



The Society of Thoracic Surgeons General Thoracic Surgery Database Analyzed Procedure Data Collection Form Version 2.41

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- An Analyzed Procedure Data Collection Form (DCF) is **required for all suspected or diagnosed Lung and Esophageal Cancer Resections** and one should be initiated every time the patient enters the operating room. These cases are risk adjusted and are included in the Data Analysis Reports.
- Fields that appear underlined and in blue are required for analyzed procedure record inclusion. If any of these fields are missing data, the entire record will be excluded from analysis.
- Completion of the **Thymus/Mediastinal Mass, Tracheal Resection and Hiatal Hernia/GERD** sections is **optional** for analyzed procedures.
- Procedures highlighted below, if performed as isolated procedures or with only other highlighted procedures, are not collected unless the Surgeon Participant chooses to track them. If collected, use the Non-analyzed Procedure DCF.
- Highlighted procedures done in conjunction with analyzed (major) procedures should be included on this Analyzed Procedure DCF.

A. Demographics			
Patient ID: _____	Medical Record #: _____		
First Name: _____	Middle Name: _____	Last Name: _____	SSN#: _____
Patient participating in STS-related clinical trial: <input type="checkbox"/> None <input type="checkbox"/> Trial 1 <input type="checkbox"/> Trial 2 <input type="checkbox"/> Trial 3 <input type="checkbox"/> Trial 4 <input type="checkbox"/> Trial 5 <input type="checkbox"/> Trial 6 (If not "None" →) Clinical trial patient ID: _____			
Date of Birth: ____/____/____	<u>Age</u> : _____	Patient Postal Code: _____	<u>Gender</u> : <input type="checkbox"/> Male <input type="checkbox"/> Female
<u>Is the Patient's Race Documented?</u> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Patient Declined to Disclose			
<u>Race</u> : <i>If Yes select all that apply</i>			
White/Caucasian	<input type="checkbox"/> Yes <input type="checkbox"/> No	Black/African American	<input type="checkbox"/> Yes <input type="checkbox"/> No
Asian	<input type="checkbox"/> Yes <input type="checkbox"/> No	American Indian/Alaskan Native	<input type="checkbox"/> Yes <input type="checkbox"/> No
Native Hawaiian/Pacific Islander	<input type="checkbox"/> Yes <input type="checkbox"/> No	Other	<input type="checkbox"/> Yes <input type="checkbox"/> No
Hispanic or Latino Ethnicity: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Documented			

B. Admission	
<u>Admission Status</u> : <input type="checkbox"/> Inpatient <input type="checkbox"/> Outpatient / Observation	<i>If Inpatient</i> → Admission Date: ____/____/____
<u>Payor</u> : Indicate the Primary payor: <input type="checkbox"/> None/self <input type="checkbox"/> Medicare <i>If Medicare</i> → Fee For Service: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Medicaid <input type="checkbox"/> Military Health <input type="checkbox"/> Indian Health Service <input type="checkbox"/> Correctional Facility <input type="checkbox"/> State Specific Plan <input type="checkbox"/> Other Government Insurance <input type="checkbox"/> Commercial Health Insurance <input type="checkbox"/> Health Maintenance Organization <input type="checkbox"/> Non U.S. Plan	<i>If Primary Payor is not None/Self</i> → Indicate the Secondary (supplemental) payor: <input type="checkbox"/> None/self <input type="checkbox"/> Medicare <i>If Medicare</i> → Fee For Service: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Medicaid <input type="checkbox"/> Military Health <input type="checkbox"/> Indian Health Service <input type="checkbox"/> Correctional Facility <input type="checkbox"/> State Specific Plan <input type="checkbox"/> Other Government Insurance <input type="checkbox"/> Commercial Health Insurance <input type="checkbox"/> Health Maintenance Organization <input type="checkbox"/> Non U.S. Plan
Surgeon Name: _____	<u>Surgeon's National Provider ID</u> : _____
<u>Taxpayer ID#</u> : _____	Hospital Name: _____

Hospital Postal Code: _____	Hospital Region: _____	Hospital's National Provider ID: _____
C. Pre-Operative Evaluation		
Height: _____(cm)	Weight: _____(kg)	
Unintentional Wt loss over past 3 months? (Enter "0" if none) - _____(kg)		
CardioPulmonary History		
Hypertension <input type="checkbox"/> Yes <input type="checkbox"/> No	Congestive Heart Failure(CHF) <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If Yes</i> → EF _____%	
Coronary Artery Disease (CAD) <input type="checkbox"/> Yes <input type="checkbox"/> No	Myocardial Infarction <input type="checkbox"/> Yes <input type="checkbox"/> No	
Afib per EKG within the last year; with or without treatment <input type="checkbox"/> Yes <input type="checkbox"/> No	Valvular Heart Disease <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If Yes</i> →	Location – <i>check all that apply:</i> AV <input type="checkbox"/> Yes <input type="checkbox"/> No PV <input type="checkbox"/> Yes <input type="checkbox"/> No MV <input type="checkbox"/> Yes <input type="checkbox"/> No TV <input type="checkbox"/> Yes <input type="checkbox"/> No
Pulmonary Hypertension: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		
Interstitial Fibrosis/ Interstitial Lung Disease <input type="checkbox"/> Yes <input type="checkbox"/> No		
Vascular History		
Major Vascular Disease <input type="checkbox"/> Yes <input type="checkbox"/> No		
DVT/PE <input type="checkbox"/> Yes <input type="checkbox"/> No		
Cerebral Vascular Disease History		
Cerebrovascular History: <input type="checkbox"/> No CVD history <input type="checkbox"/> Known disease, no events <input type="checkbox"/> Transient Ischemic Attack (TIA)		
<input type="checkbox"/> Cerebrovascular Accident (CVA) <i>If CVA</i> → Permanent Neurologic impairment <input type="checkbox"/> Yes <input type="checkbox"/> No		
Neuromuscular Disease		
Neurologic symptoms present <input type="checkbox"/> Yes <input type="checkbox"/> No		
Myasthenia Gravis <input type="checkbox"/> Yes <input type="checkbox"/> No		
Endocrine / GI / Renal History		
Diabetes <input type="checkbox"/> Yes <input type="checkbox"/> No	<i>If Yes</i> → Type of therapy:	<input type="checkbox"/> None <input type="checkbox"/> Diet Only <input type="checkbox"/> Oral <input type="checkbox"/> Insulin <input type="checkbox"/> Other Subcutaneous Medication <input type="checkbox"/> Other <input type="checkbox"/> Unknown
Liver Dysfunction <input type="checkbox"/> Yes <input type="checkbox"/> No		
On Dialysis <input type="checkbox"/> Yes <input type="checkbox"/> No		
Cancer History		
Coexisting Cancer <input type="checkbox"/> Yes <input type="checkbox"/> No		
Preoperative Chemotherapy / Immunotherapy <input type="checkbox"/> Yes <input type="checkbox"/> No	<i>If Yes</i> →	<input type="checkbox"/> Same disease, ≤ 6 months <input type="checkbox"/> Same disease, > 6 months <input type="checkbox"/> Unrelated disease, ≤ 6 months <input type="checkbox"/> Unrelated disease, >6 months
Preop Thoracic Radiation Therapy <input type="checkbox"/> Yes <input type="checkbox"/> No	<i>If Yes</i> →	<input type="checkbox"/> Same disease, ≤ 6 months <input type="checkbox"/> Same disease, > 6 months <input type="checkbox"/> Unrelated disease, ≤ 6 months <input type="checkbox"/> Unrelated disease, >6 months
<i>If Same disease, ≤ 6 months</i> → Completion Date _____		
Prior Surgical History (check all that apply)		
Prior Cardiothoracic Surgery <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If Yes</i> →	Sternotomy <input type="checkbox"/> Yes <input type="checkbox"/> No	
<i>(check all that apply)</i>	VATS/Robotic <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If Yes</i> →	<input type="checkbox"/> Right <input type="checkbox"/> Left <input type="checkbox"/> Bilateral
	Pulmonary resection <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If Yes</i> →	<input type="checkbox"/> Right <input type="checkbox"/> Left <input type="checkbox"/> Bilateral
	Thoracotomy <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If Yes</i> →	<input type="checkbox"/> Right <input type="checkbox"/> Left <input type="checkbox"/> Bilateral
PreOp Medication History		
Chronic Immunosuppressive Therapy <input type="checkbox"/> Yes <input type="checkbox"/> No		
Chronic anticoagulation <input type="checkbox"/> Yes <input type="checkbox"/> No (defined as any anticoagulation medication other than ASA)		
Home O2 <input type="checkbox"/> Yes <input type="checkbox"/> No		

