission until discharged from acute care. Code the exploratory laparotomy in SEQ 7165.



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7220	TempYN2	Definition: Was the device implanted a Model #5300 – Physio Flex Annuloplasty Ring. Intent/Clarification: Temporary field (TempYN2 – sequence 7220) which STS will begin utilizing with cases having OR dates starting January 1, 2021. This field will be used to capture the implantation of ELS 5300 – Physio Flex Annuloplasty Ring under the Mitral Valve Implantation section of version 4.20.2. Please see the screen shot below. Vendors have been notified that this field should be made available to all sites. The placement of this field within your software is vendor specific. Information on capturing this field was provided on the December 16, 2020 ACSD User Call–see links below:
7413	MultimodAnalges Given	Intent/Clarification: Update Jan 2021 - Indicate whether multimodal analgesics were given to the patient from 1 hour prior to OR Entry to 24 hours post OR Exit.
7413	MultimodAnalges	Cox-2 inhibitor/non-steroidal anti-inflammatory (PO). Update Jan 2021 includes IM and IV medications



Seq	Update
Case Inclusion	Update Dec 2020 – Cancelled or Aborted cases without any
	procedure performed are not entered into V 4.2.
492	FAQ Dec 2020 - We would like clarification on the question of
	immunosuppression. Uncontrolled diabetes is classified as a
	secondary immunodeficiency. Since uncontrolled diabetes fits
	this classification should we code this condition (if explicitly
	documented in the patient record) as immunocompromised?
	Answe r – No, do not capture as immunosuppressed. There is a
	separate field SEQ 360 to capture Diabetes and that is where
	the Diabetes Risk Factor will be captured
492	FAQ Dec 2020 – My patient takes sulfasalazine for Guillain
	Barre. Should we code "Yes" for Immunosuppression?
	Answer – No, do not capture as immunosuppressed. Although
	sulfasalazine has immunomodulatory effects, it is not classified
	as an immunosuppressive medication.
550 /555	FAQ Dec 2020 - I have encountered several carotid ultrasound
	reports that describe the percent stenosis as >70%. Should this
	be coded as moderate or severe?
005	Answer - Consider this 71% and code as moderate.
885	FAQ Dec 2020 - My patient has a history of a heart transplant.
	How do I capture if the patient had a previous MI pre- heart transplant?
	Answer – In this scenario, do not capture previous risk factors
	on prior heart.
1970	Update Dec 2020 – Prior thymectomy performed through a
	median sternotomy who needs a CABG. If the pericardial space
	was previously entered, then this would be first re-op. Not all
	thymectomy procedures enter the pericardial space. Review the
	thymectomy op note or clarify with surgeon if the pericardial
	space had been entered previously or not.
2545	Update Dec 2020 – Capture systemic clotting factors that were
	administered intra-operatively during the index surgical
	procedure.
2546	Update Dec 2020 – Capture prothrombin complex concentrate
	(i.e.K-Centra) that were administered intra-operatively during
	the index surgical procedure.
2556	Update Dec 2020 – Capture antifibrinolytic medications that
	were administered intra-operatively during the index surgical
	procedure.
2629	Subclavian stenosis – Update Dec 2020 the presence of an
	untreated significant subclavian stenosis is considered a





	Leastraindication to modicled IMA use. The IMA is a branch of the
	contraindication to pedicled IMA use. The IMA is a branch of the subclavian artery and a luminal stenosis in that vessel produces reduced flow through the IMA. The surgeon has the option of using the LIMA as a free (nonpedicled) graft, but due to the additional technical demands and reported lower patency rates for IMA free grafts, STS considers subclavian stenosis an acceptable exclusion to IMA use.
2629	Previous cardiac or thoracic surgery – Update Dec 2020 a
	prior cardiac procedure may have involved harvesting of the
	IMA. Additionally, the greater technical complexity of
	reoperative surgery may mitigate against IMA use. Therefore,
	STS considers prior cardiac surgery to be an acceptable
	exclusion to IMA use. Prior thoracic surgery, if it is ipsilateral to
	the IMA being considered for use, is also an acceptable
	exclusion due to the development of pleural adhesions
2629	secondary to prior surgery.
2029	Previous mediastinal radiation – Update Dec 2020 due to both the short and long term damaging effects of radiation on
	blood vessels, STS considers previous mediastinal radiation to
	be an acceptable reason for not using the IMA.
2629	Emergent or salvage procedure - Update Dec 2020 the
	potential need for rapid anticoagulation and institution of
	cardiopulmonary bypass, often shifts the risk/benefit balance
	away from the extra time needed for IMA harvest. These
	situations are acceptable exclusions.
2629	
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	the NQF measure for IMA use and consequently, star rating.
	Additionally, STS wishes to minimize the potential for gaming.
	As an example of gaming: small vessel caliber or inadequate
2629	cardiopulmonary bypass, often shifts the risk/benefit balance away from the extra time needed for IMA harvest. These situations are acceptable exclusions. Other - acceptable STS provided exclusion – Update Dec 2020 This category is to be chosen rarely. Generally speaking, it is for those anatomic and/or clinical situations that would be considered contraindications to IMA use by the vast majority of surgeons. To be clear: there will be select clinical situations where the surgeon opts not to use the IMA because of concern about IMA quality but the reason will not be an STS acceptable exclusion. It is and has been the position of STS leadership that such situations are 1) uncommon; 2) should be uniformly distributed across the spectrum of patients, surgeons and/or participant groups; 3) can fall into a gray area and be managed differently by surgeons; and 4) no one surgeon or participant group should encounter these random situations with any particular increased frequency such that it would unduly impact the NQF measure for IMA use and consequently, star rating. Additionally, STS wishes to minimize the potential for gaming.





