The Society of Thoracic Surgeons

General Thoracic Surgery Database

Data Collection Form Version 5.21.1



STS National Database[™]

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** - Risk Model variable

BLUE Underlined Fields – Required for record inclusion

6/21/2021

A. Demographics	S						
Patient ID: PatID (90)			Medical Record #: MedRecN (100)				
First Name: PatFName (110)							
SSN/National Identif SSNKnown (140)	ier Known □ Yes □ No □ Pt.	Refused (If Yes	$s \rightarrow)$	SSN: SSN (150)			
PatAddr (160)	ddress:			/: City (170)		State/ Region: PatRegion (180)	
Country: PatientCountry (190)			Patient Postal Code: PostalCode (200)				
Patient participating in STS-related clinical trial: \Box None \Box Trial 1 \Box Trial 2 \Box Trial 3 \Box Trial 4 \Box Trial 5 \Box Trial 6 ClinTrial (210) (If not None \rightarrow) Clinical trial patient ID: ClinTrialPatID (220)							□ Trial 6
Date of Birth: // Age: ** DOB (230) (mm/dd/yyyy) Age (240)			Male □ Female Gender: ^{**} □ Male □ Female				
Is the Patient's Race RaceDocumented (260	e Documented? □ Yes □ N))	No 🗆 Patient De	eclined to	Disclose (If	^f Yes, select all that apply	(4)	
Race**:			□ Black/A	∃ Black/African American **			
RaceMulti (270)				American Indian/Alaskan Native			
□ Native Hawaiian/Pacific Islander			Other				
Hispanic or Latino Ethnicity: Yes No Not Documented Ethnicity (340)							

B. Admissio	n			
Admission Stat (3		(If Inpatient →) AdmitDt (360)	Admission Date: /////	
Payor: Indicate PayorPrim (370)	the Primary Payor:	(If Primary Payor is not None/Self↓) Indicate the Secondary (supplemental) Payor: PayorSecond (420)		
□ None/Self		□ None/Self		
□ Medicare (in	cludes commercially managed options)	Medicare (includes commercially managed options)		
(If Medicare \rightarrow)	(If Medicare →) Commercially Managed Medicare Plan: □Yes □No (If No ↓) ComMngMedPlnPrim (380)		Commercially Managed Medicare Plan: □Yes □No (<i>If No</i> ↓) ComMngMedPInSec (430)	
	HICN/MBI Known: □ Yes □ No (If Yes ↓) HICNMBIKnown (390)		HICN/MBI Known: □ Yes □ No (If Yes ↓) HICNMBIKnownSec (440)	
	HICN/MBI: HICNMBI (400)		HICN/MBI: HICNMBINumberSec (450)	
	Primary Payor Medicare Part B: Yes No PrimMCareFFS (410)		Secondary Payor Medicare Part B: □ Yes □ No SecondMCareFFS (460)	

 ☐Medicaid (includes commercially ☐ Military Health ☐ Commercial Health Insurance ☐ Health Maintenance Organizatio ☐ Non U.S. Plan ☐ Other 		s)	 Military Health Commercial H 	lealth Insurance nance Organization		
Surgeon Name: Surgeon (470)			Surgeon's Nation SurgNPI (480)	onal Provider ID		
Taxpayer ID#: TIN (490)						
Hospital Name: HospName (500)			Hospital Region: HospStat (510)			
(If Hospital Name \rightarrow)			Hospital Postal C HospZIP (520)	Code:		
Hospital National Provider ID: HospNPI (530)						
C. Pre-Operative Evaluation		is of Covid 400				
Did the patient have a laboratory confirmed diagnosis of Covid-19? TempCode (4610) No (Harvest Code 10) Yes, prior to hospitalization for this surgery (Harvest Code 11) Yes, in hospital prior to surgery (Harvest 12) Yes, in hospital after surgery (Harvest Code 13) Yes, after discharge within 30 days of surgery (Harvest Code 14) 						
Date of Positive Covid-19 Test (clo TempDt(4600)	osest to OR date)	//	(mm/dd/yyyy	()		
Height: **(cm) HeightCm (540)		Weight:** WeightKg (550)	(kg) Calculated BMI (system calculation) CalculatedBMI (560)			
Prior Surgical History in Planned C Reop (580)	Dperative Field	IYes □No				
Cardiopulmonary History History of Cardiopulmonary Disc	Colort all the	t apply on (None' 1)				
HistCarPulDis (590)	(Select all tha	$(apply of None \downarrow)$				
□ None	Hypertension	า**	Coronary Arte	ry Disease (CAD)**		
□ Atrial Fibrillation within the last year; with or without treatment	Pulmonary H	lypertension	Congestive Heart Failure (CHF) ^{**} EF% (<i>If CHF</i> \rightarrow) EF (600)			
□ Myocardial Infarction	□ Aortic Valve	Disease	Mitral Valve Disease			
Tricuspid Valve Disease Pulmonic Valve Disease			□ Interstitial Fibr	osis/ Interstitial Lung Disease		
Vascular History						
History of Vascular Disease (Select all that apply or 'None' ↓) HistVasDis (610)						
□ Major Aortic or Peripheral Vascular Disease (PVD) **						
Deep Vein Thrombosis/Pulmonary Embolism (DVT/PE)						
Transient Ischemic Attack (TIA)						
Cerebrovascular Accident (CVA)						
(If CVA →) Permanent Net PNI (620)	urologic impairme	ent □ Yes □ No				
Endocrine / GI / Renal History						

History of Endocrine/GI/Renal Disease (Select all that apply or 'None' ↓) HistEndoGiRenDis (630)									
	None □ Diet On Other □Unknow		□ Insulin □ Other Subcutaneous Medication						
Liver Dysfunction									
□ Dialysis**									
Cancer History									
History of Cancer (Select all that apply or None ↓) HistCancer (650)									
□ None									
Coexisting Cancer									
Preoperative Chemotherapy/ Same disease, < 6 months									
Immunotherapy ** (If Preop chemo/immunotherapy - Select all that $apply \rightarrow$)	When and for w PreopChemoCurV		 □ Same disease, > 6 months □ Unrelated disease, ≤ 6 months** 						
(if i reop enemo, initiationerapy - select an that apply -)		(010)	□ Unrelated disease, >6 months						
Preoperative Thoracic Radiation Therapy			□ Same disease, ≤ 6 months						
(If Preop Thoracic Radiation - Select all that apply \rightarrow)	When and for w PreopXRTDisWhe		□ Same disease,> 6 months □ Unrelated disease, ≤ 6 months						
	1 roops at 1 Diotrino		□ Unrelated disease, >6 months						
Preoperative Medication History									
Preoperative Medication History (Select all that HistPreopMeds (690)	apply or None↓)								
□ None									
Chronic Immunosuppressive Therapy **									
Chronic anticoagulation (defined as any anticoa	gulation medication	other than ASA)							
□Home Oxygen Therapy (Home O2)									
Pre-Operative Testing									
Creatinine level measured Yes No (If Ye CreatMeasured (700)	$(s \rightarrow)$ Last created CreatLst (7)	tinine level							
Hemoglobin level measured Yes No (If Yes	es →) Last hem	oglobin level							
HemoglobinMeasured (720) HemoglobinLst (730) Pulmonary Function Tests performed? Yes									
PFT (740) FEV1 % predicted: **									
(If Yes \rightarrow) FEVPred (750)		nliachla (lf.Va	Lowest DLCO % predicted:						
DLCO test performed? L1 Yes	DLCO test performed? □ Yes □ Not Applicable (/f Yes→) Lowest DLCO % predicted: DLCO (770) DLCOPredLow (781)								
Psychosocial History									
History of Substance Abuse (Select all that apply or None↓) HistSubAbus (790)									
□ Cigarette smoking: **									
(If Cigarette Smoking \rightarrow) Smoking History: \Box Past smoker (stopped >1 month prior to operation) ^{**} \Box Current smoker ^{**} CigSmoking (800)									
Pack Year Known or can be estimated:YesNo(If Yes \rightarrow) Pack-YearsPackYearKnown (810)PackYear (820)									
□ Substance Dependency/Abuse of Non-Prescription Medications or Illicit Drugs									
□ Alcohol Abuse									
Dementia/neurocognitive dysfunction:	□ No		atric Disorder: 🛛 Yes 🗆 No						
DemNeroDys (830) PsychDisorder (840)									

