



The Society of Thoracic Surgeons General Thoracic Surgery Database Data Collection Form Version 2.081

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- A Data Collection Form (DCF) should be initiated every time the patient enters the Operating Room (which includes the Endoscopy Suite or Out Patient Surgical Center.)
- Fields that appear underlined and in blue are required for record inclusion.
If any of these fields are missing data, the entire record will be excluded from the analysis.

1. Demographics

Patient ID: _____	Medical Record #: _____		
PatID (90)	MedRecN (110)		
First Name: _____	MI: _____	Last Name: _____	SSN#: _____
PatFName (120)	PatMInit (130)	PLName (140)	SSN (150)
STS Trial Link #: _____			
STSTLink (160)			
Date of Birth: ____/____/____	<u>Age</u> : _____	Patient Zip Code: _____	<u>Gender</u> : <input type="checkbox"/> Male <input type="checkbox"/> Female
DOB (170)	Age (180)	PostalCode (190)	Gender (200)
<u>Race</u> : <i>Select all that apply</i> →	<input type="checkbox"/> White/Caucasian	<input type="checkbox"/> Black/African American	<input type="checkbox"/> Asian
	RaceCaucasian (210)	RaceBlack (220)	RaceAsian (240)
	<input type="checkbox"/> American Indian/Alaskan Native	<input type="checkbox"/> Native Hawaiian/Pacific Islander	
	RaceNativeAm (250)	RacNativePacific (260)	
Hispanic or Latino Ethnicity: <input type="checkbox"/> Yes <input type="checkbox"/> No			
Ethnicity (280)			

2. Admission

<u>Admission Status</u> : <input type="checkbox"/> Inpatient <input type="checkbox"/> Outpatient / Observation	<i>If Inpatient</i> → Admission Date: ____/____/____	
AdmissionStat (290)	AdmitDt (300)	
Payor: <i>Select all that apply</i> ↓		
<input type="checkbox"/> Government Health Insurance:		
PayorGov (310)		
<i>If Yes: Select all that apply:</i> →		
<input type="checkbox"/> Medicare	<input type="checkbox"/> Medicaid	
<input type="checkbox"/> Military Health Care	<input type="checkbox"/> State-Specific Plan	
<input type="checkbox"/> Indian Health Service		
PayorGovMcare(320) PayorGovMcaid(350) PayorGovMil(360) PayorGovState(370) PayorGovIHS(380)		
<i>If Medicare</i> →	Fee For Service? <input type="checkbox"/> Yes <input type="checkbox"/> No	
	MedicareFFS (330)	
	Health Insurance Claim (HIC)#: _____	
	HICNumber (340)	
<input type="checkbox"/> Commercial Health Insurance	<input type="checkbox"/> Non-U.S. Insured	
PayorCom (390)	PayorNonUS (410)	
<input type="checkbox"/> Health Maintenance Organization	<input type="checkbox"/> None / Self	
PayorHMO (400)	PayorNS (420)	
Surgeon Name: _____	<u>Surgeon's National Provider ID</u> : _____	
Surgeon (430)	SurgNPI (450)	
Taxpayer ID#: _____	Hospital Name: _____	
TIN (460)	HospName (470)	
Hospital Zip Code: _____	Hospital State: _____	Hospital's National Provider ID: _____
HospZIP (490)	HospStat (500)	HospNPI (510)

3. Pre-Operative Risk Factors

Height: _____(cm) Weight: _____(kg) Wt loss over past 3 months? (Enter "0" if none) _____(kg)

HeightCm (520)

WeightKg (540)

WtLoss3Kg (560)

Hypertension Steroids Congestive Heart Failure (CHF) Coronary Artery Disease (CAD)
Hypertn (580) Steroid (590) CHF (600) CAD (610)

Peripheral Vascular Disease (PVD) Prior Cardiothoracic Surgery
PVD (620) PriorCTS (630)

Preoperative chemotherapy If Yes: When → ≤6 months >6 months
PreopChemoCur (670) PreopChemoCurWhen (680)

Preoperative Thoracic Radiation Therapy If Yes: Same disease, ≤6 months Same disease, >6 months
PreopXRT (690) PreopXRTDisWhen (710) Unrelated disease, ≤6 months Unrelated disease, >6 months

Cerebrovascular History No CVD history Any reversible event Any irreversible event
CerebroHx (720)

Pulmonary Hypertension Yes No Not applicable/Not documented
PulmHypertn (730)

Diabetes If Yes, Type of control None Diet Oral or other non-insulin Insulin
Diabetes (740) DiabCtrl (750)

Creatinine level measured If Yes → Last creatinine level _____
CreatMeasured (770) CreatLst (780)

On Dialysis
Dialysis (790)

Hemoglobin level measured If Yes → Last hemoglobin level _____
HemoglobinMeasured (800) HemoglobinLst (810)

COPD (Previous diagnosis, treatment, spirometric evidence)
COPD (820)

Interstitial Fibrosis
InterstitialFib (830)

Cigarette smoking: Never smoked Past smoker (stopped >1 month prior to operation) Current smoker
CigSmoking (900)

If past or current smoker → Pack-Years _____ PackYear (910)

Pulmonary Function Tests performed? Yes No If Yes: ↓

PFT (960)

FEV1 test performed? Yes No Not Applicable If Yes→ **FEV1 % predicted:** _____
FEV (1000) FEVPred (1020)

DLCO test performed? Yes No Not Applicable If Yes→ **DLCO % predicted:** _____
DLCO (1030) DLCOPred (1040)

Zubrod Score: 0 - Normal activity, no symptoms 1 - Symptoms, fully ambulatory
Zubrod (1050) 2 - Symptoms, in bed ≤50% of time 3 - Symptoms, in bed >50% but <100%
 4 - Bedridden 5 - Moribund

4. Procedures

Category of Disease: Check both **Primary** and **Secondary** category. Indicate (circle) the Primary category.