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	flows are judgments that differ among surgeons. If accepted as exclusion, virtually any IMA could be coded in this manner as exclusion, and the IMA measure would become meaningless. With careful harvest and use of vasodilators like papaverine, almost all IMA's have adequate size and flow. STS understands that surgeons must always proceed in what they believe to be the best interests of their patient. If a surgeon selects this exclusionary category, the situation must be adjudicated by Surgeon Leadership of STS and deemed to be acceptable. If you have a documented reason for not using the IMA that does not fall into one of the above approved reasons and it not addressed below, please send in a question to the FAQ Mailbox Ask an Abstraction Question. It is important for sites to keep a copy of the FAQ email documenting the exclusion in the event of an audit.
2750	Other - Update Dec 2020 'Other' includes Cryo veins
3512	FAQ Dec 2020 - I'm trying to understand the intent of this question. Are you asking which side the chordals were taken from or which side they are going to? Answer - Anterior or posterior refers to the origin of the chords not the destination.
4505	FAQ Dec 2020 - For SEQ 4505, does timeframe of the result
	matter? I have an aortic dissection patient who, after discharge during follow up had genetic testing done. I'm wondering if I can use these results. Answer – In this scenario, you can use the results obtained post-op.
4889	Update Dec 2020 – The intent is to capture patient's who have a prior patent internal mammary graft (either left or right) present, not an internal mammary graft that is placed during the current procedure.
4892	Update Dec 2020 – The intent is to capture patient's who have prior proximal coronary bypass grafts not proximal bypass grafts that are placed during the current procedure.
4969	FAQ Dec 2020 - Does the type of coronary reimplantation have a precedence over the other? I have had two cases now and you can only enter one choice in the software. The first case had both direct to root (button) and vein graft extension for reimplantation, and the other case had a cabrol with vein graft and a classic cabrol. Which do I choose in each case? Answer - For database purposes, it is most important to differentiate right/left classic buttons vs. any other configuration. Meaning - is there an impact on outcomes when you have to do





	anything host hosting. The appropriately had a physical state
	anything but buttons. The answer would be to always select
	Cabrol if one is button and one is Cabrol. In addition, if one case
	had both SVG Cabrol and Classic Cabrol, it would make sense
	to always select SVG since SVG Cabrol is relatively infrequent
	compared to Classic Cabrol.
7005	FAQ Dec 2020 - When SEQ 7005 is marked as yes for a
	patient at submission deadline, will the patient's data that has
	been coded and submitted thus far, such as prolonged
	ventilation, be included in the data & STAR ratings of the
	harvest report or does this field exclude the patient entirely until
	discharged from the acute care setting?
	Answer - Starting with H1 2020, these cases are excluded from
	analysis because the postoperative course is not complete. So,
	in an attempt to avoid incomplete data, we are excluding these
	cases until they discharged from acute care.
7016	FAQ Dec 2020 - If smoking, alcohol, or drug use is coded as
	unknown, how do I code SEQ 7016?
	Answer - If smoking, alcohol, or drug use is "unknown" then
	you have not screened the patient. Screening would produce an
	answer to the amount of substance abuse. In this situation, you
	have to answer, SEQ 7016 as NO since there was no
	assessment of the patient's status.
7124	FAQ Dec 2020 - When a patient is coded as "Discharged to
	Hospice" should the rule be that "Operative Mortality" is also
	answered "Yes" even if there is no date of death.
	Answer – Yes that is correct. Code "Yes" to "Operative
	Mortality" in SEQ 7124 and fill out date of death when the
	patient expires.
7215	FAQ Dec 2020 - Should SEQ 7215 temporary field regarding
1210	consented Impella implantation using an open surgical
	approach be answered on all cases, or only those that received
	a Mechanical Cardiac Assist Device (i.e if seq #2137 = Yes).
	Answer - You only have to answer on patients who receive a
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	MAD, however, this is not a child field and will show up as
	missing on DQR if you do not answer the question on all
	patients



Seq	Update
395	FAQ November 2020 - If a patient has treated endocarditis and
	is culture negative prior to OR entry, am I to code the negative
	culture as it is closest to OR entry, or should I capture the
	causal agent when the culture was positive?
	Answer - Capture the name of the organism that caused the
	endocarditis if known.
405	Update Nov 2020 - The DLCO can be used to determine the
	severity of lung disease. The lowest % predicted of either the
	simple DLCO or the DLCO/VA uncorrected should be captured
	Mild: DLCO or the DLCO/VA >60% of predicted and < lower
	limit of normal.
	For example, DCLO is 72% and the normal value is 80-120%,
	then you would code Mild in this situation. Moderate: DLCO or
	the DLCO/VA 40-60% of predicted. Severe: DLCO or the
	DLCO/VA <40% of predicted. Code the most severe category if
	there is a discordance between the FEV1, DLCO, ABG, and
	inhaler criteria. See below examples: FEV1 is 60%, the DCLO is
	45% and the ABG pO2 is 50, code as severe.FEV1 of 45% and
	DCLO of 40%, code as severe. FEV1 76% and DCLO 78% (
	normal limit 80-120%), code as mild.
930	FAQ Nov 2020 - If the patient went into cardiogenic shock 36
	hours prior to surgery and is still being stabilized with inotropes
	do we code that as cardiogenic shock at time of procedure?
	Answer – Code as cardiogenic shock at time of procedure if the
	patient has a requirement for parenteral inotropic or
	vasopressor agents or mechanical support (e.g., IABP,
	extracorporeal circulation, VADs) to maintain blood pressure
	and cardiac index above those specified levels. In this scenario,
	the patient was in shock 36 hours prior to OR and did remain on
	inotropes to maintain hemodynamics up until OR entry - code
	as cardiogenic shock at time of procedure.
930	FAQ Nov 2020 - Sometimes an IABP is inserted prior to a
	procedure but it is not due to cardiogenic shock, it is placed for
	USA or prophylactic. Should I capture cardiogenic shock at time
	of procedure since the patient has an IABP in place?
	Answer - No do not capture cardiogenic shock for IABP placed
	for USA or prophylactic.