Living Status: Lives LiveStat (850)	s alone D Lives with family or fr	riend 🗆 Ass	sisted Living D Nursing Ho	ome	
Functional Status: Ind FuncStat (860)	dependent	ent 🗆 Total	ly Dependent Unknowr	1	
ECOG Score:**	□ 0 - Fully active, able to carry on all pre- disease performance without restriction	□ 1 - Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature, e.g., light housework, office work		□ 2 - Ambulatory and capable of all self-care but unable to carry out any work activities. Up and about more than 50% of waking hours	
ECOGScore (870)	□ 3 - Capable of only limited self-care, confined to bed or chair more than 50% of waking hours	□ 4 - Completely disabled. Cannot carry on any self-care. Totally			
•	gory of Disease) ed on final pathology report. iagnosis (Category of Disease) (I	ICD-10).			
		Lun	ig Cancer		
Lung cancer, main bronchus, carina (C34.00)			Lung cancer, lower lo	be (C34.30)	
Lung cancer, upper lobe (C34.10)			Lung cancer, location	unspecified (C34.90)	
Lung cancer, middle	lobe (C34.2)				
		Esopha	agus Cancer		
Esophageal cancer,	esophagogastric junction (cardia)) (C16.0)	Esophageal cancer, lo	ower third (C15.5)	
Esophageal cancer,			(C16.9)	alignant neoplasm stomach unspecified	
Esophageal cancer, I			unspecified (C15.9)	□ (Esophageal Cancer) Malignant neoplasm of the esophagus, unspecified (C15.9)	
			asthenia Gravis/Mediástina		
Malignant neoplasm of thymus (thymoma, thymic carcinoma) (C37)			□ Benign neoplasm thymus (D15.0)		
□ Myasthenia gravis (G70.00)			Mediastinal nodes, metastatic (C77.1)		
Anterior/Posterior mediastinal tumor; metastatic (C78.1)			□ Non-Hodgkin Lymphoma, intrathoracic lymph nodes (C85.92)		
	I malignant tumor primary (C38.2		□ Mediastinal abscess ((),	
seminoma) (C38.1)	malignant tumor primary (germ co		Disease of the mediastinum, not otherwise classified (J98.5)		
□ Mediastinal Mass/Neoplasm of uncertain behavior of pleura, thymus, mediastinum (D38.2-D38.4)			☐ Mediastinal nodes, benign (D36.0)		
Anterior/Posterior mediastinal tumor: benign (i.e. teratoma)			Unspecified disease of	of thymus gland (E32.9)	

(DS0.2-DS0.4)	
Anterior/Posterior mediastinal tumor; benign (i.e. teratoma)	Unspecified disease of thymus gland (E32.9)
(D15.2)	
	Trachea
Tracheal tumor, malignant (C33)	□ Tracheal stenosis, congenital (Q32.1)
Tracheal tumor, benign (D14.2)	□ Subglottic stenosis-congenital (Q31.1)
Tracheal tumor, metastatic (C78.30)	□ Subglottic stenosis-acquired (post intubation) (J38.6)
□ Tracheal stenosis, acquired (J39.8)	□ Tracheostomy related stenosis (J95.03)
Diaphragn	natic Hernia / GERD
Esophageal reflux (GERD) (K21.9)	Diaphragmatic Hernia with obstruction (K44.0)
□ Reflux esophagitis (K21.0)	Diaphragmatic Hernia with gangrene (K44.1)
□ Barrett's esophagus (K22.70)	Diaphragmatic Hernia without obstruction or gangrene (K44.9)
□ Barrett's esophagus with High Grade Dysplasia (K22.711)	

Cardiovascular						
□ Cardiac tamponade (I31.4)	□ SVC Syndrome (I87.1)					
Pericardial effusion, malignant (I31.3)	Pericardial disease (I31)					
□ Pericarditis with effusion (I30.9)	□ Unspecified disease of the pericardium (I31.9)					
Pericarditis, constrictive (I31.1)						
Che	st Wall					
Pectus carinatum (Q67.7)	□ Rib tumor, metastatic (C79.51)					
Pectus excavatum (Q67.6)	□ Thoracic outlet syndrome (G54.0)					
□ Rib tumor, benign (e.g., fibrous dysplasia) (D16.7)	□ Chest wall abscess (L03.31)					
□ Rib tumor, malignant (e.g., osteosarcoma, chondrosarcoma)						
(C41.3)	 hragm					
Diaphragm tumor, benign (D21.3)	Diaphragmatic paralysis (J98.6)					
□ Diaphragm tumor, malignant (C49.3)						
	(Diaphragm hernias are captured in the hernia section \uparrow)					
Esonha	gus - Other					
□ Achalasia of esophagus (K22.0)	□ Other disease of the esophagus (K22.8)					
□ Acquired absence of esophagus (post esophagectomy) (Z90.89)	□ Foreign body esophagus (T18.108a)					
□ Dyskinesia/spasm of esophagus (K22.4)	Gastric outlet obstruction, pyloric stenosis, acquired (K31.1)					
Epiphrenic diverticulum (K22.5)	\square Mallory Weiss tear (K22.6)					
Esophageal perforation (K22.3)	□ Tracheoesophageal fistula (J95.04)					
Esophageal stricture (K22.2)	Ulcer esophagus with bleeding (K22.11)					
Esophageal tumor-benign (i.e., leiomyoma) (D13.0)	□ Ulcer esophagus with bleeding (K22.11)					
Esophagitis (K20.9)						
	– Other					
□ Acute respiratory failure (ARDS) (J96.00)	Chronic respiratory failure (J96.1)					
Aspergillosis (B44.9)	□ Lung tumor, benign (e.g., hamartoma) (D14.30) □ Pneumonia (J18.9)					
□ Bronchiectasis (J47.9)						
Cystic fibrosis (E84.0)	Post inflammatory pulmonary fibrosis (J84.89)					
COPD/Emphysema (J44.9/J43.8)	 Primary pulmonary hypertension (I27.0) Postprocedural Respiratory Failure (J95.82) 					
Emphysematous bleb (J43.9)						
Lung abscess (J85.2)	Pulmonary sequestration (Q33.2) Transplanted lung complication(s) (T86.8XX)					
□ Interstitial lung disease/fibrosis (J84.1)						
Pneumothorax (J93.1)	Gangrene and necrosis of lung (J85.0)					
□ Solitary pulmonary nodule (not a tumor, e.g., granuloma, subpleural lymph node, pulmonary infarct) (R91.1)	Hemothorax (J94.2)					
□ Atelectasis (J98.11)	Lung tumor, metastatic (C78.00)					
□ Bronchopleural fistula (J98.09)	Lung nodule/Mass/Other disorders of lung (J98.4)					
PI	eura					
Empyema with fistula (J86.0)	□ Pleural tumor, metastatic/Secondary malignant neoplasm of pleura (C78.2)					
□ Empyema without fistula (J86.9)	□ Malignant neoplasm of pleura; other than mesothelioma (C38.4)					
□ Pleural effusion, malignant (J91.0)	Mesothelioma (C45)					
□ Pleural effusion sterile (J90)	□ Pleural effusion, TB; (Tuberculous pleurisy) (A15.6)					
□ Pleural thickening (J94.9)	□ Fibrothorax (J94.1)					

□ Pleural tumor, benign (D19.0)			
	Trachea	a & Larynx	
Dysphagia, unspecified (R13.10)		□ Vocal cord paralysis unspecified (J38.00)	
□ Tracheomalacia-congenital (Q32.0)		□ Vocal cord paralysis , unilateral (J38.01)	
□ Tracheostomy-hemorrhage (J95.01)		□ Vocal cord paralysis, bilateral (J38.02)	
	Tra	auma	
□ Flail chest (S22.5)		□ Sternal fracture (S22.20)	
□ Rib fracture (S22.39xa)		□ Tracheal injury (S12.8)	
□ Rib fractures, multiple (S22.49)		□ Traumatic pneumothorax (S27.0)	
	Misce	llaneous	
□ Abnormal radiologic finding (R91)		Lymphadenopathy (R59.9)	
Chylothorax (189.8)		□ Malignant poorly differentiated neuroendocrine carcinoma, any site (C74.1)	
Disruption of internal operation, surgical	wound (T81.32)	□ Other complication of procedure, not elsewhere specified (i.e. Non- healing surgical wound) (T81.89)	
□ Hemorrhage complicating a procedure (n	nultiple codes)	□ Other post- op infection (T81.4XXA)	
□ Hematoma complicating a procedure (mu	ultiple codes)	□ Persistent post-op fistula not otherwise classified (T81.83)	
□ Hemoptysis unspecified (R04.2)		Post-operative air leak (J95.812)	
□ Hyperhidrosis, focal axilla (L74.510)		□ Secondary malignant neoplasm of other specified sites (C79.89)	
□ Hyperhidrosis, focal, face (L74.511)		□ Shortness of breath (R06.02)	
□ Hyperhidrosis, focal, palms (L74.512)		□ Other unlisted category of disease	
(If other unlisted category of disease \rightarrow)	Other Primary Specify: CategoryPrimOth (1260)	(Refer to Diagnosis list)	
	Other Primary ICD: CategoryPrimOthICD (1270)	(Refer to Diagnosis list)	