CategoryPrim (1070)

CategorySecond (1080)

Trachea

- Tracheomalacia-congenital 748.3
- Tracheomalacia-acquired 519.1
- Tracheostenosis-congenital 748.3
- Tracheostenosis-acquired (postintubation) 519.1
- Tracheostomy-hemorrhage 519.09
- Tracheostomy related stenosis 519.02
- Tracheal tumor, malignant 162.0
- Tracheal tumor, benign 212.2
- Tracheal tumor, metastatic 197.3

Mediastinum

- Mediastinitis 519.2
- Mediastinal nodes, metastatic 196.1
- Mediastinal nodes, benign 229.0
- Anterior mediastinal tumor primary (germ cell cancer, seminoma) 164.2
- Anterior mediastinal tumor-metastatic 197.1
- Anterior mediastinal tumor-benign-(e.g. teratoma) 212.5
- Anterior mediastinal tumor-thymus tumor (thymoma, thymic carcinoma) 164.0
- Lymphoma, intrathoracic 202.82
- Posterior mediastinal malignant tumor- primary 164.3
- Posterior mediastinal tumor-metastatic 197.1

Larynx

- Subglottic stenosis-congenital 748.3
- Subglottic stenosis-acquired (postintubation) 478.74
- Vocal cord paralysis 748.3

Lung

- Lung tumor, metastatic 197.0
- Lung tumor, benign 212.3
- Lung cancer, main bronchus, carina 162.2
- Lung cancer, upper lobe 162.3
- Lung cancer, middle lobe 162.4
- Lung cancer, lower lobe 162.5
- Lung cancer, location unspecified 162.9
- Lung abscess 513.0
- Pneumothorax 512.8
- Bronchiectasis 494.0
- Empyema with fistula 510.0
- Empyema without fistula 510.9
- Emphysema 492.8
- Emphysematous bleb 492.0
- Interstitial lung disease/fibrosis 516.3
- Pneumonia 486
- Pulmonary insufficiency following surgery/trauma (ARDS) 518.5
- Hemothorax 511.8
- Lung nodule, benign (not a tumor, e.g., granuloma, subpleural lymph node, pulmonary infarct) 518.89

Esophagus

- Esophageal cancer-lower third 150.5
- Esophageal cancer, middle third 150.4
- Esophageal cancer, upper third 150.3
- Esophageal cancer, esophagogastric junction (cardia) 151.0
- Esophageal tumor-benign (ie;leiomyoma) 211.0
- Esophageal stricture 530.3
- Barrett's esophagus 530.85
- Achalasia of esophagus 530.0
- Esophageal perforation 530.4
- Zenkers diverticulum 530.6
- Epiphrenic diverticulum 530.4
- Gastroesophageal reflux (GERD) 530.81
- Tracheoesophageal fistula 530.84

Thyroid

- Goiter, nodular 241.9
- Thyroid neoplasm, malignant 193
- Thyroid neoplasm, benign 226

- Posterior mediastinal tumor-benign (ie; neurogenic tumor) 212.5
- Myasthenia gravis 358.0
- Mediastinal cyst, Bronchogenic - 519.3
- Mediastinal cyst, Foregut duplication - 519.3
- Mediastinal cyst, Pericardial - 519.3
- Mediastinal cyst, Thymic - 519.3

Pleura

- Pleural effusion (sterile) 511.9
- Pleural effusion, infected- (empyema) 511.1
- Pleural effusion, malignant 197.2
- Pleural tumor, malignant (e.g., mesothelioma) 163.9
- Pleural tumor, metastatic 197.2
- Pleural tumor, benign 212.4
- Pleural thickening 511.0

Chest Wall

- Pectus excavatum 754.81
- Pectus carinatum 754.82
- Sternal tumor, malignant 170.3
- Sternal tumor, metastatic 198.5
- Sternal tumor, benign 213.3
- Rib tumor, malignant-(e.g., osteosarcoma, chondrosarcoma) 170.3
- Rib tumor, metastatic 198.5
- Rib tumor, benign-(e.g., fibrous dysplasia) 213.3
- Thoracic outlet syndrome 353.0

Diaphragm

- Diaphragmatic paralysis 519.4
- Diaphragm tumor, malignant 171.4
- Diaphragm tumor, metastatic 198.89
- Diaphragm tumor, benign 215.4

Trauma

- Rib fracture 807.0
- Sternal fracture 807.2
- Flail chest 807.4
- Tracheal injury 807.5
- Traumatic pneumothorax 860.0
- Traumatic hemothorax 860.2
- Traumatic hemopneumothorax 860.4
- Lung contusion 861.21
- Lung laceration 861.22

- Diaphragm injury 862.0
- Esophageal injury 862.22
- Bronchus injury 862.21

Cardiovascular

- Pericarditis with effusion 420.90
- Pericardial effusion, malignant 198.89
- SVC Syndrome 459.2