Pre-Operative Testing			
Creatinine level measured	<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>If Yes</i> → Last creatinine level _____	
Hemoglobin level measured	<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>If Yes</i> → Last hemoglobin level _____	
Pulmonary Function Tests performed? <input type="checkbox"/> Yes <input type="checkbox"/> No			
<i>If No</i> →	PFT Not Performed Reason	<input type="checkbox"/> Not a Major Lung Resection <input type="checkbox"/> Tracheostomy or Ventilator	<input type="checkbox"/> Never smoked, no lung disease <input type="checkbox"/> Urgent or Emergent Status <input type="checkbox"/> Pt. Unable to perform
<i>If Yes</i> →	FEV1 test performed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable	<i>If Yes</i> → FEV1 % predicted: _____
	DLCO test performed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable	<i>If Yes</i> → DLCO % predicted: _____
Psychosocial History			
Cigarette smoking:	<input type="checkbox"/> Never smoked	<input type="checkbox"/> Past smoker (stopped >1 month prior to operation)	<input type="checkbox"/> Current smoker <input type="checkbox"/> Unknown
<i>If 'Past smoker' or 'Current Smoker' →</i>	Pack Year Known or can be estimated	<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>If Yes</i> → Pack-Years _____
Narcotic dependency	<input type="checkbox"/> Yes <input type="checkbox"/> No	Alcohol Abuse	<input type="checkbox"/> Yes <input type="checkbox"/> No
Dementia/neurocognitive dysfunction	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Major Psychiatric Disorder	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Living Status:	<input type="checkbox"/> Lives alone	<input type="checkbox"/> Lives with-family or friend	<input type="checkbox"/> Assisted Living <input type="checkbox"/> Nursing Home
Functional Status:	<input type="checkbox"/> Independent	<input type="checkbox"/> Partially Dependent	<input type="checkbox"/> Totally Dependent <input type="checkbox"/> Unknown
ECOG Score:	<input type="checkbox"/> 0 - Fully active, able to carry on all pre-disease performance without restriction	<input type="checkbox"/> 1 - Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature, e.g., light house work, office work	<input type="checkbox"/> 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
	<input type="checkbox"/> 3 - Capable of only limited self-care, confined to bed or chair more than 50% of waking hours	<input type="checkbox"/> 4 - Completely disabled. Cannot carry on any self-care. Totally confined to bed or chair	<input type="checkbox"/> 5 - Dead

D. Diagnosis (Category of Disease)	
Category of Disease: Check both Primary and Secondary Diagnosis (Category of Disease) (ICD-9, ICD-10). Indicate (circle) the Primary Diagnosis.	
Note: Diagnosis is based on final pathology report.	
<input type="checkbox"/> No Secondary Diagnosis (<i>for Category of Disease - Secondary field only</i>)	
Lung Cancer	
<input type="checkbox"/> Lung cancer, main bronchus, carina (162.2, C34.00)	<input type="checkbox"/> Lung cancer, lower lobe (162.5, C34.30)
<input type="checkbox"/> Lung cancer, upper lobe (162.3, C34.10)	<input type="checkbox"/> Lung cancer, location unspecified (162.9, C34.90)
<input type="checkbox"/> Lung cancer, middle lobe (162.4, C34.2)	<input type="checkbox"/> Lung tumor, metastatic (197.0, C78.00)
<input type="checkbox"/> Malignant neoplasm other parts of bronchus or lung (162.8, C34.8)	<input type="checkbox"/> Personal history of malignant neoplasm of bronchus and lung (V10.11, Z85.118)
<input type="checkbox"/> Neoplasm of uncertain behavior of trachea, bronchus and lung (235.7, DM38.1)	
Esophagus Cancer	
<input type="checkbox"/> Esophageal cancer, esophagogastric junction (cardia) (151.0, C16.0)	<input type="checkbox"/> Malignant neo stomach unspecified (151.9, C16.9)
<input type="checkbox"/> Esophageal cancer, upper third (150.3, C15.3)	<input type="checkbox"/> Malignant neoplasm of the esophagus, unspecified (150.9, C15.9)
<input type="checkbox"/> Esophageal cancer, middle third (150.4, C15.4)	<input type="checkbox"/> Malignant other part esophagus, specified (150.8, C15.8)
<input type="checkbox"/> Esophageal cancer-lower third (150.5, C15.5)	
Thymus / Mediastinal Mass	

<input type="checkbox"/> Anterior mediastinal tumor primary(germ cell cancer, seminoma) (164.2, C38.1)	<input type="checkbox"/> Anterior mediastinal tumor-thymus tumor (thymoma, thymic carcinoma) (164.0, C37)
<input type="checkbox"/> Anterior mediastinal tumor-metastatic (197.1, C78.1)	<input type="checkbox"/> Posterior mediastinal tumor-metastatic (197.1, C78.1)
<input type="checkbox"/> Posterior mediastinal malignant tumor- primary (164.3, C38.2)	<input type="checkbox"/> Neoplasm of uncertain behavior of pleura, thymus, mediastinum (235.8, D38.2-D38.4)
<input type="checkbox"/> Anterior mediastinal tumor-benign-(e.g., teratoma) (212.5, D15.2)	<input type="checkbox"/> Myasthenia gravis (358.0, G70.00)
Trachea	
<input type="checkbox"/> Tracheal tumor, malignant (162.0, C33)	<input type="checkbox"/> Tracheal stenosis, congenital (748.3, Q32.1)
<input type="checkbox"/> Tracheal tumor, benign (212.2, D14.2)	<input type="checkbox"/> Subglottic stenosis-congenital (748.3, Q31.1)
<input type="checkbox"/> Tracheal tumor, metastatic (197.3, C78.30)	<input type="checkbox"/> Subglottic stenosis-acquired (post intubation) (478.74, J38.6)
<input type="checkbox"/> Tracheal stenosis, acquired (519.19, J39.8)	<input type="checkbox"/> Tracheostomy related stenosis (519.02, J95.03)
Hiatal Hernia / GERD	
<input type="checkbox"/> Esophageal reflux (GERD) (530.81, K21.9)	<input type="checkbox"/> Diaphragmatic hernia, with obstruction, without gangrene (552.3, K44.0)
<input type="checkbox"/> Reflux esophagitis (530.11, K21.0)	<input type="checkbox"/> Diaphragmatic hernia with gangrene (551.3, K44.1)
<input type="checkbox"/> Barrett's esophagus (530.85, K22.70)	<input type="checkbox"/> Diaphragmatic hernia without obstruction or gangrene (553.3, K44.9)
<input type="checkbox"/> Barrett's esophagus with High Grade Dysplasia (530.85, K22.711)	
Cardiovascular	
<input type="checkbox"/> Abdominal aneurysm without rupture (441.4, I171.4)	<input type="checkbox"/> Pericarditis, constrictive (432.2, I31.1)
<input type="checkbox"/> Cardiac tamponade (423.3, I31.4)	<input type="checkbox"/> SVC Syndrome (459.2, I87.1)
<input type="checkbox"/> Pericardial effusion, malignant (198.89, C79.89)	<input type="checkbox"/> Unspecified disease of the pericardium (423.9, I31.9)
<input type="checkbox"/> Pericarditis with effusion (420.9, I30.9)	
Chest Wall	
<input type="checkbox"/> Pectus carinatum (754.82, Q67.7)	<input type="checkbox"/> Sternal tumor, benign (213.3, D16.7)
<input type="checkbox"/> Pectus excavatum (754.81, Q67.6)	<input type="checkbox"/> Sternal tumor, malignant (170.3, C41.3)
<input type="checkbox"/> Rib tumor, benign-(e.g., fibrous dysplasia) (213.3, D16.7)	<input type="checkbox"/> Sternal tumor, metastatic (198.5, C79.51)
<input type="checkbox"/> Rib tumor, malignant-(e.g., osteosarcoma, chondrosarcoma) (170.3, C41.3)	<input type="checkbox"/> Thoracic outlet syndrome (353.0, G54.0)
<input type="checkbox"/> Rib tumor, metastatic (198.5, C79.51)	
Diaphragm	
<input type="checkbox"/> Diaphragm tumor, benign (215.4, D21.3)	<input type="checkbox"/> Diaphragm tumor, metastatic (198.89, C79.89)
<input type="checkbox"/> Diaphragm tumor, malignant (171.4, C49.3)	<input type="checkbox"/> Diaphragmatic paralysis (519.4, J98.6)
Esophagus - Other	
<input type="checkbox"/> Achalasia of esophagus (530.0, K22.0)	<input type="checkbox"/> Foreign body esophagus (935.1, T18.108a)
<input type="checkbox"/> Acquired absence of esophagus (post esophagectomy) (V45.79, Z90.89)	<input type="checkbox"/> Gastric outlet obstruction, pyloric stenosis, acquired (537.0, K31.1)
<input type="checkbox"/> Dyskinesia/spasm of esophagus (530.5, K22.4)	<input type="checkbox"/> Mallory Weiss tear (530.7, K22.6)
<input type="checkbox"/> Epiphrenic diverticulum (530.6, K22.5)	<input type="checkbox"/> Stricture and stenosis of esophagus (530.3, K22.2)
<input type="checkbox"/> Esophageal perforation (530.4, K22.3)	<input type="checkbox"/> Tracheoesophageal fistula (530.84, J86.0)
<input type="checkbox"/> Esophageal stricture (530.3, K22.2)	<input type="checkbox"/> Ulcer esophagus with bleeding (530.21, K22.11)
<input type="checkbox"/> Esophageal tumor-benign (i.e., leiomyoma) (211.0, D13.0)	<input type="checkbox"/> Ulcer esophagus without bleeding (530.2, K22.10)
<input type="checkbox"/> Esophagitis (530.1, K20.9)	<input type="checkbox"/> Zenkers diverticulum (530.6, K22.5)
<input type="checkbox"/> Other disease of the esophagus (530.89, K22.8)	<input type="checkbox"/> Other digestive system complication (997.49, K91.XX)
Lung – Other	
<input type="checkbox"/> Acute respiratory failure (518.81, J96.00)	<input type="checkbox"/> Lung tumor, benign (e.g., hamartoma) (212.3, D14.30)
<input type="checkbox"/> Aspergillosis (117.3, B44.9)	<input type="checkbox"/> Pneumonia (486.0, J18.9)
<input type="checkbox"/> Bronchiectasis (494.0, J47.9)	<input type="checkbox"/> Post inflammatory pulmonary fibrosis (515, J84.89)
<input type="checkbox"/> Cystic fibrosis with pulmonary manifestations (277.02, E84.0)	<input type="checkbox"/> Primary pulmonary hypertension (416.0, I 27.0)