945	Update Nov 2020: Remote means that the patient has a history of cardiac arrhythmia more than 30 days prior to induction of anesthesia. No cardiac arrhythmia within 30 days prior to the induction of anesthesia. Recent means that the patient has a history of cardiac arrhythmia within 30 days prior to induction of anesthesia. The patient has experienced cardiac arrhythmia within 30 days prior to the induction of anesthesia
947	FAQ Nov 2020 - The patient has a permanent pacemaker but is in sinus rhythm when they enter the operating room. Should this be coded as permanent paced rhythm? Answer - No, to code permanently paced rhythm the patient should be 100% paced.
971	Update Nov 2020 - Persistent AF is defined as any documented episode of AF that fails to terminate, with or without intervention, within seven days of onset of atrial fibrillation. Persistent AF is defined as AF that fails to self-terminate within seven days. Episodes often require pharmacologic or electrical cardioversion to restore sinus rhythm.
1080	Other – Includes Angiomax and update Nov 2020 Argatroban
1155	FAQ Nov 2020 - The patient is going in for isolated CAB after a STEMI treated with PCI approx 13 months prior. There were additional blockages not amenable to PCI that surgery was consulted to re-vascularize. There was no cath done in between STEMI/PCI and CAB. I coded SEQ 1145(Cardiac Catheterization Performed) as "no" because the cath wasn't within one year. Can I still populate SEQ 1155 and child fields with the cath report data, or does this data have to be within one year also? Answer – Yes, you can populate those fields since that is the only data that you have in this scenario.
1179/1181	FAQ Nov 2020 – Per the Cath, there is a 50% stenosis in the native LAD and an 80% in-stent restenosis in the Diagonal. How do I code the LAD distribution stenosis? Answer - Code SEQ 1179 as >= 70% to capture the highest stenosis in the LAD distribution and code SEQ 1181 as native artery stenosis and stenotic stent.
1180/1184/1188 /1192	Intent/Clarification: Update Nov 2020 Is location of stenosis known within the distribution?



1617	FAQ Nov 2020 - Patient has trace regurgitation and no stenosis but is brought into OR for AV repair leaflet debridement r/t Lambl's excrescences. Would I code AV disease as "yes" since the patient was brought to OR for AV repair? Answer – Yes, the AV has disease that requires an AV repair.
1710	FAQ Nov 2020 - I often see on the echo "valve appears normal" followed by "mild regurgitation". So, if there is no mitral valve disease do I document the regurgitation? Answer – Code mild regurgitation and code Yes to MV disease. The valve should be coded as being diseased if there is mild, moderate or severe insufficiency.
1711	FAQ Nov 2020 - Does the surgeon have to document Carpentier Classification, or can the data manager infer the functional class of the mitral valve if pathology is dictated? Answer - The Provider does not have to document the class. If you can determine the class based on documentation in the chart, then code as such. For more complicated scenarios, where the documentation is unclear or an etiology can fall into more than one class, then seek clarification from the Provider.
1711	FAQ Nov 2020 - One of my surgeons said he typically associated Carpentier class with mitral regurgitation, not stenosis, but on the DCF, Type IIIa seem stenosis-related. Can you confirm that Carpentier class is appropriate/should be documented for Mitral Stenosis patients? Answer - Carpentier functional classification of mitral valve disease, which includes stenosis or regurgitation, is used to describe the mechanism of valvular dysfunction. This classification is based on the opening and closing motions of the mitral leaflets.
1970	Update Nov 2020 – Previous TAVR that needs TAVR valve-invalve procedure, code as NA not a CV surgery.
1970	Update Nov 2020 - Prior pericardial window that needs a CABG, code as first CV surgery since in a pericardial window, even though you enter the pericardial space, you do not operate on the heart.
1970	Update Nov 2020 – Prior epicardial ablation procedure that needs a CABG, code as first re-op since an ablation enters the pericardial space and involves operating on the heart tissue.
1970	Update Nov 2020 – Prior Lead extraction (laser or no laser) procedure that needs a CABG, code as first CV surgery.
1970	Update Nov 2020 – Prior ICD or pacemaker implant that needs a CABG, code as first CV surgery.





1970	Update Nov 2020 - Stand-alone lead extraction can be coded as first re-op to identify the risk associated with these standalone lead extraction cases.
1970	Update Nov 2020 - Patient with prior pericardectomy that needs a CABG, code as first re-op.
1970	Update Nov 2020 - Pt had a failed attempt at repairing ASD-secundum in cath lab, that needs open surgical repair of ASD, code as first CV surgery.
1970	Update Nov 2020 – Failed TAVR followed by emergent SAVR on the same day in the same setting, code SAVR as first CV surgery.
2105	Update Nov 2020 - Capture both planned and unplanned operative approach conversions in this field.
2120	Update Nov 2020 – CABG only for anomalous coronary artery will be coded as a CABG with no congenital procedure performed. If unroofing of the anomalous coronary artery is performed at the time of the CABG, then code as CABG plus congenital procedure.
2130	FAQ Nov 2020 – During a failed TAVR or during a planned transcatheter valve in valve procedure, do you capture the original valve as an explant even if you don't physically explant the transcatheter valve? Answer – Yes, you should still code as an explant so you can track the transcathter valve.
2137 / General Info MAD	FAQ Nov 2020 – Post -Op patient went back to OR and had a mechanical assist device inserted, do we code SEQ 2137 Mechanical Assist Device Inserted as "yes" and fill out section L, or do we code this as a post op complication? Answer – Code SEQ 2137 as Yes and then complete section L for the appropriate mechanical assist device
2145	FAQ Nov 2020 - If you have CAB and a LAA clip, but no AF is ever documented, do you abstract SEQ 2145 for an AFib procedure? Answer – Yes, code SEQ 2145 as YES and then SEQ 4139 or SEQ 4142 depending on what was performed.
2195	Update Nov 2020 – CPT codes are optional to enter.