E. Operative								
Date of Surg SurgDt (1310)		/	_/					
OR Entry Time: Anesthesia Start Time: OREntryT (1320) AnesthStartT (1340)					:	Procedure Start Time: ProcStartT (1360)	;	
OR Exit Time ORExitT (1330		:		nesthesia End Time: : nesthEndT (1350)		Procedure End Time: _ ProcEndT (1370)	;	
Multi-Day Op MultiDay (1380	Multi-Day Operation (operation continued through midnight) MultiDay (1380)							
Status of Ope Status (1390)	eration*	* 🗆 Emerge	nt 🗆 Urgent	□ Elective ^{**} □ Pall	liative			
Robotic (1400)			□ Yes □ No					
Unanticipated UnanticConv (al Approach	Conversion:	Yes, VATS \rightarrow Open	Yes, Robo	otic \rightarrow VATS \Box Yes, R	Robotic \rightarrow Open \Box No	
,	(If Conversion any Unanticipated Conversion Type: Elective Emergent UnanticConvTy (1420)							
^(Yes'→) Conversion Reason: □ Vascular □ Anatomy □ Lymph Nodes □ Other UnanticConvRsn (1430)								
Blood transfusion intraoperatively (packed red blood cells) □ Yes □ No (If Yes→) #Red Blood Cell Units: IntraopPRBC (1440) IntraopPRBCNum (1450)								
ASA Classificatio ASA (1460)	on: **	□ I Normal, healthy	□ II Mild systemic disease	□ III Severe systemic disease	□ IV Life threatening severe	□ V Moribund, not expected to survive without operation	□ VI Declared brain dead, organ donor	

	systemic	
	disease	

Chec Proc (<u>k ALL of the procedures performed.</u> <i>Indicate (circle) the</i> <u>Prin</u> (1470) Primary (1480)	mary Procedure**					
		zed Procedures					
(must complete required fields that are underlined and in blue)							
		esection (Required) ght = 60					
	□ Thoracoscopy, surgical; with lobectomy (32663) **	Removal of lung, two lobes (bilobectomy) (32482) **					
	☐ Thoracoscopy with therapeutic wedge resection (eg mass	Removal of lung, single segment (segmentectomy) (32484) **					
	or nodule) initial, unilateral (32666) **						
	□ Thoracoscopy with removal of a single lung segment (segmentectomy) (32669) **	□ Removal of lung, sleeve lobectomy (32486) **					
ases	□ Thoracoscopy with removal of two lobes (bilobectomy) (32670) **	□ Removal of lung, completion pneumonectomy (32488) **					
с g	□ Thoracoscopy with removal of lung, pneumonectomy	□ Resection and repair of portion of bronchus (bronchoplasty) when					
Analyzed Cases	(32671) **	performed at time of lobectomy or segmentectomy (32501) **					
	□ Thoracotomy with therapeutic wedge resection (eg mass nodule) initial (32505) **	□ Resection of apical lung tumor (e.g., Pancoast tumor), including chest wall resection, without chest wall reconstruction(s) (32503)					
	□ Removal of lung, total pneumonectomy; (32440) **	□ Resection of apical lung tumor (e.g., Pancoast tumor), including chest wall resection, with chest wall reconstruction (32504)					
	□ Removal of lung, sleeve (carinal) pneumonectomy (32442) **	□ Resection of lung with resection of chest wall					
	□ Removal of lung, single lobe (lobectomy) (32480) **						
dures	□ Thoracoscopy with therapeutic wedge resection (eg mass or nodule) each additional resection, ipsilateral (32667) List separately in addition to primary procedure code	□ Thoracotomy with diagnostic wedge resection followed by anatomic lung resection (+32507), List separately in addition to primary proc code					
Proce t = 20	☐ Thoracoscopy with mediastinal and regional lymphadenectomy (+32674) List separately in addition to primary procedure code	□ Thoracoscopy with diagnostic wedge resection followed by anatomic lung resection (32668), List separately in addition to primary procedure code					
Concomitant Procedures Weight = 20	□ Thoracotomy with therapeutic wedge resection (eg mass nodule) each additional resection, ipsilateral (+32506) List separately in addition to primary procedure code						
		section (Required) ght = 70					
	anshiatal-Total esophagectomy, without thoracotomy, with	□ Partial esophagectomy, distal two-thirds, with thoracotomy only					
	cal esophagogastrostomy (43107) **	(43121) **					
	tal esophagectomy without thoracotomy; with colon	□ Thoracoabdominal-Partial esophagectomy, thoracoabdominal					
	interposition or small intestine reconstruction (43108) ** approach (43122) **						
cervio	ree Incision -Total esophagectomy with thoracotomy; with cal esophagogastrostomy (43112) **	□ Partial esophagectomy, thoracoabdominal with colon interposition or small intestine (43123) **					
	tal esophagectomy with thoracotomy; with colon interposition nall intestine reconstruction (43113) **	□ Total or partial esophagectomy, without reconstruction with cervical esophagostomy (43124)					
	rtial esophagectomy, cervical, with free intestinal graft, ding microvascular anastomosis (43116)	□ Minimally invasive three incision esophagectomy (McKeown) (43288)					
	□ Ivor Lewis-Partial esophagectomy, distal two-thirds, with						
	cotomy and separate abdominal incision (43117) ** rtial esophagectomy, with thoracotomy and separate	Minimally invasive esophagectomy, Abdominal and neck approach					
	minal incision with colon interposition or small intestine	(43286) **					
(431		D Procedures (Optional)					
		ght = 30					

□ Laparoscopy, surgical, esophagogastric fundoplasty (e.g., Nissen, Toupet procedures) (43280)	□ Repair, paraesophageal hiatal hernia via laparotomy with mesh (43333)
□ Laparoscopy, surgical with repair of paraesophageal hernia (fundoplasty) without mesh (43281)	□ Repair, paraesophageal hiatal hernia via thoracotomy without mesh (43334)
□ Laparoscopy, surgical with repair of paraesophageal hernia (fundoplasty) with mesh (43282)	Repair, paraesophageal hiatal hernia via thoracotomy with mesh (43335)
□ Nissen fundoplasty- laparotomy (includes partial fundoplication/wrap) (43327)	□ Repair, paraesophageal hiatal hernia via thoracoabdominal approach without mesh (43336)
□ Transthoracic Fundoplication- open thoracotomy (includes Belsey/Nissen) (43328)	□ Repair, paraesophageal hiatal hernia via thoracoabdominal approach with mesh (43337)
Repair, paraesophageal hiatal hernia via laparotomy without mesh (43332)	LINX Procedure (43284)
Tracheal Res	section (Optional) ght = 40
Carinal reconstruction (31766)	Tracheal tumor or carcinoma excision; cervical (31785)
Excision tracheal stenosis, cervical (31780)	□ Tracheal tumor or carcinoma excision; thoracic (31786)
Excision tracheal stenosis, thoracic (31781)	
	Mass Resection (Optional) apht = 50
Thoracoscopy, surgical; with excision of mediastinal cyst, tumor, or mass (32662)	☐ Thymectomy, transcervical approach (60520)
□ Thymus, resection via Thoracoscopy unilateral or bilateral (32673)	□ Thymectomy, transthoracic approach (60521)
□ Mediastinal tumor, excision, open, Transthoracic approach (39220)	□ Thymectomy, transthoracic approach, with radical mediastinal dissection (60522)
	dures (Concomitant Procedures) ight = 10
	Bronchi, Larynx
Laryngectomy, partial (31370)	□ Tracheostomy replacement (tube change) prior to est. of fistula tract (31502)
□ Tracheal wound or injury suture repair; cervical (31800)	□ Tracheostomy, planned (31600)
□ Tracheal wound or injury suture repair; intrathoracic (31805)	□ Tracheostomy revision simple, without flap (31613)
□ Unlisted procedure, trachea, bronchi (31899)	□ Tracheostomy revision complex, with flap (31614)
□ Bronchopleural fistula closure (32906)	□ Tracheoplasty; cervical (31750)
Bronchogenic cyst removal	□ Tracheoplasty; intrathoracic (31760)
Bronchial laceration suture	Bronchial sleeve resection
□ Bronchoplasty, graft repair (31770)	Tracheostomy mediastinal
□ Bronchoplasty; excision stenosis and anastomosis (31775)	Rigid stent removal
Bron	choscopy
□ Tracheobronchoscopy through established tracheostomy incision (31615)	□ Bronchoscopy, with transbronchial lung biopsy(s), each additional lobe (31632)
Endobronchial ultrasound (EBUS) during bronchoscopy diagnostic or therapeutic intervention(s) (31620)	□ Bronchoscopy, with transbronchial needle aspiration biopsy(s), each additional lobe (31633)
□ Bronchoscopy, diagnostic, with or without cell washing (31622)	□ Bronchoscopy, with removal of foreign body (31635)
Bronchoscopy, with brushing or protected brushings (31623)	□ Bronchoscopy, with placement of bronchial stent(s) (includes tracheal/bronchial dilation as required), initial bronchus (31636)
□ Bronchoscopy, with bronchial alveolar lavage (BAL) (31624)	□ Bronchoscopy, each additional major bronchus stented (31637)
□ Bronchoscopy, with bronchial or endobronchial biopsy(s), single or multiple sites (31625)	□ Bronchoscopy, with revision of tracheal or bronchial stent inserted at previous session (31638)
□ Bronchoscopy, with placement of Fiducial markers (31626)	□ Bronchoscopy, with excision of tumor (31640)
□ Bronchoscopy, navigational (31627)	□ Bronchoscopy, with destruction of tumor or relief of stenosis by any method other than excision (e.g., laser therapy) (31641)
□ Bronchoscopy, with transbronchial lung biopsy(s), single lobe (31628)	☐ Bronchoscopy, with placement of catheter(s) for intracavitary radioelement application (31643)
□ Bronchoscopy, with transbronchial needle aspiration biopsy(s) (31629)	☐ Bronchoscopy, with therapeutic aspiration of tracheobronchial tree, initial (drainage of lung abscess) (31645)