<input type="checkbox"/> Emphysema (492.8, J43.8)	<input type="checkbox"/> Pulmonary insufficiency following surgery/trauma (ARDS) (518.5, J95.82)
<input type="checkbox"/> Emphysematous bleb (492.0, J43.9)	<input type="checkbox"/> Pulmonary sequestration (748.5, Q33.2)
<input type="checkbox"/> Lung abscess (513.0, J85.2)	<input type="checkbox"/> Transplanted lung complication(s) (996.84, T86.8XX)
<input type="checkbox"/> Interstitial lung disease/fibrosis (516.3, J84.1)	<input type="checkbox"/> Gangrene and necrosis of lung (513.0, J85.0)
<input type="checkbox"/> Pneumothorax (512.8, J93.1)	<input type="checkbox"/> Hemothorax (511.8, J94.2)
<input type="checkbox"/> Solitary pulmonary nodule (not a tumor, e.g., granuloma, subpleural lymph node, pulmonary infarct) (793.11, R91.1)	
Mediastinum	
<input type="checkbox"/> Mediastinal nodes, metastatic (196.1, C77.1)	<input type="checkbox"/> Mediastinal cyst, Pericardial (519.3, J98.5)
<input type="checkbox"/> Benign neoplasm of thymus (212.6, D15.0)	<input type="checkbox"/> Mediastinal cyst, Thymic (519.3, J98.5)
<input type="checkbox"/> Lymphoma, intrathoracic (202.82, C85.92)	<input type="checkbox"/> Mediastinal nodes, benign (229.0, D36.0)
<input type="checkbox"/> Mediastinal abscess (513.1, J85.3)	<input type="checkbox"/> Mediastinitis (519.2, J98.5)
<input type="checkbox"/> Mediastinal cyst, Bronchogenic (519.3, J98.5)	<input type="checkbox"/> Posterior mediastinal tumor-benign(neurogenic)(212.5,D15.2)
<input type="checkbox"/> Mediastinal cyst, Foregut duplication (519.3, J98.5)	<input type="checkbox"/> Unspecified disease of thymus gland (254.9, E32.9)
Pleura	
<input type="checkbox"/> Empyema with fistula (510.0, J86.0)	<input type="checkbox"/> Pleural thickening (511.0, J94.9)
<input type="checkbox"/> Empyema without fistula (510.9, J86.9)	<input type="checkbox"/> Pleural tumor, benign (212.4, D19.0)
<input type="checkbox"/> Empyema, tuberculosis (A15.6)	<input type="checkbox"/> Pleural tumor, metastatic (197.2, C78.2)
<input type="checkbox"/> Pleural effusion, infected- (empyema) (511.1, J86.9)	<input type="checkbox"/> Malignant neoplasm other specified sites of pleura (163.8, C38.4)
<input type="checkbox"/> Pleural effusion, malignant (197.2, C78.2)	<input type="checkbox"/> Malignant tumor of pleura, unspecified (e.g., mesothelioma) (163.9, C45)
<input type="checkbox"/> Pleural effusion sterile (511.9, J90)	<input type="checkbox"/> Pleural effusion, TB; (Tuberculous pleurisy) (012.0, A15.6)
<input type="checkbox"/> Pleural effusion, other specified, except TB (511.89, J90)	
Thyroid	
<input type="checkbox"/> Goiter, nodular (241.9, E04.9)	<input type="checkbox"/> Thyroid neoplasm, malignant (193.0, C73)
<input type="checkbox"/> Thyroid neoplasm, benign (226.0, D34)	
Trachea & Larynx	
<input type="checkbox"/> Dysphagia, unspecified (787.2, R13.10)	<input type="checkbox"/> Vocal cord paralysis unspecified (478.3, J38.00)
<input type="checkbox"/> Tracheomalacia-congenital (748.3, Q32.0)	<input type="checkbox"/> Vocal cord paralysis , unilateral (478.31, J38.01)
<input type="checkbox"/> Tracheomalacia-acquired (519.1, J39.8)	<input type="checkbox"/> Vocal cord paralysis, bilateral (478.33, J38.02)
<input type="checkbox"/> Tracheostomy-hemorrhage (519.09, J95.01)	
Trauma	
<input type="checkbox"/> Flail chest (807.4, S22.5xxa)	<input type="checkbox"/> Sternal fracture (807.2, S22.20xa)
<input type="checkbox"/> Rib fracture (807.0, S22.39xa)	<input type="checkbox"/> Tracheal injury (807.5, S12.8xxa)
<input type="checkbox"/> Rib fractures, multiple (807.0, S22.49xa)	<input type="checkbox"/> Traumatic pneumothorax (860.0, S27.0xxa)
Miscellaneous	
<input type="checkbox"/> Abnormal radiologic finding (793.1, R91)	<input type="checkbox"/> Other non-infectious disorders of lymphatic channels (457.8, I89.8)
<input type="checkbox"/> Chronic airway obstruction not elsewhere classified (496, J44.9)	<input type="checkbox"/> Malignant neoplasm of connective tissue and other soft tissue of the thorax (171.4, C49.3)
<input type="checkbox"/> Chylothorax (457.8, 189.8)	<input type="checkbox"/> Malignant poorly differentiated neuroendocrine carcinoma, any site (209.3, C74.1)
<input type="checkbox"/> Disruption of internal operation, surgical wound (998.31, T81.32XA)	<input type="checkbox"/> Non-healing surgical wound (998.83, T81.89XA)
<input type="checkbox"/> Hemorrhage complicating a procedure (998.11, multiple codes)	<input type="checkbox"/> Other post- op infection (998.59, T81.4XXA)
<input type="checkbox"/> Hematoma complicating a procedure (998.12, multiple codes)	<input type="checkbox"/> Persistent post-op fistula not otherwise classified (998.6, T81.83XA)
<input type="checkbox"/> Hemoptysis unspecified (786.3, R04.2)	<input type="checkbox"/> Post-operative air leak (512.2, J95.812)
<input type="checkbox"/> Hyperhidrosis, focal axilla (705.21, L74.510)	<input type="checkbox"/> Secondary malignant neoplasm of other specified sites (198.89, C79.89)
<input type="checkbox"/> Hyperhidrosis, focal, face (705.21, L74.511)	<input type="checkbox"/> Shortness of breath (786.05, R06.02)
<input type="checkbox"/> Hyperhidrosis, focal, palms (705.21, L74.512)	<input type="checkbox"/> Swelling, mass or lump in chest (786.6, R22.2)

<input type="checkbox"/> Lymphadenopathy (785.6, R59.9)		<input type="checkbox"/> Other unlisted category of disease	
Other Primary Specify:	If diagnosis not listed, free text here: _____		
Other Primary ICD:	Enter ICD-9 or ICD-10 of unlisted primary diagnosis, if known: _____		
Secondary, Other Secondary Specify:	If secondary diagnosis not listed, free text here: _____		
Secondary, Other Secondary ICD:	Enter ICD-9 or ICD-10 of unlisted secondary diagnosis, if known: _____		