Miscellaneous

- Hyperhidrosis, focal (e.g., palmar axillary hyperhidrosis) 705.21
- Lymphadenopathy 785.6
- Abnormal radiologic finding 793.1

Date of Surgery: ____/____/____

SurgDt (1100)

OR Entry Time: ____:____

OREntryT (1110)

OR Exit Time: ____:____

ORExitT (1120)

Anesthesia Start Time: ____:____

AnesthStartT (1130)

Anesthesia End Time: ____:____

AnesthEndT (1140)

Procedure Start Time: ____:____

ProcStartT (1170)

Procedure End Time: ____:____

ProcEndT (1180)

Multi-Day Operation (operation continued through midnight)

MultiDay (1190)

Status of Operation: Emergent Urgent Elective

Status (1200)

Reoperation (any prior cardiothoracic surgery that affects operative field)

Reop (1210)

Assisted by Robotic Technology

Robotic (1220)

Blood transfusion intraoperatively (packed red blood cells) If Yes→ #Red Blood Cell Units: _____

IntraopPRBC (1240)

IntraopPRBCNum (1250)

ASA Classification:

ASA (1260)

I II III IV V

Check ALL of the procedures attempted. Indicate (circle) the Primary Procedure.

Proc (1270)

Primary (1280)

Chest Wall and Neck

- Muscle flap, neck (15732)
- Muscle flap; trunk (i.e.; intercostal, pectoralis or serratus muscle) (15734)
- Excision of chest wall tumor including ribs (19260)
- Excision of chest wall tumor involving ribs, with Reconstruction (19271)
- Excision tumor, soft tissue of neck or thorax; subcutaneous (21555)
- Excision tumor, soft tissue of neck or thorax; deep, subfascial, intramuscular (21556)
- Radical resection of tumor (e.g., malignant neoplasm), soft tissue of neck or thorax (21557)
- Excision of rib, partial (21600)
- Excision first and/or cervical rib (21615)
- Excision first and/or cervical rib; with sympathectomy (21616)
- Radical resection of sternum (21630)
- Radical resection of sternum; with mediastinal Lymphadenectomy (21632)
- Hyoid myotomy and suspension (21685)
- Division of scalenus anticus; without resection of cervical rib (21700)
- Division of scalenus anticus; with resection of cervical rib (21705)
- Reconstructive repair of pectus excavatum or carinatum; open (21740)
- Reconstructive repair of pectus, minimally invasive approach (Nuss procedure), without thoracoscopy (21742)
- Reconstructive repair of pectus, minimally invasive approach (Nuss procedure), with thoracoscopy (21743)
- Open treatment of sternum fracture with or without skeletal Fixation (21825)
- Unlisted procedure, neck or thorax (21899)

Trachea and Bronchi

- Tracheoplasty; cervical (31750)
- Tracheoplasty; intrathoracic (31760)
- Carinal reconstruction (31766)
- Bronchoplasty; excision stenosis and anastomosis (31775)
- Excision tracheal stenosis and anastomosis; cervical (31780)
- Excision tracheal stenosis and anastomosis; cervicothoracic (31781)
- Excision of tracheal tumor or carcinoma; cervical (31785)
- Excision of tracheal tumor or carcinoma; thoracic (31786)
- Suture of tracheal wound or injury; cervical (31800)
- Suture of tracheal wound or injury; intrathoracic (31805)
- Unlisted procedure, trachea, bronchi (31899)

Thoracoscopy (VATS)

- Thoracoscopy, diagnostic lungs and pleural space, without biopsy (32601)
- Thoracoscopy, diagnostic lungs and pleural space, with biopsy (32602)
- Thoracoscopy, diagnostic pericardial sac, without biopsy (32603)
- Thoracoscopy, diagnostic pericardial sac, with biopsy (32604)
- Thoracoscopy, diagnostic mediastinal space, without biopsy (32605)
- Thoracoscopy, diagnostic; mediastinal space, with biopsy (32606)
- Thoracoscopy, surgical; with pleurodesis (e.g., mechanical or chemical) (32650)
- Thoracoscopy, surgical; with partial pulmonary decortication (32651)

Pleural Space and Lung

- Thoracostomy; with rib resection for empyema (32035)
- Thoracostomy; with open flap drainage for empyema (32036)
- Thoracotomy, limited, for biopsy of lung or pleura (i.e.; open lung biopsy) (32095)
- Thoracotomy, major; with exploration and biopsy (32100)
- Thoracotomy, major; with control of traumatic hemorrhage and/or repair of lung tear (32110)
- Thoracotomy, major; for postoperative complications (32120)
- Thoracotomy, major; with cyst(s) removal, with or without a pleural procedure (32140)
- Thoracotomy, major; with excision-plication of bullae, with or without any pleural procedure (32141)
- Thoracotomy, major; with removal of intrapleural foreign body or hematoma (32150)
- Thoracotomy with cardiac massage (32160)
- Pleural scarification for repeat pneumothorax (32215)
- Decortication, pulmonary- total (32220)
- Decortication, pulmonary, partial (32225)
- Pleurectomy, parietal (32310)
- Decortication and parietal pleurectomy (32320)
- Biopsy, pleura; open (32402)
- Removal of lung, total pneumonectomy (32440)
- Removal of lung, sleeve (carinal) pneumonectomy (32442)
- Removal of lung, total pneumonectomy; extrapleural (32445)
- Removal of lung, single lobe (lobectomy) (32480)
- Removal of lung, two lobes (bilobectomy) (32482)
- Removal of lung, single segment (segmentectomy) (32484)
- Removal of lung, sleeve lobectomy (32486)
- Removal of lung, completion pneumonectomy) (32488)
- Removal of lung, excision-plication of emphysematous lung(s) for lung volume reduction (LVRS) (32491)
- Removal of lung, wedge resection, single or multiple (32500)
- Resection and repair of portion of bronchus (bronchoplasty) when performed at time of lobectomy or Segmentectomy (32501)
- Resection of apical lung tumor (e.g., Pancoast tumor), including chest wall resection, without chest wall reconstruction (32503)
- Resection of apical lung tumor (e.g., Pancoast tumor), including chest wall resection, with chest wall reconstruction (32504)
- Extrapleural enucleation of empyema (empyemectomy) (32540)