2285	If hospitals choose to develop a pre-op antibiotic protocol where 2 antibiotics are given, then both must be administered within one hour of surgical incision or start of procedure if no incision required (two hours if receiving Vancomycin or fluoroquinolone) in order to code YES to Seq 2285. Update Nov 2020 – In protocol where 2 antibiotics are given, then both must be administered within their timeframe as stated above. For example, Ancef should be given within 1 hr one hour of surgical incision or start of procedure and Vancomycin should be given within 2 hr of surgical incision or start of procedure to code Yes.
2515	Yes – Update Nov 2020 – includes RBC given on pump
3500	FAQ Nov 2020 - If a MV repair is attempted and converted to an MVR, do we only code the replacement? Answer – Yes, on the DCF, you can only choose repair or replacement. In this scenario, code as a MV replacement since that was the procedure performed.
3502	Edge to edge repair - The mitral valve repair procedure included an edge to edge repair. Edge-to-edge repair is a surgical approximation of the mitral valve leaflets, sometimes called the Alfieri procedure or Bow Tie procedure. Update Nov 2020 – Transcatheter Mitral Clip cases are coded as edge to edge repair.
3786/3840	Update Nov 2020 – If a patient goes on the Heart Transplant list and receives a heart transplant while a temporary assist device is in place, then the temporary assist device is to be coded as a long-term durable device in SEQ 3840, instead of a temporary assist device in SEQ 3786.
4244	Other – Update Nov 2020 includes ganglionic plexi ablation
4712	FAQ Nov 2020 - A patient with a bicuspid aortic valve has severe aortic stenosis and bicuspid aortopathy (aneurysm). Patient had an AVR with ascending aortic replacement. For SEQ 4712, the primary indication for aortic surgery, should we code Aneurysm or Other for Valvular Dysfunction? Answer – Code Aneurysm in this scenario.
4725	FAQ Nov 2020 - If there is no documentation whether the aneurysm is fusiform or saccular we can assume it is fusiform? Answer – Code as unknown. Although most aneurysms tend to be fusiform there needs to be documentation in the medical record indicating the type.





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4855	FAQ Nov 2020 - Does every patient who has an aortic root aneurysm have aorta-annular ectasia?
	Answer – No, there needs to be documentation of aorta root ectasia or dilated annulus in order to code aortic root ectasia.
4881	No – Update Nov 2020 - Code NO if there is no documentation of arch anomalies.
5442	FAQ Nov 2020 - If I abstract a Bentall procedure I would only enter the device under SEQ 5442 and leave SEQ 5450 blank, correct? I do not see an option for "no additional devices" in SEQ 5450.
	Answer – Yes that is correct. Enter the valve conduit in SEQ 5442. SEQ 5450 is for devices other than aortic valves and aortic valve composite grafts. There is no option in SEQ 5450 to enter X or no additional devices placed - this was an oversight in V 4.2 - unfortunately, this will show up as missing on your DQR.
5450	FAQ Nov 2020 – I have noticed that there is no option for "no additional devices" in SEQ 5450, so I have devices 2-15 showing up as missing on my DQR. Is this correct? Answer – Yes this is correct. There is no option in SEQ 5450 to enter X or no additional devices placed - this was an oversight in V 4.2 - unfortunately, this will show up as missing.
5465	Intent/Clarification: This is the model number from the manufacturer related to the type of device implanted. There is no drop-down list of model numbers for aorta devices. Update Nov 2020 - sites were instructed to enter harvest codes in the fields for aorta device model numbers in data specification version 4.20.2, starting at sequence 5465. The intent was to ease the data collection burden and help ensure that the most accurate data were being collected; it has come to our attention that this method cannot be used. Starting November 1, sites will be required to enter the device model number in these fields, not a harvest code.
6748 / 6780	FAQ Nov 2020 - Patient had sternal dehiscence and returned to OR for sternal rewiring. I know I will capture this in SEQ 6748. Should I also capture as re-op non-cardiac in SEQ 6780? Answer – Capture both SEQ 6748 and SEQ 6780 in this scenario.
6860	FAQ Nov 2020 - If post-op thoracentesis is attempted but no fluid was drained, do we still code Yes for this? Answer - Do not code SEQ 6860 if no fluid was drained.





6935 /6930	FAQ Nov 2020 - My patient had a GI bleed secondary to an anticoagulant postoperatively. I said yes to sequence 6930 (AnticoagBleedEvntType). Should I also say yes to sequence 6935 GI Event and 6936 GI bleed? Answer – Yes, code SEQ 6930, SEQ 6935 and 6936 GI Bleed in this scenario
7015	FAQ Nov 2020 - Our elective CABG patients often get their education regarding the importance of attending outpatient Cardiac Rehab during their PAT visit. Can I code "yes" to cardiac rehab referral in this situation? Answer – Yes, this is acceptable since it involves the PAT EOC and the continuum of care for the surgery patient. Make sure that you have this documentation available in the event of an audit since it is happening in another EOC.
7230	FAQ Nov 2020 - Are patients that are covid positive patients being risked differently? Answer - Covid positive patients will be taken out of public reporting and risk adjusted results until more data can be captured.



Seq	Update
405	Intent/Clarification: Update Oct 2020 The intent of this field is to capture those diseases that have produced a chronic change in lung function, typically manifested by the symptoms of chronic cough, wheezing, sputum production and/or dyspnea. The degree of functional impairment may vary by patient, by disease and over the span of time. The degree of impairment can be judged subjectively by symptomatic status or more quantitatively by pulmonary function testing and the frequency of symptomatic exacerbations requiring escalation of treatment. The ACSD is concerned about chronic changes in lung function and so transient conditions such as atelectasis, pneumonia, mild/transient or childhood asthma and isolated prior pneumothorax will not typically qualify as a chronic condition.
405	Update Oct 2020 - The typical cardiac surgery patient has a history of cigarette smoking and so the most common type of chronic lung disease in the ACSD population is Chronic Obstructive Pulmonary Disease, which includes chronic bronchitis and/or emphysema A number of these patients will require inhaled or oral pharmacological therapy (e.g., beta-adrenergic agonist, anti-inflammatory agent, leukotriene receptor antagonist, or steroid) and some will require supplemental oxygen. Pulmonary function testing is used to establish a diagnosis and to help assess its severity.
405	Update Oct 2020 Patients with chronic or extensive exposure to environmental dusts/chemicals (asbestosis, black lung disease or pneumoconiosis, etc) may qualify as having chronic lung disease based on an established diagnosis resulting from formal pulmonary evaluation. Similarly, prior lung radiation therapy typically results in radiation pneumonitis (acutely) and radiation fibrosis (chronically) and also qualifies as chronic lung disease, provided pulmonary function testing is not normal. Update October 2020 A history of chronic inhalation reactive disease asbestosis, mesothelioma, black lung disease or pneumoconiosis may qualify as chronic lung disease. Radiation induced pneumonitis or radiation fibrosis also qualifies as chronic lung disease. (if above criteria are met) A history of atelectasis is a transient condition and does not qualify.
405	Sarcoidosis can be considered a chronic lung disease if the patient meets the criteria based on pulmonary function studies, use of inhaled medications or steroids aimed at the lungs. Update October 2020 These patients will have restrictive physiology