E. Operative						
<u>Date of Surgery:</u> ____ / ____ / ____						
<u>OR Entry Time:</u> ____:____		Anesthesia Start Time: ____:____		<u>Procedure Start Time:</u> ____:____		
<u>OR Exit Time:</u> ____:____		Anesthesia End Time: ____:____		<u>Procedure End Time:</u> ____:____		
Multi-Day Operation (operation continued through midnight) <input type="checkbox"/> Yes <input type="checkbox"/> No						
Planned, staged procedure? <input type="checkbox"/> Yes <input type="checkbox"/> No						
Status of Operation <input type="checkbox"/> Emergent <input type="checkbox"/> Urgent <input type="checkbox"/> Elective <input type="checkbox"/> Palliative						
Reoperation (any prior cardiothoracic surgery that affects operative field) <input type="checkbox"/> Yes <input type="checkbox"/> No			Assisted by Robotic Technology <input type="checkbox"/> Yes <input type="checkbox"/> No			
Surgical Approach Conversion: <input type="checkbox"/> VATS→ Open <input type="checkbox"/> Robotic → VATS <input type="checkbox"/> Robotic→ Open <input type="checkbox"/> No						
Conversion Type: <input type="checkbox"/> Elective <input type="checkbox"/> Emergent						
If Yes→ Conversion Reason: <input type="checkbox"/> Vascular <input type="checkbox"/> Anatomy <input type="checkbox"/> Lymph Nodes <input type="checkbox"/> Technical						
Blood transfusion intraoperatively (packed red blood cells) <input type="checkbox"/> Yes <input type="checkbox"/> No				If Yes→ #Red Blood Cell Units: _____		
ASA Classification:	<input type="checkbox"/> I Normal, healthy	<input type="checkbox"/> II Mild systemic disease	<input type="checkbox"/> III Severe systemic disease	<input type="checkbox"/> IV Life threatening severe systemic disease	<input type="checkbox"/> V Moribund, not expected to survive without operation	<input type="checkbox"/> VI Declared brain dead, organ donor

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

Analyzed Procedures	
Lung Cancer Resection	
<input type="checkbox"/> Thoracoscopy, surgical; with lobectomy (32663)	<input type="checkbox"/> Removal of lung, single lobe (lobectomy) (32480)
<input type="checkbox"/> Thoracoscopy with therapeutic wedge resection (eg mass or nodule, initial, unilateral) (32666)	<input type="checkbox"/> Removal of lung, two lobes (bilobectomy) (32482)
<input type="checkbox"/> Thoracoscopy with therapeutic wedge resection(eg mass or nodule) each additional resection, ipsilateral (32667) List separately in addition to primary procedure code	<input type="checkbox"/> Removal of lung, single segment (segmentectomy) (32484)
<input type="checkbox"/> Thoracoscopy with diagnostic wedge resection followed by anatomic lung resection (32668), List separately in addition to primary procedure code	<input type="checkbox"/> Removal of lung, sleeve lobectomy (32486)
<input type="checkbox"/> Thoracoscopy with removal of a single lung segment (segmentectomy) (32669)	<input type="checkbox"/> Removal of lung, completion pneumonectomy (32488)
<input type="checkbox"/> Thoracoscopy with removal of two lobes (bilobectomy) (32670)	<input type="checkbox"/> Resection and repair of portion of bronchus (bronchoplasty) when performed at time of lobectomy or segmentectomy (32501)
<input type="checkbox"/> Thoracoscopy with removal of lung, pneumonectomy (32671)	<input type="checkbox"/> Resection of apical lung tumor (e.g., Pancoast tumor), including chest wall resection, without chest wall reconstruction(s) (32503)
<input type="checkbox"/> Thoracotomy with therapeutic wedge resection (eg mass nodule) initial (32505)	<input type="checkbox"/> Resection of apical lung tumor (e.g., Pancoast tumor), including chest wall resection, with chest wall reconstruction (32504)

<input type="checkbox"/> Removal of lung, total pneumonectomy; (32440)	<input type="checkbox"/> Thoracotomy with therapeutic wedge resection (eg mass nodule) each additional resection, ipsilateral (+32506)List separately in addition to primary procedure code
<input type="checkbox"/> Removal of lung, sleeve (carinal) pneumonectomy (32442)	<input type="checkbox"/> Thoracotomy with diagnostic wedge resection followed by anatomic lung resection (+32507), List separately in addition to primary proc code
<input type="checkbox"/> Thoracoscopy with mediastinal and regional lymphadenectomy (+32674) List separately in addition to primary procedure code	<input type="checkbox"/> Thoracic lymphadenectomy, regional, including mediastinal and peritracheal nodes (38746)
Esophagus Resection	
<input type="checkbox"/> Transhiatal-Total esophagectomy, without thoracotomy, with cervical esophagogastrostomy (43107)	<input type="checkbox"/> Partial esophagectomy, distal two-thirds, with thoracotomy only (43121)
<input type="checkbox"/> Total esophagectomy without thoracotomy; with colon interposition or small intestine reconstruction (43108)	<input type="checkbox"/> Thoracoabdominal-Partial esophagectomy, thoracoabdominal approach (43122)
<input type="checkbox"/> Three Incision -Total esophagectomy with thoracotomy; with cervical esophagogastrostomy (43112)	<input type="checkbox"/> Partial esophagectomy, thoracoabdominal with colon interposition or small intestine (43123)
<input type="checkbox"/> Total esophagectomy with thoracotomy; with colon interposition or small intestine reconstruction (43113)	<input type="checkbox"/> Total or partial esophagectomy, without reconstruction with cervical esophagostomy (43124)
<input type="checkbox"/> Partial esophagectomy, cervical, with free intestinal graft, including microvascular anastomosis (43116)	<input type="checkbox"/> Minimally invasive three incision esophagectomy (McKeown) (43288)
<input type="checkbox"/> Ivor Lewis-Partial esophagectomy, distal two-thirds, with thoracotomy and separate abdominal incision (43117)	<input type="checkbox"/> Minimally invasive esophagectomy, Ivor Lewis approach (43287)
<input type="checkbox"/> Partial esophagectomy, with thoracotomy and separate abdominal incision with colon interposition or small intestine (43118)	<input type="checkbox"/> Minimally invasive esophagectomy, Abdominal and neck approach (43286)
Hiatal Hernia / GERD Procedures	
<input type="checkbox"/> Laparoscopy, surgical, esophagogastric fundoplasty (e.g., Nissen, Toupet procedures) (43280)	<input type="checkbox"/> Repair, paraesophageal hiatal hernia via laparotomy with mesh (43333)
<input type="checkbox"/> Laparoscopy, surgical with repair of paraesophageal hernia (fundoplasty) without mesh (43281)	<input type="checkbox"/> Repair, paraesophageal hiatal hernia via thoracotomy without mesh (43334)
<input type="checkbox"/> Laparoscopy, surgical with repair of paraesophageal hernia (fundoplasty) with mesh (43282)	<input type="checkbox"/> Repair, paraesophageal hiatal hernia via thoracotomy with mesh (43335)
<input type="checkbox"/> Nissen fundoplasty- laparotomy (includes partial fundoplication/wrap) (43327)	<input type="checkbox"/> Repair, paraesophageal hiatal hernia via thoracoabdominal approach without mesh (43336)
<input type="checkbox"/> Transthoracic Fundoplication- open thoracotomy (includes Belsey/Nissen) (43328)	<input type="checkbox"/> Repair, paraesophageal hiatal hernia via thoracoabdominal approach with mesh (43337)
<input type="checkbox"/> Repair, paraesophageal hiatal hernia via laparotomy without mesh (43332)	
Tracheal Resection	
<input type="checkbox"/> Carinal reconstruction (31766)	<input type="checkbox"/> Tracheal tumor or carcinoma excision; cervical (31785)
<input type="checkbox"/> Excision tracheal stenosis, cervical (31780)	<input type="checkbox"/> Tracheal tumor or carcinoma excision; thoracic (31786)
<input type="checkbox"/> Excision tracheal stenosis, thoracic (31781)	
Thymus / Mediastinal Mass Resection	
<input type="checkbox"/> Thoracoscopy, surgical; with excision of mediastinal cyst, tumor, or mass (32662)	<input type="checkbox"/> Thymectomy, transcervical approach (60520)
<input type="checkbox"/> Thymus, resection via Thoracoscopy unilateral or bilateral (32673)	<input type="checkbox"/> Thymectomy, transthoracic approach (60521)
<input type="checkbox"/> Mediastinal tumor, excision, open, Transthoracic approach (39220)	<input type="checkbox"/> Thymectomy, transthoracic approach, with radical mediastinal dissection (60522)
Non-analyzed Procedures	
Trachea, Bronchi, Larynx	
<input type="checkbox"/> Laryngectomy, partial (31370)	
<input type="checkbox"/> Tracheostomy replacement (tube change) prior to est. of fistula tract (31502)	<input type="checkbox"/> Tracheal wound or injury suture repair; cervical (31800)
<input type="checkbox"/> Tracheostomy, planned (31600)	<input type="checkbox"/> Tracheal wound or injury suture repair; intrathoracic (31805)
<input type="checkbox"/> Tracheostomy revision simple, without flap (31613)	<input type="checkbox"/> Unlisted procedure, trachea, bronchi (31899)
<input type="checkbox"/> Tracheostomy revision complex, with flap (31614)	<input type="checkbox"/> Bronchopleural fistula closure (32906)
<input type="checkbox"/> Tracheoplasty; cervical (31750)	<input type="checkbox"/> Bronchogenic cyst removal
<input type="checkbox"/> Tracheoplasty; intrathoracic (31760)	<input type="checkbox"/> Bronchial laceration suture
	<input type="checkbox"/> Bronchial sleeve resection
<input type="checkbox"/> Bronchoplasty, graft repair (31770)	<input type="checkbox"/> Tracheostomy mediastinal