Bronchoscopy

- Tracheobronchoscopy through established tracheostomy Incision (31615)
- Endobronchial ultrasound (EBUS) during bronchoscopic diagnostic or therapeutic intervention(s) (31620)
- Bronchoscopy, diagnostic, with or without cell washing (31622)
- Bronchoscopy, with brushing or protected brushings (31623)
- Bronchoscopy, with bronchial alveolar lavage (BAL) (31624)
- Bronchoscopy, with bronchial or endobronchial biopsy(s), single or multiple sites (31625)
- Bronchoscopy, with transbronchial lung biopsy(s), single

- Thoracoscopy, surgical; with total pulmonary decortication (32652)
- Thoracoscopy, surgical; with removal of intrapleural foreign body or fibrin deposit (32653)
- Thoracoscopy, surgical; with control of traumatic hemorrhage (32654)
- Thoracoscopy, surgical; with excision-plication of bullae, including any pleural procedure (32655)
- Thoracoscopy, surgical; with parietal pleurectomy (32656)
- Thoracoscopy, surgical; with wedge resection of lung, single or multiple (32657)
- Thoracoscopy, surgical; with removal of clot or foreign body from pericardial sac (32658)
- Thoracoscopy, surgical; with creation of pericardial window or partial resection of pericardial sac for drainage (32659)
- Thoracoscopy, surgical; with total pericardiectomy (32660)
- Thoracoscopy, surgical; with excision of pericardial cyst, tumor, or mass (32661)
- Thoracoscopy, surgical; with excision of mediastinal cyst, tumor, or mass (32662)
- Thoracoscopy, surgical; with lobectomy, total or segmental (32663)
- Thoracoscopy, surgical; with thoracic sympathectomy (32664)
- Thoracoscopy, surgical; with esophagomyotomy (Heller type) (32665)

Lung Other

- Insertion indwelling tunneled pleural catheter (32550)
- Repair lung hernia through chest wall (32800)
- Closure of chest wall following open flap drainage for empyema (Clagett type procedure) (32810)
- Open closure of major bronchial fistula (32815)
- Major reconstruction, chest wall (posttraumatic) (32820)
- Thoracoplasty with closure of bronchopleural fistula (32906)
- Total lung lavage (for alveolar proteinosis) (32997)
- Radio-frequency ablation (RFA) lung tumor (32998)
- Single lung transplant (32851)
- Single lung transplant with CPB (32852)
- Double lung transplant (32853)
- Double lung transplant with CPB (32854)
- Unlisted procedure, lung (32999)

Thymus

- Thymectomy, transcervical approach (60520)
- Thymectomy, transthoracic approach (60521)
- Thymectomy, transthoracic approach, with radical mediastinal dissection (60522)
- VATS thymectomy (605XX)

Esophagus

- Transhiatal-Total esophagectomy, without thoracotomy, with cervical esophagogastrotomy (43107)
- Three hole-Total esophagectomy with thoracotomy; with cervical esophagogastrotomy (43112)
- Ivor Lewis-Partial esophagectomy, distal two-thirds, with thoracotomy and separate abdominal incision (43117)
- Thoracoabdominal-Partial esophagectomy, thoracoabdominal approach (43122)
- Minimally invasive esophagectomy, Ivor Lewis approach (43XXX)
- Minimally invasive esophagectomy, Abdominal and neck approach (43XXX)
- Total esophagectomy without thoracotomy; with colon interposition or small intestine reconstruction (43108)
- Total esophagectomy with thoracotomy; with colon interposition or small intestine reconstruction (43113)
- Partial esophagectomy, cervical, with free intestinal graft, including microvascular anastomosis (43116)
- Partial esophagectomy, with thoracotomy and separate abdominal incision with colon interposition or small intestine (43118)
- Partial esophagectomy, distal two-thirds, with thoracotomy only (43121)

Lobe (31628)

- Bronchoscopy, with transbronchial needle aspiration biopsy(s) (31629)
- Bronchoscopy, with tracheal/bronchial dilation or closed reduction of fracture (31630)
- Bronchoscopy, with placement of tracheal stent(s) (includes tracheal/bronchial dilation as required) (31631)
- Bronchoscopy, with transbronchial lung biopsy(s), each additional lobe (31632)
- Bronchoscopy, with transbronchial needle aspiration biopsy(s), each additional lobe (31633)
- Bronchoscopy, with removal of foreign body (31635)
- Bronchoscopy, with placement of bronchial stent(s) (includes tracheal/bronchial dilation as required), initial bronchus (31636)
- Bronchoscopy, each additional major bronchus stented (31637)
- Bronchoscopy, with revision of tracheal or bronchial stent inserted at previous session (31638)
- Bronchoscopy, with excision of tumor (31640)
- Bronchoscopy, with destruction of tumor or relief of stenosis by any method other than excision (e.g., laser therapy) (31641)
- Bronchoscopy, with placement of catheter(s) for intracavitary radioelement application (31643)
- Bronchoscopy, with therapeutic aspiration of tracheobronchial tree, initial (e.g., V2_0_17, drainage of lung abscess) (31645)
- Bronchoscopy, with therapeutic aspiration of tracheobronchial tree, subsequent (31646)