405	Update Oct 2020 Grading the Severity of Chronic Lung
100	Disease: It is important to understand that the criteria used to
	grade the severity of lung disease have evolved over time, but
	all grading schema incorporate the results of pulmonary function
	testing. The ACSD uses the FEV1 criteria noted above. We do
	so because it is a reasonable framework, and it has been a
	stable format over the years both for the purposes of risk model
	development and consistency in reporting over time. However,
	other grading systems, such as the Global Initiative for Chronic
	Obstructive Lung Disease or GOLD criteria for FEV1 grading
	have changed over the years. GOLD uses slightly different
	cutoffs in FEV1 for grading the severity of disease. Additionally,
	GOLD currently uses a severity schema that incorporates both
	PFTs and clinical symptoms and response to treatment. So,
	when you see a difference between the surgical team and the
	pulmonologist, it may be the results of using different grading
	systems. Please use only the ACSD criteria listed above
410	Obstructive chronic lung disease is characterized by chronically
	poor airflow. It typically worsens over time and the main
	symptoms include shortness of breath, cough, and sputum
	production (ex. COPD; Chronic Bronchitis; Emphysema).
	Update Oct 2020 Obstructive chronic lung disease is caused by
	conditions that obstruct the flow of air through the respiratory
	system That obstruction can come from the narrowing of
	smaller or larger bronchioles from chronic inflammation,
	excessive contraction of smooth muscles or from the loss of
	elastic recoil in the lungs (such as in severe emphysema due to
	the destruction of alveolar units). For our patient population,
	COPD (Chronic Obstructive Pulmonary Disease) is by far the
	most common entity creating an obstructive defect. Asthma, as
	noted in the prior section, creates reversible obstruction. In its
	earlier or milder forms, it typically does not create chronic
	obstruction. However, long standing or poorly treated asthma
	may demonstrate chronic obstructive changes on PFTs. Other
	causes of chronic obstruction are from bronchiectasis and cystic
	fibrosis, but these conditions are very uncommon in the ACSD
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	patient population



410	Reactive - Update Oct 2020 - this category should rarely, if ever, be used. Reactive lung disease is an older construct, its use is somewhat controversial, it does not have a clear definition and has been used to describe different conditions. It is sometimes informally used as a placeholder for asthma before a definitive diagnosis can be made. Reactive airway disease should not be confused with Reactive Airway Dysfunction Syndrome or RADS, which is caused by excessive exposure to corrosive gases or vapors. Reactive lung disease is a specific type of reactive airway disease, a term used to generally describe a condition where the individual experiences asthma-like symptoms after exposure to toxins. This can include asbestosis and mesothelioma.
410	Update Oct 2020 Interstitial fibrosis comprises a group of parenchymal lung diseases that are more properly included in the restrictive lung disease category, as noted above. Please disregard this category and code interstitial diseases in the restrictive category. Interstitial lung disease (ILD), also known as diffuse parenchymal lung disease (DPLD), refers to a group of lung diseases affecting the interstitium (the tissue and space around the air sacs of the lungs). It concerns alveolar epithelium, pulmonary capillary endothelium, basement membrane, perivascular and perilymphatic tissues. The term ILD is used to distinguish these diseases from obstructive airways diseases; (ex. ILD, DPLD, Cystic Fibrosis)
410	Update Oct 2020 - Restrictive lung diseases are less common than obstructive but comprise a diverse group of underlying conditions. The hallmark of all these diseases is that they restrict the ability of the lung to expand to normal volumes. These diseases include entities that: 1)interfere with the interstitium or lung parenchyma itself. They include things like idiopathic pulmonary fibrosis, the interstitial pneumonitises, collagen vascular disease (such as lupus, rheumatois arthritis, scleoderma and the like), chronic infection (such as TB and pneumocystis), occupational related diseases (such as asbestosis, silicosis, berryliosis and hypersensitivity pneumonitis), drug toxicity (as seen with amiodarone and chemotherapy) and radiation fibrosis.2) affect the chest wall, pleura or diaphragm can restrict the lungs as well. Examples are kyphoscoliosis, pectus excavatum, pleural thickening or effusion (as from chronic inflammation or even mesothelioma), elevated diaphragm and extreme abdominal obesity. 3) neuromuscular diseases such as as myasthenia and





	Amyotrophic Lateral Sclerosis can weaken respiratory muscles
	and impair lung expansion.
420	FAQ October 2020 - If a FEV1 is 49.9% do I code this as 49 or 50? Answer – Do not round up, code as 49.
485	Update October 2020 Hemochromoatosis can lead to liver disease but is not considered liver disease by itself
695	Other valve procedure Update Oct 2020 may include Angiovac valve procedures
915	FAQ Oct 2020 - What do I code when the NYHA is documented as NO or Class 0? Answer - NYHA Class 0 will be coded as NYHA Class 1. NYHA Class NO will be coded as not documented
1020	Yes - Update Oct 2020 Capture those who are prescribed to take medications on a regular schedule and are presumed to be at a therapeutic level, patients who receive an ACE/ARB within 48 hours prior to entry into the OR
1050	Update Oct 2020 Do NOT include one-time boluses of Nitroglycerin.
1060	Update Oct 2020 This includes a one time dose of ADP within 5 days of surgery.
General Information Coronary Artery Stenosis	Update Oct 2020 – Coding of Native Vessel Stenosis in Patients who have had prior CAB Surgery. If all grafts are patent bypassing stenosis in the native vessels then capture RCA, LAD, CX, LM distribution 50% or > as NO. The goal is to capture new disease of the vessel supplying blood to the myocardium. We are specifically looking for stenosis of vessels that are not bypassed, or stenosis in the bypass graft, or stenosis in a native artery with a graft that may be obstructing flow to the myocardium. See examples below:
General Information Coronary Artery Stenosis	Patient had prior CAB x 3 most recent Cath shows 90% stenosis in native mid-Left Anterior Descending (mLAD), 80% stenosis in native Circumflex (CM), and 95% stenosis in native distal RCA. The Posterior Descending Artery (PDA) originate from the RCA. Bypass grafts to mLAD, OM1, and right PDA are patent and the Provider documents that there is no obstructive disease and no bypass grafts are performed, code the LAD, CX, and RCA distribution as NO to stenosis 50% or greater.