<input type="checkbox"/> Bronchoplasty; excision stenosis and anastomosis (31775)	<input type="checkbox"/> Rigid stent removal
Bronchoscopy	
<input type="checkbox"/> Tracheobronchoscopy through established tracheostomy incision (31615)	<input type="checkbox"/> Bronchoscopy, with transbronchial lung biopsy(s), each additional lobe (31632)
<input type="checkbox"/> Endobronchial ultrasound (EBUS) during bronchoscopy diagnostic or therapeutic intervention(s) (31620)	<input type="checkbox"/> Bronchoscopy, with transbronchial needle aspiration biopsy(s), each additional lobe (31633)
<input type="checkbox"/> Bronchoscopy, diagnostic, with or without cell washing (31622)	<input type="checkbox"/> Bronchoscopy, with removal of foreign body (31635)
<input type="checkbox"/> Bronchoscopy, with brushing or protected brushings (31623)	<input type="checkbox"/> Bronchoscopy, with placement of bronchial stent(s) (includes tracheal/bronchial dilation as required), initial bronchus (31636)
<input type="checkbox"/> Bronchoscopy, with bronchial alveolar lavage (BAL) (31624)	<input type="checkbox"/> Bronchoscopy, each additional major bronchus stented (31637)
<input type="checkbox"/> Bronchoscopy, with bronchial or endobronchial biopsy(s), single or multiple sites (31625)	<input type="checkbox"/> Bronchoscopy, with revision of tracheal or bronchial stent inserted at previous session (31638)
<input type="checkbox"/> Bronchoscopy, with placement of Fiducial markers (31626)	<input type="checkbox"/> Bronchoscopy, with excision of tumor (31640)
<input type="checkbox"/> Bronchoscopy, navigational (31627)	<input type="checkbox"/> Bronchoscopy, with destruction of tumor or relief of stenosis by any method other than excision (e.g., laser therapy) (31641)
<input type="checkbox"/> Bronchoscopy, with transbronchial lung biopsy(s), single lobe (31628)	<input type="checkbox"/> Bronchoscopy, with placement of catheter(s) for intracavitary radioelement application (31643)
<input type="checkbox"/> Bronchoscopy, with transbronchial needle aspiration biopsy(s) (31629)	<input type="checkbox"/> Bronchoscopy, with therapeutic aspiration of tracheobronchial tree, initial (drainage of lung abscess) (31645)
<input type="checkbox"/> Bronchoscopy, with tracheal/bronchial dilation or closed reduction of fracture (31630)	<input type="checkbox"/> Bronchoscopy, with therapeutic aspiration of tracheobronchial tree, subsequent (31646)
<input type="checkbox"/> Bronchoscopy, with placement of tracheal stent(s) (includes tracheal/bronchial dilation as required) (31631)	
Pleural Space and Lung	
<input type="checkbox"/> Thoracostomy; with rib resection for empyema (32035)	<input type="checkbox"/> Insertion indwelling tunneled pleural catheter (32550)
<input type="checkbox"/> Thoracostomy; with open flap drainage for empyema (32036)	<input type="checkbox"/> Thoracoscopy, diagnostic lungs and pleural space, without biopsy (32601)
<input type="checkbox"/> Thoracotomy with biopsy(s) lung infiltrate(s) (e.g. wedge), unilateral (32096)	<input type="checkbox"/> Thoracoscopy, diagnostic; with biopsy(s) of lung infiltrate(s) (e.g. wedge), unilateral (32607)
<input type="checkbox"/> Thoracotomy with biopsy(s) lung nodule(s) or masses (e.g. incisional), unilateral (32097)	<input type="checkbox"/> Thoracoscopy, diagnostic; with biopsy(s) of lung nodule(s) or mass(es) (eg incisional), unilateral (32608)
<input type="checkbox"/> Thoracotomy with biopsy(s) of pleura (32098)	<input type="checkbox"/> Thoracoscopy, diagnostic; with biopsy(s) of pleura (32609)
<input type="checkbox"/> Thoracotomy, with exploration (32100)	<input type="checkbox"/> Thoracoscopy, surgical; with pleurodesis (e.g., mechanical or chemical) (32650)
<input type="checkbox"/> Thoracotomy, major; with control of traumatic hemorrhage and/or repair of lung tear (32110)	<input type="checkbox"/> Thoracoscopy, surgical; with partial pulmonary decortication (32651)
<input type="checkbox"/> Thoracotomy, major; for postoperative complications (32120)	<input type="checkbox"/> Thoracoscopy, surgical; with total pulmonary decortication (32652)
<input type="checkbox"/> Thoracotomy with open intrapleural pneumolysis (32124)	<input type="checkbox"/> Thoracoscopy, surgical; with removal of intrapleural foreign body or fibrin deposit (32653)
<input type="checkbox"/> Thoracotomy, major; with cyst(s) removal, with or without a pleural procedure (32140)	<input type="checkbox"/> Thoracoscopy, surgical; with control of traumatic hemorrhage (32654)
<input type="checkbox"/> Thoracotomy, major; with excision-plication of bullae, with or without any pleural procedure (32141)	<input type="checkbox"/> Thoracoscopy, surgical; with excision-plication of bullae, including any pleural procedure (32655)
<input type="checkbox"/> Thoracotomy, major; with removal of intrapleural foreign body or hematoma (32150)	<input type="checkbox"/> Thoracoscopy, surgical; with parietal pleurectomy (32656)
<input type="checkbox"/> Thoracotomy with cardiac massage (32160)	<input type="checkbox"/> Thoracoscopy with resection-plication for emphysematous lung (bullous or non-bullous) for lung volume reduction- LVRS, unilateral including any pleural procedure (32672)
<input type="checkbox"/> Decortication, pulmonary, total (32220)	<input type="checkbox"/> Repair lung hernia through chest wall (32800)
<input type="checkbox"/> Pleural scarification for repeat pneumothorax (32215)	<input type="checkbox"/> Closure of chest wall following open flap drainage for empyema (Clagett type procedure) (32810)
<input type="checkbox"/> Decortication, pulmonary, partial (32225)	<input type="checkbox"/> Total lung lavage (for alveolar proteinosis) (32997)
<input type="checkbox"/> Pleurectomy, parietal (32310)	<input type="checkbox"/> Radio-frequency ablation (RFA) lung tumor (32998)
<input type="checkbox"/> Decortication and parietal pleurectomy (32320)	<input type="checkbox"/> Removal of lung, total pneumonectomy; extrapleural (32445)
<input type="checkbox"/> Removal of lung, excision-plication of emphysematous lung(s) for lung volume reduction (LVRS) (32491)	<input type="checkbox"/> Unlisted procedure, lung (32999)
Lung Other Procedures	
<input type="checkbox"/> Open closure of major bronchial fistula (32815)	<input type="checkbox"/> Double lung transplant (32853)
<input type="checkbox"/> Single lung transplant (32851)	<input type="checkbox"/> Double lung transplant with CPB (32854)