Mediastinum and Diaphragm

- Thoracic lymphadenectomy, regional, including mediastinal and peritracheal nodes (38746)
- Mediastinotomy with exploration or biopsy; cervical approach (39000)
- Mediastinotomy with exploration or biopsy; transthoracic approach (39010)
- Excision of mediastinal cyst (39200)
- Excision of mediastinal tumor (39220)
- Mediastinoscopy, with or without biopsy (39400)
- Unlisted procedure, mediastinum (39499)
- Repair, laceration of diaphragm, any approach (39501)
- Repair of paraesophageal hiatus hernia, transabdominal with or without fundoplasty (39502)
- Repair, diaphragmatic hernia (other than neonatal), traumatic; acute (39540)
- Repair, diaphragmatic hernia (other than neonatal), traumatic; chronic (39541)
- Imbrication (i.e.; plication) of diaphragm (39545)
- Resection, diaphragm; with simple repair (e.g., primary suture) (39560)
- Resection, diaphragm; with complex repair (e.g., prosthetic material, local muscle flap) (39561)
- Unlisted procedure, diaphragm (39599)

Esophagus – other procedures

- Cricopharyngeal myotomy (43030)
- Diverticulectomy of hypopharynx or esophagus, with or without myotomy; cervical approach (43130)
- Diverticulectomy of hypopharynx or esophagus, with or without myotomy; thoracic approach (43135)
- Laparoscopy, surgical, esophagogastric fundoplasty (e.g., Nissen, Toupet procedures) (43280)
- Laparoscopic esophageal myotomy (432XX)
- Esophagogastric fundoplasty (e.g., Nissen, Belsey IV, Hill procedures) (43324)
- Esophagogastric fundoplasty; with gastroplasty (e.g., Collis) (43326)
- Esophagomyotomy (Heller type); thoracic approach (43331)

- Partial esophagectomy, thoracoabdominal with colon interposition or small intestine (43123)
- Total or partial esophagectomy, without reconstruction with cervical esophagostomy (43124)

Esophagoscopy

- Esophagoscopy (43200)
- Esophagoscopy with biopsy (43202)
- Esophagoscopy with removal of foreign body (43215)
- Esophagoscopy with insertion of stent (43219)
- Esophagoscopy with balloon dilation (43220)
- Esophagoscopy with insertion of guide wire followed by dilation over guide wire (43226)
- Esophagoscopy with ablation of tumor (43228)
- Esophagoscopy with endoscopic ultrasound examination (EUS) (43231)
- Esophagoscopy with transendoscopic ultrasound-guided fine needle aspiration (43232)
- Upper gastrointestinal endoscopy, diagnostic (43235)
- Upper gastrointestinal endoscopy with endoscopic ultrasound examination limited to the esophagus (43237)
- Upper gastrointestinal endoscopy with transendoscopic ultrasound-guided FNA (43238)
- Upper gastrointestinal endoscopy with biopsy (43239)
- Upper gastrointestinal endoscopy with dilation of gastric outlet for obstruction (43245)
- Upper gastrointestinal endoscopy with directed placement of percutaneous gastrostomy tube (43246)
- Upper gastrointestinal endoscopy with removal of foreign body (43247)
- Upper gastrointestinal endoscopy with insertion of guide wire followed by dilation of esophagus (43248)
- Upper gastrointestinal endoscopy with balloon dilation of esophagus (43249)
- Upper gastrointestinal endoscopy with transendoscopic stent placement (43256)
- Upper gastrointestinal endoscopy with ablation of tumor (43258)

- Esophagostomy, fistulization of esophagus, external; cervical approach (43352)
- Gastrointestinal reconstruction for previous esophagectomy with stomach (43360)
- Gastrointestinal reconstruction for previous esophagectomy with colon interposition or small intestine (43361)
- Ligation or stapling at gastroesophageal junction for pre-existing esophageal perforation (43405)
- Suture of esophageal wound or injury; cervical approach (43410)
- Suture of esophageal wound or injury; transthoracic or transabdominal approach (43415)
- Closure of esophagostomy or fistula; cervical approach (43420)
- Free jejunum transfer with microvascular anastomosis (43496)
- Total gastrectomy with esophagoenterostomy (43620)
- Total gastrectomy with Roux-en-Y reconstruction (43621)
- Unlisted procedure, esophagus (43499)

Miscellaneous

- Partial laryngectomy (31370)
- Ligation thoracic duct (38381)
- Intraoperative jejunostomy (44015)
- Omental flap (49904)
- Transthoracic thyroidectomy (60270)
- Removal substernal thyroid, cervical approach (60271)
- Tube pericardiostomy (33015)
- Pericardial window (33025)
- SVC resection and reconstruction (34502)
- Other (XXXX)

Lung Resection Performed Yes No **LungResect (1400)**

If Yes → Laterality: Right Left Bilateral Not Applicable
Laterality (1410)