General Information Coronary Artery Stenosis	Patient had prior CAB x 2 most recent Cath shows 90% stenosis in native Mid LAD, 80% stenosis in native OM 1 and 95% stenosis in native distal RCA. Bypass grafts to mid LAD and right PDA are patent and the Provider is planning on performing a bypass of the native OM1, code the LAD and RCA distribution as NO to stenosis 50% or > and the CX distribution as > 70%.
1615 / 1616	FAQ Oct 2020 - If the conclusion of the ECHO provides values for mean gradient and peak velocity both under stress and at rest, which values go into the registry? Answer - Code the REST values in this scenario.
1970	Update Oct 2020 - ANY Endovascular explant is counted as a previous incidence. For example, if a patient had a TEVAR in the past and is now having another aorta procedure where a prior endovascular stent or graft is explanted during procedure, code as first re-op.
1970	Update Oct 2020 - Previous Left Mini Thoractomy for MIDCAB that needs Sternotomy AVR, code as first re-op.
1970	Update Oct 2020 - Previous Left Mini Thoractomy for MIDCAB that needs Open Thoracoabdominal aortic aneurysm (TAAA) repair via left Thoracotomy, code as first CV surgery.
1970	Update Oct 2020 - Previous sternotomy CABG that needs Mini Rt thoracotomy Mitral Repair, code as first re-op.
3395	Update Oct 2020 - Left Main endarterectomy done in conjunction with an AVR is considered part of the AVR procedure and should not be coded elsewhere
3424	Pannus/thrombus removal (Native Valve) – the aortic repair included pannus or thrombus removal. Pannus is the ingrowth of fibrous tissue into the valve apparatus. Update Oct 2020 – may also include removal of vegetation.
3502	Pannus/Thrombus Removal (Native Valve) - The mitral repair included pannus or thrombus removal. Pannus is the ingrowth of fibrous tissue into the valve apparatus. Update Oct 2020 – may also include removal of vegetation.
3620	Annuloplasty Ring Surgical - Update Oct 2020 may also be referred to as Annuloplasty Band
3637	Pannus/Thrombus Removal (Native Valve) - The tricuspid repair included pannus or thrombus removal. Pannus is the ingrowth of fibrous tissue into the valve apparatus. Update Oct 2020 – may also include removal of vegetation.



3690	Pannus or Thrombus removal - Update Oct 2020 – may also include removal of vegetation
4139	FAQ Oct 2020 – How do I code left atrial appendage obliteration without MAZE procedure done. Answer - Code SEQ 4139 as YES and then NO to SEQ 4191 and SEQ 4240 if no ablation lesions are created.
4952	FAQ October 2020 – How do I code for an aortic valve sparing procedure and aortic root and ascending aorta replacement. If I code, 4952, then I have to either enter AV Replacement, AV Rrepair or Surgical Prosthetic Valve Intervention (Not explant of valve)? Answer – Code SEQ 4951 as Yes, leave SEQ 4952 blank, then code the Root procedure in SEQ 4963.
4958	Pannus/thrombus removal (Native Valve) – the aortic repair included pannus or thrombus removal. Pannus is the ingrowth of fibrous tissue into the valve apparatus. Update Oct 2020 – may also include removal of vegetation.
7320	Attending anesthesiologist medically directing AA (Attending anesthesiologist Update Oct 2020 Anesthesiologist Assistant)
7579	Update Oct 2020 – The start of rewarming is defined by documentation that the rewarming phase begins on the perfusion record
7705	Indicate the value of lactate in Update Oct 2020 mg/dl mmol/L measured after OR Exit to one hour post OR Exit. Do not record missing data as a zero value.
7716	Update October 2020 – this does not include PRN IV sedatives. The intent is to capture IV infusions of the above listed sedatives.



Seq	Update
305	FAQ Sept 2020 - Patient came in for explantation of RV leads x2, explantation of AICD generator, implantation of RV lead, and implantation of new AICD generator. Patient was in "extended recovery" status the entire stay. Do I code surgery
	date as admit date even though the patient was never technically an inpatient? Answer - Yes code surgery date as admit date in this scenario
486	FAQ September 2020 - Patient has a history of liver disease and cirrhosis s/p liver transplant 2016. Are you still considered to have cirrhosis despite the transplant? Answer - In this scenario, since the patient has new liver, only code cirrhosis if the new liver has cirrhosis.
895	Update September 2020 - For elective patients, choose the CAD presentation that was the cause of consultation for CAB.
1141	Update September 2020 Repatha and other PCSK9 inhibitors are captured as a non-statin/other.
General Information Coronary Artery Stenosis General Information	Update September 2020 – Coding of Native Vessel Stenosis in Patients who have had prior CAB Surgery. If all grafts are patent bypassing stenosis in the native vessels then capture RCA, LAD, CX, LM distribution 50% or > as NO. For example, patient had prior CAB x 3 most recent Cath shows 70% stenosis in native LM, 90% stenosis in native LAD, 80% stenosis in native CX, and 95% stenosis in native RCA. Bypass grafts to mid LAD, OM1, and right PDA are patent, code the LM, LAD, CX, and RCA distribution as NO to stenosis 50% or >. Update September 2020 For NA choice – Use the NA choice in situations where the patient does not anatomically have the
Coronary Artery Stenosis	vessel such as no Ramus and also in situations where the vessel or any part of the vessel distribution has not been addressed in the medical record. For example, there is no mention of the RCA in the cath report or any of the other documentation in the medical record, code the RCA distribution 50% or > as NA.
General Concepts Valve Disease and Regurgitation	Update September 2020 - For pre-op valve regurgitation and stenosis Parent fields (Seq 1585,1600,1679,1690,1774,1776,1812,1822) the answers are Yes and No. If you have no documentation of any regurgitation or stenosis then code NO. Do not open up the child fields and code not documented.