<input type="checkbox"/> Single lung transplant with CPB (32852)	<input type="checkbox"/> Thoracoplasty with closure of bronchopleural fistula (32906)
Mediastinum and Diaphragm	
<input type="checkbox"/> Thoracoscopy, diagnostic; mediastinal space, with biopsy (32606)	<input type="checkbox"/> Diaphragmatic hernia repair (other than neonatal), traumatic; acute (39540)
<input type="checkbox"/> Mediastinotomy with exploration or biopsy; cervical approach (39000)	<input type="checkbox"/> Diaphragmatic hernia repair (other than neonatal), traumatic; chronic (39541)
<input type="checkbox"/> Mediastinotomy with exploration or biopsy; transthoracic approach (39010)	<input type="checkbox"/> Diaphragm imbrication (i.e., plication) of (39545)
<input type="checkbox"/> Mediastinal cyst, excision, open, Transthoracic approach (39200)	<input type="checkbox"/> Diaphragm; resection with simple repair (e.g., primary suture) (39560)
<input type="checkbox"/> Mediastinoscopy, with or without biopsy (39400)	<input type="checkbox"/> Diaphragm; resection with complex repair (e.g., prosthetic material, local muscle flap) (39561)
<input type="checkbox"/> Unlisted procedure, mediastinum (39499)	<input type="checkbox"/> Unlisted procedure, diaphragm (39599)
<input type="checkbox"/> Diaphragm, laceration repair, any approach (39501)	
Esophagoscopy	
<input type="checkbox"/> Esophagoscopy (43200)	<input type="checkbox"/> Upper gastrointestinal endoscopy with endoscopic ultrasound examination limited to the esophagus (43237)
<input type="checkbox"/> Esophagoscopy with biopsy (43202)	<input type="checkbox"/> Upper gastrointestinal endoscopy with transendoscopic ultrasound-guided FNA (43238)
<input type="checkbox"/> Esophagoscopy with removal of foreign body (43215)	<input type="checkbox"/> Upper gastrointestinal endoscopy with biopsy (43239)
<input type="checkbox"/> Esophagoscopy with insertion of stent (43219)	<input type="checkbox"/> Upper gastrointestinal endoscopy with dilation of gastric outlet for obstruction (43245)
<input type="checkbox"/> Esophagoscopy with balloon dilation (43220)	<input type="checkbox"/> Upper gastrointestinal endoscopy with directed placement of percutaneous gastrostomy tube (43246)
<input type="checkbox"/> Esophagoscopy with insertion of guide wire followed by dilation over guide wire (43226)	<input type="checkbox"/> Upper gastrointestinal endoscopy with removal of foreign body (43247)
<input type="checkbox"/> Esophagoscopy with ablation of tumor (43228)	<input type="checkbox"/> Upper gastrointestinal endoscopy with insertion of guide wire followed by dilation of esophagus (43248)
<input type="checkbox"/> Esophagoscopy with endoscopic ultrasound examination (EUS) (43231)	<input type="checkbox"/> Upper gastrointestinal endoscopy with balloon dilation of esophagus (43249)
<input type="checkbox"/> Esophagoscopy with transendoscopic ultrasound-guided fine needle aspiration (43232)	<input type="checkbox"/> Upper gastrointestinal endoscopy with transendoscopic stent placement (43256)
<input type="checkbox"/> Upper gastrointestinal endoscopy, diagnostic (43235)	<input type="checkbox"/> Upper gastrointestinal endoscopy with ablation of tumor (43258)
Esophagus Other Procedures	
<input type="checkbox"/> Thoracoscopy, surgical; with esophagomyotomy (Heller type) (32665)	<input type="checkbox"/> Esophagostomy, fistulization of esophagus, external; cervical approach (43352)
<input type="checkbox"/> Cricopharyngeal myotomy (43030)	<input type="checkbox"/> Gastrointestinal reconstruction for previous esophagectomy with stomach (43360)
<input type="checkbox"/> Excision esophageal lesion with primary repair, cervical approach (43100)	<input type="checkbox"/> Gastrointestinal reconstruction for previous esophagectomy with colon interposition or small intestine (43361)
<input type="checkbox"/> Excision Esophageal lesion with primary repair, thoracic approach (eg: leiomyoma) (43101)	<input type="checkbox"/> Suture of esophageal wound or injury; cervical approach (43410)
<input type="checkbox"/> Diverticulectomy of hypopharynx or esophagus, with or without myotomy; cervical approach (43130)	<input type="checkbox"/> Suture of esophageal wound or injury; transthoracic or transabdominal approach (43415)
<input type="checkbox"/> Diverticulectomy of esophagus, with or without myotomy; thoracic approach (43135)	<input type="checkbox"/> Closure of esophagostomy or fistula; cervical approach (43420)
<input type="checkbox"/> Laparoscopic esophageal myotomy (Heller Myotomy, with or without fundoplication) (43279)	<input type="checkbox"/> Total gastrectomy with esophagoenterostomy (43620)
<input type="checkbox"/> Laparoscopy, surgical, esophageal lengthening procedure (Collis) (43283) Secondary Procedure code	<input type="checkbox"/> Total gastrectomy with Roux-en-Y reconstruction (43621)
<input type="checkbox"/> Unlisted laparoscopy, esophagus (43289)	<input type="checkbox"/> Conduit revision s/p esophagectomy
<input type="checkbox"/> Esophagoplasty with repair of TEF, cervical approach (43305)	<input type="checkbox"/> Per oral endoscopic myotomy (POEM)
<input type="checkbox"/> Esophagoplasty with repair TEF, thoracic approach (43312)	<input type="checkbox"/> Trans oral fundoplication
<input type="checkbox"/> Esophagomyotomy (Heller type); thoracic approach (43331)	<input type="checkbox"/> Esophageal lengthening procedure - open (Collis) Secondary Procedure code (43338)
<input type="checkbox"/> Free jejunum transfer with microvascular anastomosis (43496)	<input type="checkbox"/> Ligation or stapling at gastroesophageal junction for esophageal perforation (43405)
<input type="checkbox"/> Unlisted procedure, esophagus (43499)	
Chest Wall and Neck	
<input type="checkbox"/> Muscle flap, neck (15732)	<input type="checkbox"/> Radical resection of sternum (21630)

<input type="checkbox"/> Muscle flap; trunk (i.e., intercostal, pectoralis or serratus muscle) (15734)	<input type="checkbox"/> Radical resection of sternum; with mediastinal lymphadenectomy (21632)
<input type="checkbox"/> Excision of chest wall tumor including ribs (19260)	<input type="checkbox"/> Hyoid myotomy and suspension (21685) secondary procedure code
<input type="checkbox"/> Excision of chest wall tumor involving ribs, with reconstruction (19271)	<input type="checkbox"/> Division of scalenus anticus; without resection of cervical rib (21700)
<input type="checkbox"/> Excision tumor, soft tissue of neck or thorax; subcutaneous (21555)	<input type="checkbox"/> Division of scalenus anticus; with resection of cervical rib (21705)
<input type="checkbox"/> Excision tumor, soft tissue of neck or thorax; deep, subfascial, intramuscular (21556)	<input type="checkbox"/> Reconstructive repair of pectus excavatum or carinatum; open (21740)
<input type="checkbox"/> Radical resection of tumor (e.g., malignant neoplasm), soft tissue of neck or thorax (21557)	<input type="checkbox"/> Reconstructive repair of pectus, minimally invasive approach (Nuss procedure), without thoracoscopy (21742)
<input type="checkbox"/> Excision of rib, partial (21600)	<input type="checkbox"/> Open treatment of sternum fracture with or without skeletal fixation (21825)
<input type="checkbox"/> Excision first and/or cervical rib (21615)	<input type="checkbox"/> Removal of sternal wire(s)
<input type="checkbox"/> Excision first and/or cervical rib; with sympathectomy (21616)	<input type="checkbox"/> Reconstructive repair of pectus, minimally invasive approach (Nuss procedure), with thoracoscopy (21743)
<input type="checkbox"/> Major reconstruction, chest wall (posttraumatic) (32820)	<input type="checkbox"/> Unlisted procedure, neck or thorax (21899)
Miscellaneous	
<input type="checkbox"/> Thoracoscopy, diagnostic pericardial sac, with biopsy (32604)	<input type="checkbox"/> SVC resection and reconstruction (34502)
<input type="checkbox"/> Thoracoscopy, surgical; with removal of clot or foreign body from pericardial sac (32658)	<input type="checkbox"/> Ligation thoracic duct (38381)
<input type="checkbox"/> Thoracoscopy, surgical; with creation of pericardial window or partial resection of pericardial sac for drainage (32659)	<input type="checkbox"/> Intraoperative jejunostomy (44015)
<input type="checkbox"/> Thoracoscopy, surgical; with total pericardiectomy (32660)	<input type="checkbox"/> Omental flap (49904)
<input type="checkbox"/> Thoracoscopy, surgical; with excision of pericardial cyst, tumor, or mass (32661)	<input type="checkbox"/> Transthoracic thyroidectomy (60270)
<input type="checkbox"/> Thoracoscopy, surgical; with thoracic sympathectomy (32664)	<input type="checkbox"/> Removal substernal thyroid, cervical approach (60271)
<input type="checkbox"/> Stereotactic radiosurgery (SRS) and stereotactic body radiotherapy (SBRT), surgeon participation (32701)	<input type="checkbox"/> Application of wound vac (97605, 97606)
<input type="checkbox"/> Tube pericardiostomy (33015)	<input type="checkbox"/> Pericardial window (33025)
<input type="checkbox"/> Other Minor Procedure	<input type="checkbox"/> Other
Enter Name of unlisted Procedure(s):	
Enter 5 digit CPT code(s) of unlisted procedure, if known:	

Surgical Procedure for Lung Cancer or Suspected Lung Cancer?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>if yes, complete Section F</i>
Surgical Procedure for Esophageal Cancer?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>if yes, complete Section G</i>
Are you collecting data for Thymus / Mediastinal Mass Resection?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>if yes, complete Section H</i>
Are you collecting data for Tracheal Resection?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>if yes, complete Section I</i>
Are you collecting data for Hiatal Hernia / GERD?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>if yes, complete Section J</i>

F. Lung Cancer

Diagnosis:

Was there a pathological diagnosis of lung cancer prior to the lung resection? (yes: lung cancer was diagnosed preoperatively; no: lung cancer was only suspected preoperatively) Yes No

How was lung cancer diagnosed?

Bronchoscopy Yes No Needle Biopsy Attempted or Completed Yes No

Clinical Staging: Pre-treatment Lung cancer staging- to be completed if lung cancer suspected or documented AND lung resection performed. Clinical staging determines the treatment plan.