If Admission Status=Inpatient → **Patient Disposition:** ICU Intermediate Care Unit
PatDisp (1420) Regular Floor Bed Not Applicable (Expired in OR)

If Admission Status=Inpatient → Total #Days in ICU: _____ **ICUDays (1430)**

Lung cancer documented AND resection performed LungCancer (1490)

Indicate whether the patient has lung cancer documented with one of the following Categories of Disease:

- 150 = Lung cancer, main bronchus, carina-162.2
- 160 = Lung cancer, upper lobe-162.3,
- 170 = Lung cancer, middle lobe-162.4
- 180 = Lung cancer, lower lobe-162.5
- 190 = Lung cancer, location unspecified-162.9

AND,

was treated with one of the following Procedures:

- 2470 = Removal of lung, total pneumonectomy; (32440)
- 2500 = Removal of lung, single lobe (lobectomy) (32480)
- 2510 = Removal of lung, two lobes (bilobectomy) (32482)
- 2520 = Removal of lung, single segment (segmentectomy) (32484)
- 2530 = Removal of lung, sleeve lobectomy (32486)
- 2540 = Removal of lung, completion pneumonectomy (32488)
- 2560 = Removal of lung, wedge resection, single or multiple (32500)
- 2580 = Resection of apical lung tumor (e.g., Pancoast tumor), including chest wall resection, without chest wall reconstruction(s) (32503)
- 2590 = Resection of apical lung tumor (e.g., Pancoast tumor), including chest wall resection, with chest wall reconstruction (32504)
- 2740 = Thoracoscopy, surgical; with wedge resection of lung, single or multiple (32657)
- 2800 = Thoracoscopy, surgical; with lobectomy, total or segmental (32663).

Yes No (If Yes, indicate clinical and pathological staging for lung cancer)

Esophageal cancer documented AND resection performed **ClinStageEsophC (1500)**

Indicate whether the patient has esophageal cancer documented with one of the following Categories of Disease:

- 680 = Esophageal cancer-lower third-150.5
- 690 = Esophageal cancer, middle third-150.4
- 700 = Esophageal cancer, upper third-150.3
- 710 = Esophageal cancer, esophagogastric junction (cardia)-151.0

AND was treated with one of the following Procedures:

- 3320 = Transhiatal-Total esophagectomy, without thoracotomy, with cervical esophagogastrostomy (43107)
- 3330 = Three hole-Total esophagectomy with thoracotomy; with cervical esophagogastrostomy (43112)
- 3340 = Ivor Lewis-Partial esophagectomy, distal two-thirds, with thoracotomy and separate abdominal incision (43117)
- 3350 = Thoracoabdominal-Partial esophagectomy, thoracoabdominal approach (43122)
- 3360 = Minimally invasive esophagectomy, Ivor Lewis approach (43XXX)
- 3370 = Minimally invasive esophagectomy, Abdominal and neck approach (43XXX)
- 3380 = Total esophagectomy without thoracotomy; with colon interposition or small intestine reconstruction (43108)
- 3390 = Total esophagectomy with thoracotomy; with colon interposition or small intestine reconstruction (43113)
- 3400 = Partial esophagectomy, cervical, with free intestinal graft, including microvascular anastomosis (43116)
- 3410 = Partial esophagectomy, with thoracotomy and separate abdominal incision with colon interposition or small intestine (43118)
- 3420 = Partial esophagectomy, distal two-thirds, with thoracotomy only (43121)
- 3430 = Partial esophagectomy, thoracoabdominal with colon interposition or small intestine (43123)

Yes No (If Yes, indicate clinical and pathological staging for esophageal cancer)

Clinical Staging

If lung cancer documented and resection performed: ↓ (Stage both non-small cell and small cell lung cancer the same.)

Lung Cancer

- T1a** (Tumor ≤2 cm, surrounded by lung, not in the main bronchus) **ClinStageLungT (1510)**
- T1b** (Tumor >2 cm, ≤3 cm, surrounded by lung, not in the main bronchus)
- T2a** (Tumor >3 cm, ≤5 cm, or invades visceral pleura, involves main bronchus >2 cm from carina, associated with atelectasis that extends to the hilum but not the entire lung)
- T2b** (Tumor >5 cm, ≤7 cm, or invades visceral pleura, involves main bronchus >2 cm from carina, associated with atelectasis that extends to the hilum but not the entire lung)
- T3** (Tumor >7 cm or invasion of chest wall, diaphragm, phrenic nerve, mediastinal pleura, pericardium; or tumor in the main bronchus ≤2 cm from carina, or atelectasis of the entire lung, or separate tumor nodules in the same lobe)
- T4** (Tumor of any size that invades mediastinum, heart, great vessels, recurrent laryngeal nerve, esophagus, vertebral body, carina; separate tumor nodule in a different ipsilateral lobe)
- N0** (No nodal metastases) **ClinStageLungN (1520)**
- N1** (Nodal metastases to ipsilateral hilar or peribronchial nodes)
- N2** (Nodal metastases to ipsilateral mediastinal and/or subcarinal nodes)
- N3** (Nodal metastases to contralateral mediastinal, contralateral hilar, and either ipsilateral or contralateral scalene or supraclavicular nodes)
- M0** (No distant metastases) **ClinStageLungM (1530)**
- M1a** (Separate tumor nodule in a contralateral lobe, tumor with pleural nodules or malignant pleural or pericardial effusion)
- M1b** (Distant metastases)