1601/ 1777 /1820	Update September 2020 Critical stenosis can be coded as severe.
1970	Update September 2020 - Prior thoracic endovascular aneurysm repair that needs another thoracic endovascular aneurysm repair should be coded as first reoperation.
2245 / 2270	Update September 2020 – If a patient is undergoing a catheter based or EP procedure that is not required to be entered into the STS Database and the patient has to convert to an open surgical procedure, for example, while undergoing a TAVR, surgery was converted to open SAVR, use the below directions for coding of OR entry and incision time: 1) For sites that have separate cath and OR logs. You will use the times on the OR log. 2) For sites that do not have separate Cath/OR logs and continue to use one log, the OR entry time and OR incision time will be coded as the same time. In this scenario, the incision time will be the time of sternotomy or open incision to perform the emergent STS qualifying procedure.
2361	All bicaval cannulation will be captured as as RA and SVC.
5433	FAQ September 2020 - If the intra-op EEG in a circ arrest case is documented as "isoelectric activity" is this coded as "yes" for documented EEG abnormality? Answer – Do not code as Yes for documented EEG abnormality in this scenario. An isoelectric EEG is abnormal, but it is "normal" for patients undergoing circulatory arrest.
5440	For section M2, 'device' refers to any implanted material within the Update July 2020 aortic valve for combined aorta and aortic valve procedures and the aorta; grafts or stent-grafts. This will include all synthetic prosthetics inserted. This may include Dacron, PTFE, homografts, autografts, stents, stent-grafts, and Update September 2020 patch grafts.
6610	Update September 2020 – Do not round ICU hours up. For example, if the ICU hours are 26.347, enter 26.34.
6595	Update September 2020 – Do not round additional ventilator hours up. For example, if the ventilator hours are 50.626, enter 50.62.





7100	FAQ September 2020 - The training manual states we should take the last EF prior to discharge to determine if an ACE/ARB is required due to an EF < = 40%. A patient had a pre op EF of 46%. His post anesthesia, pre incision echo has EF of 35-40%. He has no other echo done prior to discharge. Would I use the intra op pre-incision echo results to determine the ACE/ARB at discharge? Answer - If an intraop-post surgery EF or a post-op EF had been done then the later of the 2 would be the last EF. In this scenario, the last EF prior to surgery would be the last EF to use. We would not recommend using the intra-op pre-incision EF results to determine if an ACE/ARB is needed at discharge.
7320	FAQ September 2020 – How should I code an Attending Anesthesiologist medically directing anesthesia PA? Answer - Code as Attending Anesthesiologist medically directing CRNA.
7335	FAQ September 2020- Do we capture heparin administered by anesthesia that is given during an off-pump case. Answer – Yes, capture any heparin given by anesthesia during surgery.



Seq	Update
General Update UDI Number	STS does not want data managers to manually enter Device UDI numbers into the database. If your facility scans the UDI into the HIM record and your vendor allows automatic entry into their software, please use this method for entry. If the UDI is scanned into the chart and you can copy and paste this into our vendor software, please use this method. Update August 2020 - If you can't use either of these methods please leave blank.
485	FAQ August 2020 - Would ischemic hepatitis be coded as liver disease? Patient initially presented with septic shock and endocarditis with no documented prior liver history. Answer - No, ischemic hepatitis or shock liver is a result of the sepsis and is not liver disease as defined in SEQ 485.
545	Update August 2020 – Timeframe code the study closest and prior to OR Entry, done within 1 year of OR date.
810	Other Cardiac Intervention (not listed) – such as ethanol ablation, coronary artery brachytherapy or Update July 2020 temporary mechanical assist devices that are placed open via implantation using an open surgical approach (transaxillary or transaortic) and Update August 2020 Infrarenal abdominal aorta procedures.
810	Update August 2020 - If a patient has had multiples of the same type of intervention, coding once for each separate intervention is acceptable. For example, patient has had multiple previous cardioversions, code cardioversion one time in the grid
895	Update August 2020 - Time Frame: The highest value from arrival at transferring facility / arrival to your facility admission to OR Entry
1071	FAQ August 2020 - Patient receives aspirin at 1:15 PM the day before surgery with an AM OR time at 0808. Is that to be counted as "1" day of discontinuance (per the midnight instruction) or "0" as it is less than 24 hours. Answer – If it is clear in the documentation that the aspirin was given < 24 hours, then code "0". If documentation is unclear, then use the day discontinuation counting method as above.



General Information ECHO / Hemodynamics	Update August 2020 - If there are multiple values for the valve regurgitation within the same echo such as Under the Mitral Value is says moderate regurgitation and Under Impression is states mild regurgitation, use the value on the final impression / conclusion / summary from the reading physician.
	FAQ August 2020 - For PA Systolic pressure, the instructions specify not to take a value from in intra-op measurement after induction of anesthesia. However, the general statement for the hemodynamics section #3 states that you can obtain values that were not available anywhere else from any intra-op measurement prior to incision time. Which of these instructions are we to follow? Answer - For SEQ 1570, it is specific that if there are no PA pressures recorded or available pre-op from heart cath or echo, that you can only obtain pre-induction values. Do not use pre-
1570	incision values.
2631	Update August 2020 – Code the total number of distal anastomoses constructed using an artery to include IMA, radial, and other arterial conduits in this field.
3424	Update August 2020 - Leaflet commissural resuspension suture with replacement of the ascending aorta is not captured as a valve sparing root procedure in SEQ 4968. It is captured in SEQ 4958.
4956	Update August 2020 – For Composite Valve Conduit, capture SEQ 4956 as Other. Complete SEQ 4966 and SEQ 4967 to capture the type of composite valve conduit.
4958	Update August 2020 - Leaflet commissural resuspension suture with replacement of the ascending aorta is not captured as a valve sparing root procedure in SEQ 4968. It is captured in SEQ 4958.
5066	TEVAR are included as endovascular aorta cases if a CT surgeon on the participant agreement participated in the TEVAR. Update August 2020 - TEVAR with any portion above the level of the diaphragm is to be entered into the database. EVARs are not included in the STS Database.
5220, 5270, 5320, 5360,	FAQ August 2020 - How do you code visceral vessel management for a TEVAR in the Descending Thoracic Aorta when the patient has a prior history of fenestrated stent-graft repair of juxtarenal aortic aneurysm? Should I code the