Clinical Staging Done Yes No

If Yes → Pre-Op Positive Tissue diagnosis Obtained Yes No

Clinical Staging Methods : Choose all that apply

Radiographic Staging Procedures

PET or PET/CT <input type="checkbox"/> Yes <input type="checkbox"/> No	Brain CT Scan <input type="checkbox"/> Yes <input type="checkbox"/> No
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CT <input type="checkbox"/> Yes <input type="checkbox"/> No	Brain MRI <input type="checkbox"/> Yes <input type="checkbox"/> No
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Was invasive mediastinal staging performed? Yes, reason documented Yes, reason not documented No

If Documented → Operative/Clinic Note indicates Invasive Mediastinal Staging performed for the following reasons: (check all that apply)

Lesion size > 3cm	<input type="checkbox"/> Yes <input type="checkbox"/> No
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Mediastinal Lymphadenopathy on CT > 1cm	<input type="checkbox"/> Yes <input type="checkbox"/> No
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Ipsilateral hilar mediastinal node FDG uptake on PET	<input type="checkbox"/> Yes <input type="checkbox"/> No
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Central Tumor	<input type="checkbox"/> Yes <input type="checkbox"/> No
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Other	<input type="checkbox"/> Yes <input type="checkbox"/> No
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Mediastinal Tissue Sampling/Staging

EBUS <input type="checkbox"/> Yes <input type="checkbox"/> No	VATS <input type="checkbox"/> Yes <input type="checkbox"/> No
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EUS <input type="checkbox"/> Yes <input type="checkbox"/> No	Other <input type="checkbox"/> Yes <input type="checkbox"/> No
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Mediastinoscopy/Chamberlain <input type="checkbox"/> Yes <input type="checkbox"/> No	
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Tumor size known? Yes No *If Yes* ↓
 Lung CA tumor size in cm (the dominant/most concerning lesion per CT Scan) _____ cm (ex. 2.3cm)

Invasion of Adjacent Structures Yes No

Lung CA T Stage (tumor stage) Tis T1 T2 T3 T4

Lung CA Nodes:	<input type="checkbox"/> N0 <i>No regional lymph node metastasis</i>	<input type="checkbox"/> N1 <i>Metastasis in ipsilateral peribronchial or hilar and intrapulmonary nodes. Includes direct extension.</i>
	<input type="checkbox"/> N2 <i>Metastasis in ipsilateral mediastinal and/or subcarinal lymph nodes</i>	<input type="checkbox"/> N3 <i>Metastasis in contralateral mediastinal or contralateral hilar nodes, ipsilateral or contralateral scalene or supraclavicular nodes</i>

Lung CA Metastases:	<input type="checkbox"/> M0 <i>No distant metastasis</i>	<input type="checkbox"/> M1 <i>Distant Metastasis</i>
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Lung - FINAL Pathological Staging

To be completed if lung cancer suspected or documented **AND** lung resection performed. (8th Edition)

Lung Cancer Results

No cancer found, benign tumor Lung Cancer Tumor present:

If Cancer Tumor Present→	<input type="checkbox"/> TX Primary Tumor cannot be assessed, or tumor proven by the presence of malignant cells in sputum or bronchial washings but not visualized by imaging or bronchoscopy	<input type="checkbox"/> T0 No evidence of primary tumor	<input type="checkbox"/> Tis Carcinoma in situ; squamous cell carcinoma in situ (SCIS); Adenocarcinoma in situ (AIS): adenocarcinoma with pure lepidic pattern, ≤3 cm in greatest dimension
	<input type="checkbox"/> T1mi Minimally invasive adenocarcinoma: adenocarcinoma (≤3 cm in greatest dimension) with a predominantly lepidic pattern and ≤5 mm invasion in greatest dimension.	<input type="checkbox"/> T1a Tumor ≤1 cm in greatest dimension. A superficial, spreading tumor of any size whose invasive component is limited to the bronchial wall and may extend proximal to the main bronchus also is classified as T1a, but these tumors are uncommon.	<input type="checkbox"/> T1b Tumor > 1 cm but ≤ 2 cm in greatest dimension
	<input type="checkbox"/> T1c Tumor > 2 cm but ≤ 3 cm in greatest dimension	<input type="checkbox"/> T2a Tumor > 3 cm but ≤ 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.	<input type="checkbox"/> T2b Tumor > 4 cm but ≤ 5 cm at greatest dimension
	<input type="checkbox"/> T3 Tumor > 5 cm but ≤ 7 cm in greatest dimension or directly invading any of the following: parietal pleura (PL3), chest wall (including superior sulcus tumors), phrenic nerve, parietal pericardium; or separate tumor nodule(s) in the same lobe as the primary	<input type="checkbox"/> 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	
If tumor is T2a or T2b → Visceral Pleura Invasion <input type="checkbox"/> Yes <input type="checkbox"/> No			
Lung CA Nodes:	<input type="checkbox"/> NX Regional lymph nodes cannot be assessed	<input type="checkbox"/> N0 No regional lymph node metastasis	<input type="checkbox"/> N1 Metastasis in ipsilateral peribronchial and/or ipsilateral hilar lymph nodes and intrapulmonary nodes, includes involvement by direct extension
	<input type="checkbox"/> N2 Metastasis in ipsilateral mediastinal and/or subcarinal lymph node(s)	<input type="checkbox"/> N3 Metastasis in contralateral mediastinal, contralateral hilar, ipsilateral or contralateral scalene or supraclavicular lymph node(s)	
If N2 → Multi-station N2 <input type="checkbox"/> Yes <input type="checkbox"/> No			
Lung CA Metastases:	<input type="checkbox"/> M0 No distant metastasis	<input type="checkbox"/> M1 Distant metastasis	
Lung CA Histology:	<input type="checkbox"/> Carcinoma in situ- <input type="checkbox"/> Small cell <input type="checkbox"/> Other	<input type="checkbox"/> Adenocarcinoma <input type="checkbox"/> Low Grade Neuroendocrine (typical carcinoid)	<input type="checkbox"/> Squamous cell <input type="checkbox"/> Intermediate grade neuroendocrine, atypical carcinoid <input type="checkbox"/> Large cell <input type="checkbox"/> Mixed
Grade:	<input type="checkbox"/> Low grade (well differentiated)	<input type="checkbox"/> Intermediate grade	<input type="checkbox"/> High grade (poorly differentiated) <input type="checkbox"/> Unknown / Not reported
Total # of Lymph Nodes sampled/harvested: _____		Total # of Nodal Stations sampled/harvested: _____	
Lung CA Resection Margins Positive:	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes→	<input type="checkbox"/> R1 (microscopic residual tumor present)	<input type="checkbox"/> R2 (macroscopic (gross) residual tumor present)

G. Esophageal Cancer

Clinical Staging: Pre-treatment Esophageal cancer staging - to be completed if esophageal cancer suspected, documented OR esophagus resection performed. Clinical staging determines the treatment plan.

Clinical Staging Done Yes No

Radiologic / Endoscopic Staging Procedures

If Clinical Staging Done is Yes →	PET or PET/CT	<input type="checkbox"/> Yes <input type="checkbox"/> No	CT	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Bronchoscopy	<input type="checkbox"/> Yes <input type="checkbox"/> No	EUS	<input type="checkbox"/> Yes <input type="checkbox"/> No

Invasive Staging Procedures

VATS – for staging	<input type="checkbox"/> Yes <input type="checkbox"/> No	Laparoscopy – for staging	<input type="checkbox"/> Yes <input type="checkbox"/> No
Endoscopic Mucosal Resection	<input type="checkbox"/> Yes <input type="checkbox"/> No	Other:	<input type="checkbox"/> Yes <input type="checkbox"/> No
Esophageal Tumor:	<input type="checkbox"/> T0 <i>No evidence of primary tumor</i> <input type="checkbox"/> T2 <i>Tumor invades muscularis propria</i>	<input type="checkbox"/> Tis <i>High grade dysplasia</i> <input type="checkbox"/> T3 <i>Tumor invades adventitia</i>	<input type="checkbox"/> T1 <i>Tumor invades lamina propria, mucosa or submucosa</i> <input type="checkbox"/> T4 <i>Tumor invades adjacent structures</i>
Clinical Diagnosis of Nodal Involvement:	<input type="checkbox"/> Yes (N1, N2 or N3)		<input type="checkbox"/> No
Esophageal CA Metastases	<input type="checkbox"/> M0 <i>No Distant Metastasis</i>		<input type="checkbox"/> M1 <i>Distant Metastasis</i>

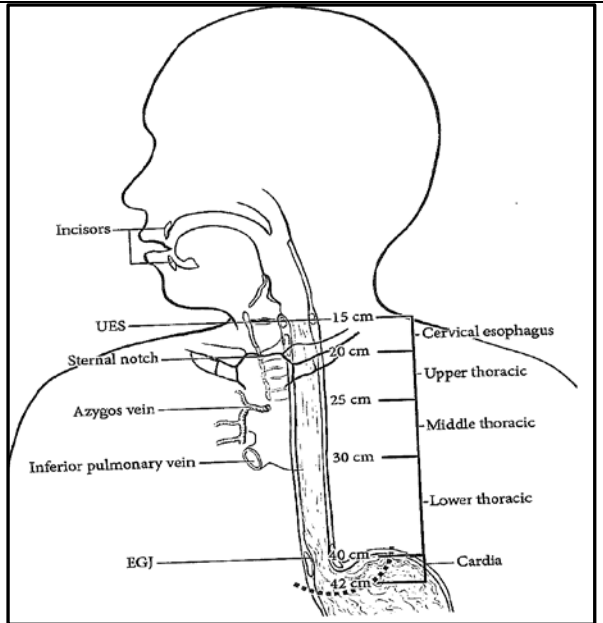
Tumor Location (check all that apply):