Bronchoscopy, with tracheal/bronchial dilation or closed reduction	□ Bronchoscopy, with therapeutic aspiration of tracheobronchial tree,								
of fracture (31630)	subsequent (31646)								
□ Bronchoscopy, with placement of tracheal stent(s) (includes tracheal/bronchial dilation as required) (31631)									
Pleural Space and Lung									
□ Thoracostomy; with rib resection for empyema (32035)	□ Insertion indwelling tunneled pleural catheter (32550)								
□ Thoracostomy; with open flap drainage for empyema (32036)	□ Thoracoscopy, diagnostic lungs and pleural space, without biopsy (32601)								
Thoracotomy with biopsy(s) lung infiltrate(s) (e.g. wedge), unilateral (32096)	Thoracoscopy, diagnostic; with biopsy(s) of lung infiltrate(s) (e.g. wedge), unilateral (32607)								
□ Thoracotomy with biopsy(s) lung nodule(s) or masses (e.g. incisional), unilateral (32097)	Thoracoscopy, diagnostic; with biopsy(s) of lung nodule(s) or mass(es) (eg incisional), unilateral (32608)								
□ Thoracotomy with biopsy(s) of pleura (32098)	□ Thoracoscopy, diagnostic; with biopsy(s) of pleura (32609)								
□ Thoracotomy, with exploration (32100)	□ Thoracoscopy, surgical; with pleurodesis (e.g., mechanical or chemical) (32650)								
□ Thoracotomy, major; with control of traumatic hemorrhage and/or repair of lung tear (32110)	□ Thoracoscopy, surgical; with partial pulmonary decortication (32651)								
□ Thoracotomy, major; for postoperative complications (32120)	□ Thoracoscopy, surgical; with total pulmonary decortication (32652)								
□ Pneumolysis, any approach (32124)	□ Thoracoscopy, surgical; with removal of intrapleural foreign body or fibrin deposit (32653)								
Thoracotomy, major; with cyst(s) removal, with or without a pleural procedure (32140)	□ Thoracoscopy, surgical; with control of traumatic hemorrhage (32654)								
□ Thoracotomy, major; with excision-plication of bullae, with or without any pleural procedure (32141)	□ Thoracoscopy, surgical; with excision-plication of bullae, including any pleural procedure (32655)								
Thoracotomy, major; with removal of intrapleural foreign body or hematoma (32150)	□ Thoracoscopy, surgical; with parietal pleurectomy (32656)								
□ Thoracotomy with cardiac massage (32160)	□ Thoracoscopy with resection-plication for emphysematous lung (bullous or non-bullous) for lung volume reduction- LVRS, unilateral including any pleural procedure (32672)								
Decortication, pulmonary, total (32220)	Repair lung hernia through chest wall (32800)								
□ Pleural scarification for repeat pneumothorax (32215)	□ Closure of chest wall following open flap drainage for empyema (Clagett type procedure) (32810)								
Decortication, pulmonary, partial (32225)	□ Total lung lavage (for alveolar proteinosis) (32997)								
Pleurectomy, parietal (32310)	□ Radio-frequency ablation (RFA) lung tumor (32998)								
□ Decortication and parietal pleurectomy (32320)	□ Removal of lung, total pneumonectomy; extrapleural (32445)								
□ Removal of lung, excision-plication of emphysematous lung(s) for lung volume reduction (LVRS) (32491)									
	er Procedures								
Open closure of major bronchial fistula (32815)	Pulmonary artery arterioplasty (33926)								
□ Single lung transplant (32851)	Double lung transplant (32853)								
□ Single lung transplant with CPB (32852)	Double lung transplant with CPB (32854)								
□ Cryoablation (32994)	□ Unlisted procedure, lung (32999)								
	and Diaphragm								
□ Thoracoscopy, diagnostic; mediastinal space, with biopsy	Diaphragmatic hernia repair (other than neonatal), traumatic; acute								
(32606)	(39540)								
Mediastinotomy with exploration or biopsy; cervical approach (39000)	□ Diaphragmatic hernia repair (other than neonatal), traumatic; chronic (39541)								
Mediastinotomy with exploration or biopsy; transthoracic approach (39010)	Diaphragm imbrication (i.e., plication) of (39545)								
□ Mediastinal cyst, excision, open, Transthoracic approach (39200)	□ Diaphragm; resection with simple repair (e.g., primary suture) (39560)								
Mediastinoscopy, with or without biopsy (39400)	□ Diaphragm; resection with complex repair (e.g., prosthetic material, local muscle flap) (39561)								
□ Unlisted procedure, mediastinum (39499)	□ Unlisted procedure, diaphragm (39599)								
Diaphragm, laceration repair, any approach (39501)									

Esophagoscopy								
Esophagoscopy (43200)	□ Upper gastrointestinal endoscopy with endoscopic ultrasound examination limited to the esophagus (43237)							
Esophagoscopy with biopsy (43202)	□ Upper gastrointestinal endoscopy with transendoscopic ultrasound- guided FNA (43238)							
Esophagoscopy with removal of foreign body (43215)	Upper gastrointestinal endoscopy with biopsy (43239)							
Esophagoscopy with insertion of stent (43219)	□ Upper gastrointestinal endoscopy with dilation of gastric outlet for obstruction (43245)							
Esophagoscopy with balloon dilation (43220)	□ Upper gastrointestinal endoscopy with directed placement of percutaneous gastrostomy tube (43246)							
□ Esophagoscopy with insertion of guide wire followed by dilation over guide wire (43226)	□ Upper gastrointestinal endoscopy with removal of foreign body (43247)							
Esophagoscopy with ablation of tumor (43228)	Upper gastrointestinal endoscopy with insertion of guide wire followed by dilation of esophagus (43248)							
□ Esophagoscopy with endoscopic ultrasound examination (EUS) (43231)	□ Upper gastrointestinal endoscopy with balloon dilation of esophagus (43249)							
□ Esophagoscopy with transendoscopic ultrasound-guided fine needle aspiration (43232)	□ Upper gastrointestinal endoscopy with transendoscopic stent placement (43256)							
□ Upper gastrointestinal endoscopy, diagnostic (43235)	□ Upper gastrointestinal endoscopy with ablation of tumor (43258)							
□ Endoflip endoluminal balloon (91040)								
Esophagus	Other Procedures							
□ Thoracoscopy, surgical; with esophagomyotomy (Heller type) (32665)	□ Esophagostomy, fistulization of esophagus, external; cervical approach (43352)							
□ Cricopharyngeal myotomy (43030)	□ Gastrointestinal reconstruction for previous esophagectomy with stomach (43360)							
□ Excision esophageal lesion with primary repair, cervical approach (43100)	□ Gastrointestinal reconstruction for previous esophagectomy with colon interposition or small intestine (43361)							
Excision Esophageal lesion with primary repair, thoracic approach (eg: leiomyoma) (43101)	□ Suture of esophageal wound or injury; cervical approach (43410)							
□ Diverticulectomy of hypopharynx or esophagus, with or without myotomy; cervical approach (43130)	□ Suture of esophageal wound or injury; transthoracic or transabdominal approach (43415)							
□ Diverticulectomy of esophagus, with or without myotomy; thoracic approach (43135)	□ Closure of esophagostomy or fistula; cervical approach (43420)							
□ Laparoscopic esophageal myotomy (Heller Myotomy, with or without fundoplication) (43279)	□ Total gastrectomy with esophagoenterostomy (43620)							
□ Laparoscopy, surgical, esophageal lengthening procedure (Collis) (43283) Secondary Procedure code	□ Total gastrectomy with Roux-en-Y reconstruction (43621)							
□ Unlisted laparoscopy, esophagus (43289)	Conduit revision s/p esophagectomy							
Esophagoplasty with repair of TEF, cervical approach (43305)	Per oral endoscopic myotomy (POEM)							
Esophagoplasty with repair TEF, thoracic approach (43312)	□ Trans oral fundoplication							
Esophagomyotomy (Heller type); thoracic approach (43331)	Esophageal lengthening procedure - open (Collis) Secondary Procedure code (43338)							
□ Free jejunum transfer with microvascular anastomosis (43496)	□ Ligation or stapling at gastroesophageal junction for esophageal perforation (43405)							
□ Unlisted procedure, esophagus (43499)								
Chest	Wall and Neck							
□ Muscle flap, neck (15732)	□ Radical resection of sternum (21630)							
Muscle flap; trunk (i.e., intercostal, pectoralis or serratus muscle) (15734)	□ Radical resection of sternum; with mediastinal lymphadenectomy (21632)							
□ Excision of chest wall tumor including ribs (19260)	□ Hyoid myotomy and suspension (21685) secondary procedure code							
□ Excision of chest wall tumor involving ribs, with reconstruction (19271)	Division of scalenus anticus; without resection of cervical rib (21700)							
 Excision tumor, soft tissue of neck or thorax; subcutaneous (21555) 	Division of scalenus anticus; with resection of cervical rib (21705)							
Excision tumor, soft tissue of neck or thorax; deep, subfascial, intramuscular (21556)	□ Reconstructive repair of pectus excavatum or carinatum; open (21740)							