	presence of these prior stents and fenestrations to the celiac, mesenteric, renal and Iliac arteries even though they were not done during the current procedure? Answer - Code as "native flow" since the visceral vessels were not manipulated as part of the descending TEVAR procedure.
6749	Update August 2020 - If SEQ 6700 Post-Op-Deep Sternal Wound is coded "yes", then SEQ 6749 Deep Sternal Wound Infection Within 90 Day is automatically coded "yes" as well. For sites who do not normally follow infection for 90 days: If you code Yes to SEQ 6700 DSWI infection within 30 days, then also code SEQ 6749 as "Yes". For all other patients that do not have DSWI infection within 30 days, code unknown for SEQ 6749.
7016	FAQ August 2020 - Patient was screened for tobacco, alcohol and illicit drug use, but the patient was not positive for tobacco, alcohol or drug use. How do I code SEQ 7016? Answer - This is a 2 part question did you screen and did you provide counseling if necessary. In this scenario, code "Yes" you screened the patient for tobacco, alcohol and illicit drug use and no counseling was needed.
7465	FAQ August 2020 - If a patient is readmitted and a MRI with or without contrast is performed is this considered an "Other Procedure"? Answer - No, "Other" procedure for SEQ 7165 does not include diagnostic procedures and is defined as an invasive procedure with intent to treat. For example, patient is readmitted and an EGD with cauterization is performed for GI bleeding. This is to
7165 7225	be captured as "other procedure' In SEQ 7165. FAQ August 2020 - Patient had documented positive COVID-19 PCR in month before surgery. COVID-19 negative x 2 in hospital before surgery. Post op course uneventful. Patient readmitted within 30 days post discharge and COVID-19 test positive again. What positive date should I code in SEQ 7225? Answer - Code the positive test date closest to surgery in this scenario.
7451	FAQ August 2020 - Our facility is using Isolyte which is not on the list of crystalloids in the DCF. How should this be captured for SEQ 7451? Answer - In this scenario, code SEQ 7448 as "Yes" and the amount given in SEQ 7450. Leave the type blank in SEQ 7451.
7579	Update August 2020 - The intent is to know if the arterial outflow temperature was measured by perfusion and if so, what was the highest arterial outflow temperature during rewarming.





7124 / 7125	A discharge to palliative care is an acknowledgement that the
	patient is not expected to survive. Therefore, a discharge to
	palliative care is equivalent to a discharge to hospice and
	should be regarded as a mortality unless the participant group
	provides proof otherwise.



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Seq	Update
150	FAQ July 2020 - Our electronic medical record allows a selection of 'two
	or more races' to capture patients of multiple race. When this is the only
	documentation available within our EMR for a patient, how do we code
	SEQ 150? Answer - Code SEQ 150 as NO in this scenario. It is
	important to work with your facility to accurately code Race since it is a
	component of the Risk Model
Lab	Update July 2020 – For lab values that are documented as more or less
General	than a value (< or >), code as the next decimal point below or above the
Statement	value. For example, if the total bilirubin closest to entry into the OR is
	documented as "<0.2". Code as 0.19
805	Implantable Loop Recorder, LifeVest, defibrillation or AED/ AICD shock
	for arrest or placement of IABP or Update July 2020 catheter based
	temporary mechanical assist device is not considered a previous CV
	intervention in Seq 805.
805	Update July 2020 Temporary mechanical assist devices that are placed
	open via implantation using an open surgical approach (transaxillary or
	transaortic), can be captured as Other Cardiac Intervention (not listed).
1855	Update July 2020 – the selection for "Endocarditis" is to be used for
	Endocarditis of the native valve. There is a separate selction for
	Endocarditis of a prosthetic valve.
2285 and	Update July 2020 -The intent of the exclusion is to eliminate patients
2290	who are currently infectious and currently receiving antibiotics on a
	regular schedule within 24 hr of surgery
2566,	FAQ July 2020 - Post repair AV Mean gradient was reported as 7-10
2571,	mmHg. How should I code this? Answer - Capture the highest value in
2576	this range. Code as 10 mmHg. This concept also applies to SEQ 2571
4504	MV mean gradient and SEQ 2576 TV mean gradient.
4521	Note: Currently, the only applicable choice for root repair type is open –
	Update July 2020 the other choices in the selction set were added in the
1000	event endovascular root procedures started.
4966 and	Update July 2020 Ross procedure with autograft capture in SEQ 4966
5440	and for SEQ 5440 code as No to devices inserted.
5440	For section M2, 'device' refers to any implanted material within the
	Update July 2020 aortic valve for combined aorta and aortic valve
	procedures and the aorta; grafts or stent-grafts. This will include all
	synthetic prosthetics inserted. This may include Dacron, PTFE,
	homografts, autografts, stents, and stent-grafts. Do not capture the felt or Bioglue
6586	Update July 2020 Leave field blank if patient not intubated.
6870	FAQ July 2020 - Can you please explain what an "0.5 Rise" means?
	Does this mean that if a patient has a preop creatinine of 1.0 prior to





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	surgery and a highest postop creatinine of 1.5 that this patient should be marked as "Renal Failure" in 6870 because he/she had a rise of 0.5? Answer - One of the indicators for renal failure is a serum creatinine level ≥4 mg/dL with at least a 0.5 mg/dL rise. For example, if your preop creatinine was 4.0 or greater and your highest post-op creatinine rises 0.5 or greater then that is coded as renal failure. For example, preop crt 4.1 and post-op 4.6 = renal failure.
7215	Temporary Field - Definition: The patient had a planned and consented
	Impella implantation using an open surgical approach (transaxillary or
	transaortic) during the index cardiac procedure. Please see Training
	Manual for complete details.
7225	FAQ July 2020 - It is documented that my patient had a positive COVID-
	19 test in April 2020. What date do I enter into the database when I only
	have the month and year of the positive COVID-19 test? Answer - If
	month and year are known code month/01/year. If only the year is
	known code 01/01/Year. Leave Blank if you have no information on the
	month, day, or year of the test.
7230	Update July 2020 - The nasal swab/OP swab, lower resp (RNA) test is
	the test that we are looking for. The IgG is the antibody test, this is not
	the test we are looking for. See image in Training Manual.