If esophageal cancer documented and resection performed: ↓

Esophageal Cancer

Primary Tumor **ClinStageEsophT (1540)**

- T0** (No evidence of tumor)
- Tis** (High grade dysplasia – HGD)
- T1a** (Tumor invades lamina propria or muscularis mucosae)
- T1b** (Tumor invades submucosa)
- T2** (Tumor invades muscularis propria)
- T3** (Tumor invades adventitia)
- T4a** (Tumor invades adjacent structures – pleura, pericardium, diaphragm)
- T4b** (Tumor invades other adjacent structures)

Distant Metastasis

- M0** (No distant metastases) **ClinStageEsophM (1560)**
- M1** (Distant metastases)

Histopathologic Type

- H1** (Squamous carcinoma) **ClinStageEsophH (1570)**
- H2** (Adenocarcinoma)

Regional Lymph Nodes **ClinStageEsophN (1550)**

- N0** (No nodal metastases)
- N1a** (Nodal metastases to 1 or 2 nodes)
- N1b** (Nodal metastases to 3 to 5 nodes)
- N2** (Nodal metastases to 6 to 9 nodes)
- N3** (Nodal metastases to 10 or more nodes)

Histologic Grade **ClinStageEsophG (1580)**

- GX** (Grade cannot be accessed)
- G1** (Well differentiated)
- G2** (Moderately differentiated)
- G3** (Poorly differentiated)
- G4** (Undifferentiated)

5. Postoperative Events

Indicate all adverse events that occurred within 1 month of surgery if discharged from the hospital or those that occur during the same admission, regardless of the length of stay.

If Patient Disposition = "ICU", "Intermediate Care Unit" or "Regular floor bed" → Unexpected Return to the OR Yes No **ReturnOR (1590)**

If Yes → Bleeding req re-operation Yes No **BleedOperate (1600)**

Postoperative Events? Yes No *If Yes, select all that occurred: ↓*

POEvents (1610)

<p>Pulmonary</p> <p><input type="checkbox"/> Air leak > 5 days duration AirLeak5 (1620)</p> <p><input type="checkbox"/> Atelectasis req bronchoscopy Atelectasis (1630)</p> <p><input type="checkbox"/> Pneumonia Pneumonia (1640)</p> <p><input type="checkbox"/> Adult Respiratory Distress Syndrome (ARDS) ARDS (1650)</p> <p><input type="checkbox"/> Bronchopleural fistula Bronchopleural (1660)</p> <p><input type="checkbox"/> Pulmonary embolus PE (1670)</p> <p><input type="checkbox"/> Pneumothorax Pneumo (1680)</p> <p><input type="checkbox"/> Initial ventilator support > 48 hours Vent (1690)</p> <p><input type="checkbox"/> Reintubation Reintube (1700)</p> <p><input type="checkbox"/> Tracheostomy Trach (1710)</p> <p><input type="checkbox"/> Other Pulmonary event OtherPul (1720)</p> <p>Cardiovascular</p> <p><input type="checkbox"/> Atrial arrhythmia req Rx AtrialArryth (1730)</p> <p><input type="checkbox"/> Ventricular arrhythmia req Rx VentArryth (1740)</p> <p><input type="checkbox"/> Myocardial infarct MI (1750)</p> <p><input type="checkbox"/> Deep venous thrombosis (DVT) req Rx DVT (1760)</p> <p><input type="checkbox"/> Other CV event OtherCV (1770)</p>	<p>Infection</p> <p><input type="checkbox"/> Urinary tract infection UTI (1880)</p> <p><input type="checkbox"/> Empyema req Rx Empyema (1890)</p> <p><input type="checkbox"/> Wound infection WoundInfect (1900)</p> <p><input type="checkbox"/> Sepsis Sepsis (1910)</p> <p><input type="checkbox"/> Another infection req IV antibiotics OtherInfect (1920)</p> <p>Hematology</p> <p><input type="checkbox"/> Packed red blood cells PostopPRBC (1850) <i>If Yes→ # Units _____ PostopPRBCUnits (1860)</i></p> <p>Gastrointestinal</p> <p><input type="checkbox"/> Gastric outlet obstruction GastricOutlet (1780)</p> <p><input type="checkbox"/> Ileus Ileus (1790)</p> <p><input type="checkbox"/> Anastomosis leak req medical Rx only (i.e.: interventional radiation drainage, NPO, antibiotics) AnastoMed (1800)</p> <p><input type="checkbox"/> Anastomosis leak req surgical intervention (i.e.: reoperation) AnastoSurg (1810)</p> <p><input type="checkbox"/> Dilatation esophagus prior to discharge DilationEsoph (1820)</p> <p><input type="checkbox"/> Other GI event OtherGI (1830)</p>	<p>Neurology</p> <p><input type="checkbox"/> New central neurological event (TIA, CVA, etc.) CentNeuroEvt (1930)</p> <p><input type="checkbox"/> Recurrent laryngeal nerve paresis or paralysis RecLarynParesis (1940)</p> <p><input type="checkbox"/> Delirium Delirium (1950)</p> <p><input type="checkbox"/> Other neurological event OtherNeuro (1960)</p> <p>Miscellaneous</p> <p><input type="checkbox"/> New renal failure req Rx or worsening (Cr >=2x preop) NewRenalFail (1970)</p> <p><input type="checkbox"/> Chylothorax req medical intervention (i.e.; chest tube, TPN) ChyloMed (1980)</p> <p><input type="checkbox"/> Chylothorax req surgical intervention (i.e.; reoperation and ligation of thoracic duct) ChyloSurg (1990)</p> <p><input type="checkbox"/> Other events req OR with general anesthesia OtherSurg (2010)</p> <p><i>If Admission Status = Inpatient ↓</i></p> <p><input type="checkbox"/> Unexpected Admission to ICU UnexpectedAdmitICU (2020)</p>
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6. Discharge