□ Radical resection of tumor (e.g., ma tissue of neck or thorax (21557)	lignant neoplasm), soft		□ Reconstructive repair of pectus, minimally invasive approach (Nuss procedure), without thoracoscopy (21742)					
Excision of rib, partial (21600)		□ Open treatr (21825)	□ Open treatment of sternum fracture with or without skeletal fixation					
Excision first and/or cervical rib (216	615)		sternal wire(s)					
Excision first and/or cervical rib; with	n sympathectomy (21616)		tive repair of pectus, minimally invasive approach (Nuss ith thoracoscopy (21743)					
□ Major reconstruction, chest wall (pos	sttraumatic) (32820)		nerve block (64220-1)					
Unlisted procedure, neck or thorax (21899)							
	Mis	cellaneous						
Thoracoscopy, diagnostic pericardia	I sac, with biopsy (32604)	SVC resect	ion and reconstruction (34502)					
☐ Thoracoscopy, surgical; with remova from pericardial sac (32658)	al of clot or foreign body	□ Ligation the	pracic duct (38381)					
☐ Thoracoscopy, surgical; with creatio partial resection of pericardial sac for c	Irainage (32659)	Omental fla						
□ Thoracoscopy, surgical; with total pe	ericardiectomy (32660)	□ Transthora	cic thyroidectomy (60270)					
□ Thoracoscopy, surgical; with excisio or mass (32661)	n of pericardial cyst, tumor,	□ Removal substernal thyroid, cervical approach (60271)						
□ Thoracoscopy, surgical; with thoraci	c sympathectomy (32664)	□ Application	of wound vac (97605, 97606)					
□ Stereotactic radiosurgery (SRS) and radiotherapy (SBRT),surgeon participa		□ Pericardial window (33025)						
□ Tube pericardiostomy (33015)	· ·	Other Minor Procedure						
□ Insertion of Tunneled CV Catheter (36561)	Robotic-Ase	□ Robotic-Assisted Surgery (capture as an additional code) (S2900)					
□ Other								
(If "Other Minor Procedure", "Other" or one of the "unlisted" procedures \rightarrow)	Enter Name of unlisted Proc ProcOth (1490)	cedure(s):						
	Enter 5 digit CPT code(s) of ProcOthCPT (1500)	unlisted procedu	ure, if known:					
Procedure Laterality: Right Left Laterality (1505)		1						
Primary Lung Cancer Resection Per	formed LungCancer (1510)	□ Yes □ No	(If yes, complete Section F)					
Esophageal Cancer Resection Perfo		□ Yes □ No	(If yes, complete Section G)					
Thymus / Mediastinal Mass Resection ThymusMediastinalData (1540)	on/ Myasthenia Gravis	□ Yes □ No	(If yes, complete Section H)					
Tracheal Resection TrachealData (1550)		□ Yes □ No	(If yes, complete Section I)					
Hiatal Hernia / Diaphragmatic Hernia HiatalHerniaData (1560)	a / GERD	□ Yes □ No	(If yes, complete Section J)					

F. Lung Cancer (If Primary Lung Cancer Resection Performed is Yes↓)										
Diagnosis:										
	ClinStagDoneLung (1600) □ Yes □ No (If yes ↓)									
	Clinical Stag	ing Method	s: (Select all that apply \downarrow)							
	Clinical Stagi ClinStagMeth (PET/CT CT Brain CT Brain MRI Invasive mediastinal staging performediastinal staging performediastinastinastinal staging perform	rmed						
			(If Invasive mediastinal staging performed - select all that apply →) MedLymNodSam (1630)	Method of Mediastinal Lymph Node Sampling: EBUS IR Needle Biopsy EUS Chamberlain Mediastinoscopy						

					VATS/Lymph Node Biopsy Other					
			m (the dominant/most	t concerning lesion			cm (ex. 2.3cm)			
	Lung	CaTumSz (1800) CA T Stage (tumo ageLungTumor (1810	r stage) 🗆 Tis 🗆 1	T1	□ T4					
	Lung	CA Nodes:)	node metastasis		 N1 Metastasis in ipsilateral peribronchial or hilasi intrapulmonary nodes. Includes direct externion N3 				
	ClinSt	ageLungN (1820)	Metastasis in ipsila subcarinal lymph r		and/or	contralateral scalene or su	n contralateral mediastinal or hilar nodes, ipsilateral or contralateral ıpraclavicular nodes			
	Lung CA Metastases: ClinStageLungM (1830)					□M1 Distant Meta	stasis			
		logical Staging	ed. (8 th Edition)							
Lung Cancer			es □ No (If yes ↓)							
(If Cancer Tume		,	hological Tumor Stag	jing:						
Present→) **		□ TX Primary Tumor ca the presence of n	annot be assessed, o nalignant cells in sput visualized by imaging	tum or bronchial	□ T0 No evic	dence of prima	ry tumor			
		□ Tis Carcinoma in situ (SCIS); Adenocal	; squamous cell carcı rcinoma in situ (AIS): pattern, ≤3 cm in grea	□ T1mi Minimally invasive adenocarcinoma: adenocarcinoma (<u><</u> 3 cm in greatest dimension) with a predominantly lepidic pattern and <u><</u> 5 mm invasion in greatest dimension.						
		spreading tumor of is limited to the bi	rreatest dimension. A of any size whose inv ronchial wall and may hus also is classified uncommon.	asive component extend proximal						
		□ T1c Tumor > 2 cm but	t <u>< 3</u> cm in greatest d	limension	1					
	□ T2a Tumor > 3 cm but \leq 4 cm at greatest dimension, or having any of the following features: 1. involves the main bronchus regardless of distance to the carina, 2. but without involvement of the carina; invades visceral pleura (PL1 or PL2); 3. associated with atelectasis or obstructive pneumonitis that extends to the hilar region, involving part or all of the lung.						□ T2b Tumor > 4 cm but <u><</u> 5 cm at greatest dimension			
		directly invading a (PL3), chest wall phrenic nerve, pa	t ≤ 7 cm in greatest d any of the following: p (including superior su rietal pericardium; or ame lobe as the prim	parietal pleura Ilcus tumors), separate tumor ary	□ T4 Tumor > 7 cm or tumor of any size invading one or more of the following: diaphragm, mediastinum, heart, great vessels, trachea, recurrent laryngeal nerve, esophagus, vertebral body, or carina; separate tumor nodule(s) in an ipsilateral lobe different from that of the primary					
			nor is T2a or T2b $ ightarrow$)	Visceral Pleura VisPleuralnv (186	D)	□ Yes □	No			
		Invasion of Adjace	ent Structures (Select <mark>875)</mark>	all that apply or None	e↓)					
			□ None	🗆 Phrenic	nerve		□ Chest wall			
			Esophagus	□ Heart			□ Pericardium			
			Diaphragm	Recurre	nt Laryng	□ Great Vessels				

	/ertebral Body								
Lung CA Nodes Assess LungNodeAsses (1880)	ed: □Yes □] No							
	Node Station:	:							
	1 (N3) NS1 (1890)		[□ Not Sampled		<i>l</i> alignant	🗆 Benig	ın	
	2 (N2)		[□ Not Sampled		<i>l</i> alignant	🗆 Benig	In	
	NS2 (1900) 3 (N2)		[□ Not Sampled		Alignant	🗆 Benig	ın	
	NS3 (1910) 4 (N2)		[□ Not Sampled		<i>I</i> alignant	🗆 Benig	In	
	NS4 (1920) 5 (N2)			□ Not Sampled		/lalignant	🗆 Benig	jn	
	NS5 (1930) 6 (N2)			□ Not Sampled		Alignant	🗆 Benig	IN	
	N <u>S6 (1940)</u> 7 (N2)			□ Not Sampled		/alignant	Beniç		
(If Nodes Assessed Yes \rightarrow)	NS7 (1950) 8 (N2)			□ Not Sampled		/alignant	Benig		
<i>')</i>	NS8 (1960) 9 (N2)			□ Not Sampled		Alignant	Benig		
	NS9 (1970)	<u>,</u>		•		0			
	10 (N1) (Hilar NS10 (1980)			□ Not Sampled		<i>N</i> alignant	🗆 Benig		
	11 (N1) (Inter NS11 (1990)			☐ Not Sampled		<i>l</i> alignant	🗆 Benig		
	12-14 (N1) (Lobar) NS12_14 (2000)			☐ Not Sampled		<i>l</i> alignant	🗆 Benig	In	
	Contralateral NSContraLat (2	(N3)	[☐ Not Sampled		<i>I</i> alignant	🗆 Benig	In	
	Total number	maligna		es:					
	Total number LungCANodes	of all no		assessed:					
	Lung CA Nod	es: **	□ N0 No regional lymph node metastasis/All benign						
	PathStageLung (2040)								
			□ N2	N2 Metastasis in ipsilateral mediastinal and/or subcarinal lymph de(s)/No N3 marked malignant					
			ipsilate	A3 Metastasis in contralateral mediastinal, contralateral hilar, lateral or contralateral scalene or supraclavicular lymph node(s)/Any marked malignant					
				Regional lymph n	odes		assessed/N		
Lung CA Metastases: PathStageLungM (2060)	□ M0 No distant metastasis	pleural	ant pleura or perica	al or pericardial effu Irdial nodules or sep in contralateral lobe	oarate	□ M1b Single ext metastasis		☐ M1c Multiple extrathoracic metasteses (1 or >1organ)	
	□ Adenocarc	inoma		□ Squamous ce	əll		□ Large c	ell	
Lung CA Histology:	□ Small cell						□ Low Gra (typical ca	ade Neuroendocrine rcinoid)	
LungCAHist (2070)	Intermediate grade neuroendocrine, atypical carcinoid			□ Carcinoma in	n situ		Other		
Grade: LungCAHistGrade (2080)	□ Low grade differentiated)			□ Intermediate grade		□ High gra (poorly diffe		Unknown / Not reported	
Lung CA Resection Margins Positive:	□ Yes □ No								

	LungCAPathMarg (2100)									
	(If Margins Posi Yes		-	□ R1 (microscopic residual tumor prese	nt) Lun	R2 (macrosonor present)	copic (gross) residual			
· · · · · · · · · · · · · · · · · · ·					<u>I</u>					
		Cancer Resection Performed								
		geal cancer staging C	clinical stagi	ng determines the	treatment	plan.				
Pre-Operative Evalu		the last 2 menths?		Not Documented						
WtLos10Pct (2120)	0% of body weight in	the last 3 months?		Not Documented						
Staging Procedures										
Clinical Staging Dor ClinStagDoneEsophMul	1e (Select all that apply ti (2135)	r or 'None'↓)								
□ None	D PET/CT	□ CT		Bronchoscopy		S				
UVATS – for staging	Laparosco	opy – for staging □I	Endoscopic N	/lucosal/Submucosal	Resectior	n 🗆 Othe	r			
		□ T0 No evidence of primary	/ tumor	□ Tis <i>High grade</i> o	lvsplasia					
				r ngri grado d		□ T1b	□ T1 unspecified			
	Esophageal Tumor:	Tumor invades lamina	propria, muc	osa or submucosa						
	ClinStageEsophT	□ T2 Tumor invades muscula	aris propria							
	(2220)		ans propria	□ T4] T4					
		Tumor invades adventi	umor invades adventitia			Tumor invades adjacent structures				
	Clinical Diagnosis ClinStageEsophNod	of Nodal Involvement: e (2230)								
	Esophageal CA M ClinStageEsophM (2			Distant Metastasis ant Metastasis						
	Tumor Location (EsoTumLoc (2250)	Select all that apply↓):								
(If Clinical Staging Done is not 'None' \rightarrow)		l Esophagus (15 – < 20 c	:m)		/		\mathbf{i}			
		Thoracic (20 - < 25 cm)			5					
		Thoracic (25 - < 30 cm)		(/					
				Incisors		θĴ				
		EG Junction (30 – 42 cm)			Fab	$\rangle \rangle ($	/			
				UES-	Si	15 cm-	-Cervical esophagus			
				Sternal not	ch R	20 cm -	- Upper thoracic			
				Azygos vei	in	25 cm -	-Middle thoracic			
				Inferior pulmona	ary vein	30 cm				
							-Lower thoracic			
				R.C.		30 cm	Cardia			
				EG	.,	+ 42 cm				
(If Esophageal Cancer F	Resection Performed is	Yes!)				Welenger				
Planned, staged proc	oduro?									
PlanStageProc (2300)		No								

	□ None	□ Open	Cervicoscopic	□ Rob	otic				
Neck Approach: EsoNeckAppr (2310)					hadenectomy pe	rformed?		/ith Neck dissection /ithout Neck dissection	
			Ν	leckLymph	Aden (2320)		-		
Thorax Approach: EsoThorAppr (2330)		□ Thoracot	-	•		Thoracoab	dominal		
Abdomen Approach	n: 🗆 None	□ Laparoto		•	□ Robotic				
EsoAbdAppr (2340)	(If 'La		or Rodotic \rightarrow)	soAbdApp	st: □ Yes □ No orHandAss (2350)				
Anastomotic Metho AnastoMeth (2360)	d: □ Stapled □Part	ial hand-sew	vn □Hand-sew	'n					
	it: 🗆 Stomach 🛛 Sn	nall bowel	□ Colon □ Sup	percharge	ed Small Bowel	Superch	narged Colo	n	
Pylorus Manageme PylorusManage (2380	ent: 🗆 No	ne 🗆 Boto	x Injection □ E	Balloon D	ilation	oplasty D] Pyloromyc	otomy	
(Select all that apply									
J-Tube Placement: JTubePlac (2390)	□ None □ Pre-exis	ting □ Du	ring Surgery □	l Post Su	gery				
Pathological Stag	ing - Esophagus								
	completed if esophag er = Yes) (8 th Edition)		documented <u>AI</u>	<u>ND</u> esopl	hageal resectior	n performe	ed (Pre-Ope	erative Evaluation –	
	er Present: Yes								
· · · · · ·						🗆 Tis			
(If Cancer Present is 'Yes' →)			□ T0 No evidence of primary tumor			High Grade dysplasia, defined as malignant cells confined to the epithelium by the basement membrane			
	Esophageal Tumor: * PathStageEsophT (2410		□ T1a Tumor invade muscularis mue	na propria or	□ T1b Tumor invades submucosa				
	PathotageEsoph1 (2410))	□ T2 Tumor invades	ris propria	□ T3 Tumor invades adventitia				
			T4a ☐ T4a Tumor invades pleura, pericardium, azygos vein, diaphragm or peritoneum			□ T4b Tumor invades other adjacent structures such as aorta, vertebral body, or airway.			
	Esophageal CA Node PathStageEsophN (2420		□ NX □ N0 Regional lymph No regional lymph nodes cannot be metastasis assessed □			□ N1			
		<i></i>	□ N2 Metastasis in 3 nodes	3-6 region	al lymph	□ N3 Metastasis in 7 or more regional lymph nodes			
	Esophageal CA Meta PathStageEsophM (243		□ M0 No distant meta	astasis		□ M1 <i>Distant n</i>	netastasis		
	Esoph Histopathologi PathStageEsophH (2440		H1 Squamou	us Carcir	ioma 🗆 H	2 Adenoca	arcinoma	□ Other	
	Esophageal CA Histo Grade: PathStageEsophG (2450	-	□ GX Grade cannot k assessed	Grade cannot be Well			□ G2 □ G3 Moderately Poorly differentiated, differentiated undifferentiated		
	Total # of Lymph Nodes sampled/harvested: EsophCANodes (2460)								
	Esophageal CA Rese EsophCAPathMarg (247		ns Positive: 🛛 Ye	es □ No					
		(If Resecti	ion Margins Positive select all that		Location: PosMargLocate	(2480)	□ Proximal □ Distal (G □ Radial	(Esophageal) astric)	