If Admission Status = Inpatient → **Date of Discharge:** ____/____/____

DischDt (2030)

Discharge Status: Alive Dead

MtDCStat (2040)

If Alive → **Discharge location:** Home Extended Care / Transitional Care Unit / Rehab
DisLocn (2050)

Other Hospital Nursing Home Hospice Other

Readmitted within 30 days of procedure Yes No

Readm30 (2060)

If Admission Status = Inpatient → **Status at 30 days after surgery:** Alive Dead Unknown

Mt30Stat (2070)

Date of Death: ____/____/____

MtDate (2080)

Chest tube used? Yes No

CTubeUse (2090)

If Chest Tube Use = Yes → Discharged with chest tube Yes No *If No* → Date chest tube was removed: ____/____/____

CTubeDis (2100)

CTubeOutDate (2110)

Pathological Staging

If lung cancer documented and resection performed: ↓

Lung Cancer

T1a (Tumor <=2 cm, surrounded by lung, not in the main bronchus) **PathStageLungT (2170)**

T1b (Tumor >2 cm, <=3 cm, surrounded by lung, not in the main bronchus)

T2a (Tumor >3 cm, <=5 cm, or invades visceral pleura, involves main bronchus >2 cm from carina, associated with atelectasis)

- that extends to the hilum but not the entire lung)
- T2b** (Tumor >5 cm, <=7 cm, or invades visceral pleura, involves main bronchus >2 cm from carina, associated with atelectasis that extends to the hilum but not the entire lung)
- T3** (Tumor >7 cm or invasion of chest wall, diaphragm, phrenic nerve, mediastinal pleura, pericardium; or tumor in the main bronchus <=2 cm from carina, or atelectasis of the entire lung, or separate tumor nodules in the same lobe)
- T4** (Tumor of any size that invades mediastinum, heart, great vessels, recurrent laryngeal nerve, esophagus, vertebral body, carina; separate tumor nodule in a different ipsilateral lobe)
- N0** (No nodal metastases) **PathStageLungN (2180)**
- N1** (Nodal metastases to ipsilateral hilar or peribronchial nodes)
- N2** (Nodal metastases to ipsilateral mediastinal and/or subcarinal nodes)
- N3** (Nodal metastases to contralateral mediastinal, contralateral hilar, and either ipsilateral or contralateral scalene or supraclavicular nodes)
- M0** (No distant metastases) **PathStageLungM (2190)**
- M1a** (Separate tumor nodule in a contralateral lobe, tumor with pleural nodules or malignant pleural or pericardial effusion)
- M1b** (Distant metastases)

If esophageal cancer documented *and* resection performed: ↓

Esophageal Cancer and of the Cardia and Gastroesophageal Junction

Primary Tumor

- T0** (No evidence of tumor) **PathStageEsophT (2200)**
- Tis** (High grade dysplasia – HGD)
- T1a** (Tumor invades lamina propria or muscularis mucosae)
- T1b** (Tumor invades submucosa)
- T2** (Tumor invades muscularis propria)
- T3** (Tumor invades adventitia)
- T4a** (Tumor invades adjacent structures – pleura, pericardium, diaphragm)
- T4b** (Tumor invades other adjacent structures)

Distant Metastasis

PathStageEsophM (2220)

- M0** (No distant metastases)
- M1** (Distant metastases)

Histopathologic Type

PathStageEsophH (2230)

- H1** (Squamous carcinoma)
- H2** (Adenocarcinoma)

Regional Lymph Nodes

- N0** (No nodal metastases) **PathStageEsophN (2210)**
- N1a** (Nodal metastases to 1 or 2 nodes)
- N1b** (Nodal metastases to 3 to 5 nodes)
- N2** (Nodal metastases to 6 to 9 nodes)
- N3** (Nodal metastases to 10 or more nodes)

Histologic Grade

- GX** (Grade cannot be accessed) **PathStageEsophG (2240)**
- G1** (Well differentiated)
- G2** (Moderately differentiated)
- G3** (Poorly differentiated)
- G4** (Undifferentiated)

7. Quality Measures

If Admission Status = Inpatient ↓

- IV antibiotics ordered within 1 hour Yes No *If Yes →* IV antibiotics given within 1 hour **IVAntibioGiven (2260)** Yes No Not indicated for procedure
- IVAntibioOrdered (2250)**
- Cephalosporin Antibiotic Ordered Yes No Not indicated for procedure
- CephalAntiOrdered (2270)** Not indicated due to documented allergy; another appropriate antibiotic given
- Prophylactic Antibiotic Discontinuation Ordered Yes No No, due to documented infection
- AntibioticDiscOrdered (2280)**
- DVT Prophylaxis Measures Yes No Not applicable
- DVTProphylaxis (2290)**

If Cigarette Smoking = Current Smoker ↓

- Smoking Cessation Counseling Yes No Patient refused
- SmokCoun (2300)**