H. Thymoma	a/Thymecto	omy/Me	diastinal Mas / Myasthenia Gr	ss Res	ection/Myast	ther	nia Gravis		
Preoperative	ulasunai Mass	Resection	i Niyastrierila Gr	avisisi	(es↓)				
Symptomatic myasthenia		□ Yes I	□ No						
MyastheniaSym (If Y	pt (2490) 'es, select all t	hat apply)				Mes	stinon 🗆 Steroi	ds	nmunosuppressive Therapy
Preoperative			ChronMed	a i reat (2	2500)				
IVIG: □ Yes IVIG (2540)									
Plasmaphereis Plasmaphereis		No							
Size of mass k MassSizeKnowr	nown: 🗆 Y	es □ No							
	(If Size 'Yes' —	Known is	Largest dia MassSizeCm			om p	preop axial, coror	nal or sagittal in	nagecm
Operative									
Initial Surgical ThyInitSurgAp (2									
□ Full Sterno		□ Clarr	nshell or Hemic	lamshe	ell		□ Transcervic	al	
Partial Ster	•	🗆 Robo			□ VATS		□ Thoracotom	ıy	
	obotic', 'VATS', obVATSLoc (2		$cotomy' \rightarrow)$	Lo	ocation: 🗆 Rig	ght	🗆 Left 🛛 Bi	ateral	
	anscervical', 'l onvToOpen (2		· 'VATS' →)	Co	onversion to ope Yes, Pla		pproach during p d □ Yes	procedure? , Unplanned I	□ No
		,			(If Yes	s, ed/ui	$nplanned \rightarrow)$	Conversion app Sternotomy Clamshell Thoracotomy	roach:
Intentional res PhrenicNerveRe		ctioning p	hrenic nerve:	□ Ye	es □ No				
Was a thymore ThymomaProc (ma procedu	re perfor	med? □ Yes	□ No					
(If Thymoma	Pathologic								
performed is 'Yes' →)	PathRptStag							d. Also called a	noninvasive thymoma. That is, it
	□ Stage II The thymoma invades beyond the capsule (outer boundary of the thymus) and into the nearby fatty tissue or to the pleura (outer covering of the lung). Sometimes divided into:								
		ic invasio t area, ine							ues or organs of the lower neck or ood vessels leading into or exiting
		pericardia	l dissemination ghout the pleur				□ Stage IVb Hematogeno spread to dis		c dissemination. The thymoma has
	(If not 'No ca	ncer	WHO classifi		🗆 Туре А		🗆 Туре АВ		
	found' \rightarrow)		(from path re	port –	🗆 Туре В1		🗆 Туре В2		

		Thymoma only) ThymomaType (2650)	🗆 Туре ВЗ	Thymic Carcinoma or Type C				
Completeness ResectComplete) □ R1 □ R2							
Patient alive a PtAlive30Day (2		t-op: □ Yes □ No						
	Myasthenic MYAL (2680)	1 5	or intervention (intu	pation, plasmapheresis) 🗆 Yes 🗀 No				
(If Yes \rightarrow)	Unintentiona PhrenicNerve	al phrenic nerve palsy	□ No					
	Patient alive PtAlive90Day	e at 90 days post-op:	□ No					
	Adjuvant thoracic radiation Yes No ThoracicRadiation (2710)							
	(If Yes \rightarrow)	Persistent unintentional phre PhrenNrvPalsyPersis (2720)	enic nerve palsy □	Yes 🗆 No				

I. Tracheal Resection (If	Tracheal Resection is Yes↓)
Pre-Operative	
Current Airway AirwayCurr (2730)	□ Native □ Oral ETT □ Trach □ T-Tube
Prior tracheostomy TracheostomyPrior (2740)	□ Yes □ No
Prior intubation IntubatePrior (2750)	□ Yes □ No
Prior Tracheal Resection TrachealResectPrior (2760)	□ Yes □ No
Recent Bronchoscopic Interv BronchInt6Wks (2770)	includes: core out, dilation, ablation, stent)
Recurrent nerves intact preop RecurrNervesIntact (2780)	beratively
	(If Nerves Intact is 'No' →) Which nerve? □ Right □ Left □ Both RecurrNervNotIntact (2790)
Operative	
ArWyMgtDurngTrachResc (2800	esection (Select all that apply or 'None'↓)) ble ventilation □ VA ECMO □ Jet ventilation □ VV ECMO □ Cardiopulmonary bypass
Incision (Select all that apply m	nust have at least one indicated↓)
TrachIncis (2860)	
	rtial sternotomy
Length of tracheal resection _ TrachealResectLen (2920)	Cm (Surgical or pathological measurement acceptable)
Cricoid resection required CricoidResect (2930)	
Carinal resection required CarinalResect (2940)	
Release Maneuvers Type: ReleaseManeuverType (2960)	□ None □ Suprahyoid □ Suprathyroid □ Hilar □Suprahyoid - Hilar □Suprathyroid - Hilar
Additional Post-Operative I TrachAddIPOEve (2970)	Events (Select all that apply or 'None' \downarrow)
□ None	
□ Anastomotic dehiscence re	equiring drainage, revision, stent, tracheostomy, T-tube
□ Anastomotic stricture requ	iring intervention
□ Airway obstruction requirin	intervention (e.g., unscheduled bronchoscopy)
□ Recurrent nerve palsy	
(If Recurrent nerve)	which nerve? □Right □ Left □ Bilateral NervePalsyRecurr (2980)
Did the patient leave the hosp TrachealAppliance (3020)	pital with tracheal appliance? (tracheostomy, T-tube or stent)

Stent/tube free a			ure l	⊐Yes □	No 🗆 Pa	tient d	lied within 30	days of pro	cedure	
StentTubeFree300		,		act proced				ant diad with	in 00 days	of procedure
$(If No \rightarrow)$		be free at 90 c eFree90days (3		ost proced	ure 🗆 re	es 🗆		ent died with	in 90 days	s of procedure
J. Hiatal Hern	ia / GEE	D /If Histor He	arnia / I	CEPD is Ve						
Symptoms (Sele HiatHernSymp (30	ect all that a			GERD IS TE	5↓)					
□ None] Heartburn			Cough			□ Regurgi		
		Dysphagia			Sore throa			□ Epigastr □ Anemia	ric/chest pa	ain
□ Asthma	L	Early satiety			Reflux lary	ngitis				
PPIs PPI use					l relief					
PPIUse (3190)	□ Ye	es □ No (If	Yes –		Relief (3200)	Complet	te 🗆 Par	tial 🗆 I	No
EGD	(D.N.	_								
EGD Done: □ Y EGDDone (3210)	res ⊔ No)								
	Esophag Esophag	gitis itis (3220)		□ Yes □	No (If Ye	es →)	LA Grade: LAGrade (3	□ A □ E 230)	в□С	□ D
(If Yes→)	Barrett's	s metaplasia iaBarrett (3240))	□ Yes □	No (If Ye	es →)		netaplasia g	rade:	 Low grade dysplasia Indeterminate for dysplasia High grade dysplasia Without dysplasia
pH Testing PH Testing PH Test (3260)	es □ No	(If Yes \rightarrow)		DeMeester DeMeesterS						
Manometry										
Manometry perfe		□ Yes □ N	lo							
Manometry (3280)		Motili		□ Nor	mal	Decreased	d 🗆 Aperista	alsis	
(If Manometr	vperform	ed is 'Yes' \rightarrow)		<u>y (3290)</u> resting pre	ssure					
(II Manomen	y periorine	cu 13 1 c3		Pressure (33	00) Iows					
				owFail (3310						
Radiology Imag	ging									
Imaging perform ImagePerform (33	ned 320)	□ Yes □ No	(If	Yes, Select	all that appl	<i>y</i> →)	Type of image ImageTypeMu	ging: ılti (3331).	□ Bariur □ CT So □ CXR	n swallow / Upper GI can
Hiatal hernia typ HerniaType (3350				IV					•	
Hernia repair sta HerniaRepStat (33	atus	Primary rep	bair l	□ Re-oper	ation					
	(If Re-ope	eration \rightarrow) Su	irdical	approach	used in the	initial	procedure:	□ Laparo	scopic	Laparotomy
				opApp (337		ai	p	□ Thorac	otomy [□ LINX □ Not documented
Procedure Appro		lect all that appl	y↓)							
HHProcAppro (33			🗆 Rot	ootic Chest			Robotic /	Abdomen		
□ Laparotomy				oracotomy			□ Thoracos	scopic		
Fundoplication		□ Ye	es 🗆	,	Type:		🗆 Pai		Complete	
ProcFundoplicate Gastroplasty	(3430)	(If Ye	(Fundoplica	teType	e (3440)			
ProcGastroplasty Mesh	(3450)	□ Ye	es □	No						
ProcMesh (3460)		□ Ye	es 🗆	No						
Relaxing incision	n (3470)		es 🗆	No						
Magnetic sphine MagSphAugmen ((3480)	×.	· [⊐Yes □I	No					
Is patient alive a GERDPtAliveMth		s post – Op? [∃ Yes	□ No			atient alive at DPtAliveYr (35		- Op? □	Yes 🗆 No

	(If Patient alive at 30 days post-Op is Yes $\not ightarrow$)		
	30 Day Post-Operative Follow Up : HH30dFU (3500) □ None	(15)/00	1 Year Post-Operative Follow Up: HH1yFU (3560) □ None
(If Yes, Select all		(If Yes, Select all	
that apply	Radiographic recurrence	that apply	Radiographic recurrence
or 'None')	Symptomatic recurrence	or 'None')	□ Symptomatic recurrence
\rightarrow)	Endoscopic Intervention	$\rightarrow)$	Endoscopic Intervention
	□ Redo Operation		Redo operation

K. Post-Operative Events

K. Post-Operative							
Indicate all adverse ev admission, regardless		thin 30 days of sur	gery if discharged from the hospital <u>or</u> those that occur during the same				
Postoperative Events POEvents (3660)		No – Patient Died	in OR				
(If Post-Operative	Did the patient have another operation through a new or existing incision: □ Yes □ No PostOpProc (3670)						
Events Yes \rightarrow)		(If Yes \rightarrow)	Was reoperation related to bleeding: □ Yes □ No BleedOperate (3680)				
	Pulmonary						
	Air leak > 5 days		· •				
	duration AirLeak5 (3690)	□ Yes □ No					
	Therapeutic Bronchoscopy POTherBronc (3700)	□ Yes □ No					
	Pleural Effusion requiring drainage CPIEff (3710)	□ Yes □ No					
	Pneumonia Pneumonia (3720)	\Box Yes \Box No (If Yes, Grade \rightarrow)	Grade: POGrdPnu (3730)				
			□ Grade 2 – Moderate symptoms; oral intervention indicated (oral antibiotics, antifungal, or antiviral)				
			□ Grade 3 – Invasive intervention indicated; IV antibiotic, antifungal, or antiviral intervention indicated				
			□ Grade 4 – Urgent Intervention indicated; Life threatening consequences (escalation of care/intubation/hemodynamic support)				
			Grade 5 - Death				
	Acute Respiratory		Grade: POGrdARDS (3750)				
	Distress	□ Yes □ No	Grade 3 - Present with radiologic findings; intubation not indicated				
	Syndrome (ARDS) ARDS (3740)	$(If Yes, Grade \rightarrow)$	□ Grade 4 - Life-threatening respiratory or hemodynamic compromise; intubation or urgent intervention indicated				
	. ,		Grade 5 - Death				
	Respiratory Failure RespFail (3760)	□ Yes □ No					
	Bronchopleural Fistula Bronchopleural (3770)	🗆 Yes 🗆 No					

		Grade: POGrdPE (3790) Grade 1 - Medical intervention not indicated Grade 2 - Medical intervention indicated
Pulmonary Embolus	$\Box \operatorname{Yes} \Box \operatorname{No}_{(If Yes, Grade \rightarrow)}$	Grade 3 - Urgent medical intervention indicated
PE (3780)	(,,	Grade 4 - Life-threatening consequences with hemodynamic or neurologic instability
		Grade 5 - Death
Pneumothorax req. CT reinsertion Pneumo (3800)	□ Yes □ No	
Initial Vent Support > 48 Hr Vent (3810)	□ Yes □ No	
Tracheostomy Trach (3820)	□ Yes □ No	
		Cardiovascular
Atrial arrhythmia AtrialArryth (3830)	$\Box \operatorname{Yes}_{(If Yes \to)} \operatorname{No}_{}$	Discharged on Anticoagulation : Yes No DCAntiCoag (3840)
Ventricular arrhythmia (Requiring Treatment) VentArrth (3850)	□ Yes □ No	
		Grade: POGrdMI (3880) □Grade 2 - Asymptomatic and cardiac enzymes minimally abnormal and no evidence of ischemic ECG changes
Myocardial infarct MI (3870)	$\Box \operatorname{Yes} \Box \operatorname{No}_{(If \ Yes \rightarrow)}$	□Grade 3 - Severe symptoms; cardiac enzymes abnormal; hemodynamically stable; ECG changes consistent with infarction
		Grade 4 - Life-threatening consequences; hemodynamically unstable
		Grade 5 - Death
Deep venous thrombosis (DVT) req. treatment DVT (3890)	□ Yes □ No	
		Gastrointestinal
lleus Ileus (3900)	□ Yes □ No	
Delayed conduit emptying requiring intervention (pyloric dilatation or botox) or maintenance of NG drainage > 7days post-op	□ Yes □ No	
DelayCondEmp (3910)		

	Esophagogastric leak from anastomosis, staple line or localized conduit necrosis PosOpProcAL (3920)		□ Yes □ No (If Yes →)		Type: POTypeAnasLeak (3930) Type 1 - Local defect requiring no change in therapy or treated medically or with dietary modification Type 2 - Localized defect requiring interventional but not surgical therapy Type 3 - Localized defect requiring surgical therapy				
	Conduit necrosis/Failure POConNec (3940)		□ Yes □ No (If Yes →)		Type: POCondNecType (3950) □ Type 1 - Identified endoscopically; additional monitoring or non- surgical therapy □ Type 2 - Identified endoscopically; not associated w/ free anastomotic or conduit leak; surgical therapy w/out esophageal diversion				
							onduit resection/divers	ion	
-					Hematolo	ogy			
	Packed red blood cells PostopPRBC (3970)		□ Yes □ No (If Yes→)		*transfusions documented here do not include blood given in OR*		# Units PostopPRBCUnits (3980)		
				I	Urologi	ic			
	Urinary tract infection UTI (3990)	□ Yes	□ No	Cathet	v retention req. erization ent (4000)	□ Yes □ No	Discharged with Foley catheter DischFoley (4010)	□ Yes □ No	
Ī					Infectio	'n		eter 🛛 Yes 🗆 No	
Ī	Empyema requiring treatment Empyema (4020)		□ Yes [⊐ No					
	Surgical Site Infection SurgSiteInfect (4030)	1	□ None	□ None □ Superficial □ Deep □ Organ space					
	Sepsis Sepsis (4040)		□Yes [⊐ No					
	Other infection require antibiotics OtherInfect (4050)	ing IV	□ Yes □ No						
		Neurology							
	New central neurolog event CentNeuroEvt (4060)	ical		i □ No Yes →)	hours) RIND recover a contral neu postoperativel New postop	ve transient neuro ery within 72 hour rologic deficit pers ly for > 72 hours perative coma that anoxic/ischemic an		4 hours	

		Severity: LaryNerPareSev (4090)	□ Unilateral □ Bilateral		
Recurrent laryngeal nerve paresis – new onset	□ Yes □ No (If Yes →)	Grade:	Medical Therapy/Dietary Modification Only		
LaryngealNerve (4080)		LaryNerParGrade (4100)	Elective Procedural Intervention		
			Emergent Procedural Intervention		
Delirium Delirium (4110)	□ Yes □ No				
		Miscellaneou	S		
New renal failure per RIFLE criteria RenFailRIFLE (4120)	$\Box \operatorname{Yes} \Box \operatorname{No}_{(If Yes \rightarrow)}$	Discharged on Dialysis:			
Unexpected escalation of care POEscCare (4140)	□ Yes □ No				
		Severity:	□ < 1 liter per day maximum		
POChyLeakSev (4170)			□ >= 1 liter per day maximum		
Chyle Leak POChylLeak (4150)	$\Box \operatorname{Yes} \Box \operatorname{No}_{(If \ Yes \rightarrow)}$	Grade:	□ Type I - Enteric dietary modifications		
	(POChyLeakGrade	□ Type II - TPN		
		(4180)	Type III Treatment		
		(15 Trues 111	IR Embolization POChyLeakIIIR (4190) □ Yes – Successful □ Yes – Failed □ No		
		(If Type III	→) Surgical ligation POChyLeakIIISL (4191) □ Yes – Successful □ Yes – Failed □ No		

Patient still in the stillInHosp (4200)	hospital □ Yes □ No (If No ↓)	
	bital Discharge Date: /// Dt (4210)	·
	is at Hospital Discharge: ** Stat (4220)	 Discharged Alive, last known status Alive (other than hospice) Discharged Alive, died after discharge Discharged to Hospice Died in Hospital
	ischarge Alive, last known status alive' OR 'Discharged Alive, died after discharge' \rightarrow)	Discharge location: Home Extended Care/Transitional Care Unit /Rehab DisLoctn (4230) Other Hospital Nursing Home Other
		Discharged with chest tube. □ Yes □ No CTubeDis (4235) □ Yes □ No Discharged with home O2 □ Yes □ No (new; not using O2 pre-op) □ SchHomeO2 (4240) □ Yes
		(<i>If</i> Yes →) On O2 at 30 days postoperative? OnOxygen30DayPOp (4260) □ Yes □ No □ Unknown □ Patient Died Within 30 Days Post Op
		Readmit to any hospital within 30 days of discharge: Pres No Unknown Readm30Dis (4270)
		Substance Use Screening and Counseling Performed (NQF 2597): DCSubUseScre (4290)

(If Status at Hospital Discharge is 'Discharged Alive, Died after discharge' OR 'Discharged to Hospice'→)	Mortality – Date MortDate (4300)	/	_/	(mm/dd/yyyy)
Status at 30 days after surgery (either discharged or in-hospital): ** Mt30Stat (4310)			□ Dead	Unknown