Cervical Esophagus (15 – < 20 cm) Yes No

Upper Thoracic (20 - < 25 cm) Yes No

Middle Thoracic (25 - < 30 cm) Yes No

Lower Thoracic, including EG Junction (30 – 42 cm) Yes No



Pathological Staging - Esophagus

Esophagus to be completed if esophageal cancer documented AND esophageal resection performed (Pre-Operative Evaluation – Esophageal Cancer = Yes) (8th Edition)

Esophageal Cancer Results

No cancer found, benign tumor Esophageal cancer present

<i>If cancer present →</i>	Esophageal Tumor:				
	<input type="checkbox"/> TX <i>Tumor cannot be assessed</i>	<input type="checkbox"/> T0 <i>No evidence of primary tumor</i>	<input type="checkbox"/> Tis <i>High Grade dysplasia, defined as malignant cells confined to the epithelium by the basement membrane</i>		
	<input type="checkbox"/> T1a <i>Tumor invades lamina propria or muscularis mucosa</i>	<input type="checkbox"/> T1b <i>Tumor invades submucosa</i>	<input type="checkbox"/> T2 <i>Tumor invades muscularis propria</i>		
	<input type="checkbox"/> T3 <i>Tumor invades adventitia</i>	<input type="checkbox"/> T4a <i>Tumor invades pleura, pericardium, azygos vein, diaphragm or peritoneum</i>	<input type="checkbox"/> T4b <i>Tumor invades other adjacent structures such as aorta, vertebral body, or airway.</i>		
	Esophageal CA Nodes:	<input type="checkbox"/> NX <i>Regional lymph nodes cannot be assessed</i>	<input type="checkbox"/> N0 <i>No regional lymph node metastasis</i>	<input type="checkbox"/> N1 <i>Metastasis in 1-2 regional nodes</i>	
		<input type="checkbox"/> N2 <i>Metastasis in 3-6 regional lymph nodes</i>	<input type="checkbox"/> N3 <i>Metastasis in 7 or more regional lymph nodes</i>		
	Esophageal CA Metastases:	<input type="checkbox"/> M0 <i>No distant metastasis</i>		<input type="checkbox"/> M1 <i>Distant metastasis</i>	
Esoph Histopathologic Type:	<input type="checkbox"/> H1 Squamous Carcinoma	<input type="checkbox"/> H2 Adenocarcinoma	<input type="checkbox"/> Other		
Esophageal CA Histologic Grade:	<input type="checkbox"/> GX Grade cannot be assessed	<input type="checkbox"/> G1 Well differentiated	<input type="checkbox"/> G2 Moderately differentiated	<input type="checkbox"/> G3 Poorly differentiated, undifferentiated	
Total # of Lymph Nodes sampled/harvested: _____		Esophageal CA Resection Margins Positive: <input type="checkbox"/> Yes <input type="checkbox"/> No			

H. Thymus / Mediastinal Mass Resection

Pre-Operative

Symptomatic myasthenia Yes No

If Yes → Chronic Medical Treatment:

Mestinin

Yes No

Steroids

Yes No

Other Immunosuppressive Therapy

Yes No

Pre-operative management

IVIG

Yes No

Plasmapheresis

Yes No

Size of mass known: Yes No

If yes → Largest diameter in mm derived from preop axial, coronal or sagittal image _____ mm

Initial Surgical Approach

Full Sternotomy

Clamshell or Hemiclamshell

Transcervical

Partial Sternotomy

Robotic

VATS

If "Robotic" or "VATS" →

Location: Right

Left

Bilateral

If "Transcervical", "Partial Sternotomy", "Robotic" or "VATS" →

Conversion to open approach during procedure?

Yes, Planned

Yes, Unplanned

No

If Yes →

Sternotomy

Clamshell

Thoracotomy

Intentional resection of functioning phrenic nerve

Yes No

Pathologic Staging			
<input type="checkbox"/> Stage I <i>Grossly and microscopically encapsulated. Also called a noninvasive thymoma. That is, it has not spread beyond the thymus.</i>	<input type="checkbox"/> Stage II <i>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:</i>	<input type="checkbox"/> Stage IIa <i>Microscopic transcapsular invasion</i>	<input type="checkbox"/> Stage IIb <i>Macroscopic capsular invasion</i>
<input type="checkbox"/> Stage III <i>Macroscopic invasion of neighboring organs. The thymoma extends into the neighboring tissues or organs of the lower neck or upper chest area, including the pericardium (covering of the heart), the lungs, or the main blood vessels leading into or exiting from the heart.</i>	<input type="checkbox"/> Stage IVa <i>Pleural or pericardial dissemination. The thymoma has spread widely throughout the pleura and/or pericardium.</i>	<input type="checkbox"/> Stage IVb <i>Hematogenous or lymphatic dissemination. The thymoma has spread to distant organs.</i>	
WHO classification (from path report – Thymoma only)			
<input type="checkbox"/> Type A <input type="checkbox"/> Type AB <input type="checkbox"/> Type B1 <input type="checkbox"/> Type B2 <input type="checkbox"/> Type B3 <input type="checkbox"/> Thymic Carcinoma or Type C <input type="checkbox"/> Not Thymoma			
Completeness of resection (from operative note or pathology report) <input type="checkbox"/> R0 <input type="checkbox"/> R1 <input type="checkbox"/> R2			
Patient alive at 30 days post op <input type="checkbox"/> Yes <input type="checkbox"/> No			
<i>If Yes →</i> Post – operative Event (30 day)			
Myasthenic crisis requiring return to ICU or intervention (intubation, plasmapheresis) <input type="checkbox"/> Yes <input type="checkbox"/> No			
Unintentional phrenic nerve palsy <input type="checkbox"/> Yes <input type="checkbox"/> No			
Patient alive at 90 days post op <input type="checkbox"/> Yes <input type="checkbox"/> No			
<i>If Yes →</i> 90 Day Post – Operative Variable			
Adjuvant thoracic radiation <input type="checkbox"/> Yes <input type="checkbox"/> No			
Persistent unintentional phrenic nerve palsy <input type="checkbox"/> Yes <input type="checkbox"/> No			

I. Tracheal Resection			
Pre-Operative			
Current Airway	<input type="checkbox"/> Native <input type="checkbox"/> Oral ETT <input type="checkbox"/> Trach <input type="checkbox"/> T-Tube		
Prior tracheostomy	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Prior intubation	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Prior Tracheal Resection	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Recent Bronchoscopic Intervention (within 6 weeks) <input type="checkbox"/> Yes <input type="checkbox"/> No (<i>includes: core out, dilation, ablation, stent</i>)			
Recurrent nerves intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			
<i>If not intact →</i> Which nerve? <input type="checkbox"/> Right <input type="checkbox"/> Left <input type="checkbox"/> Both			
Airway management during resection (check all that apply)			
Cross – table ventilation	<input type="checkbox"/> Yes <input type="checkbox"/> No	VA ECMO	<input type="checkbox"/> Yes <input type="checkbox"/> No Jet ventilation <input type="checkbox"/> Yes <input type="checkbox"/> No
VV ECMO	<input type="checkbox"/> Yes <input type="checkbox"/> No	Cardiopulmonary bypass	<input type="checkbox"/> Yes <input type="checkbox"/> No
Incision (check all that apply, must have at least one indicated)			
Cervical	<input type="checkbox"/> Yes <input type="checkbox"/> No	Partial sternotomy	<input type="checkbox"/> Yes <input type="checkbox"/> No Full sternotomy <input type="checkbox"/> Yes <input type="checkbox"/> No
Right thoracotomy	<input type="checkbox"/> Yes <input type="checkbox"/> No	Clamshell	<input type="checkbox"/> Yes <input type="checkbox"/> No
Length of tracheal resection _____ mm (Surgical or pathological measurement acceptable)			
Cricoid resection required <input type="checkbox"/> Yes <input type="checkbox"/> No			
Carinal resection required <input type="checkbox"/> Yes <input type="checkbox"/> No			
Release Maneuvers <input type="checkbox"/> Yes <input type="checkbox"/> No			
<i>If yes →</i> <input type="checkbox"/> Suprahyoid <input type="checkbox"/> Suprathyroid <input type="checkbox"/> Hilar			

Additional Post-Operative Events	
Anastomotic dehiscence requiring drainage, revision, stent, tracheostomy, T-tube	<input type="checkbox"/> Yes <input type="checkbox"/> No
Anastomotic stricture requiring intervention	<input type="checkbox"/> Yes <input type="checkbox"/> No
Airway obstruction requiring intervention (e.g., unscheduled bronchoscopy)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Recurrent nerve palsy	<input type="checkbox"/> Right <input type="checkbox"/> Left <input type="checkbox"/> Both <input type="checkbox"/> Neither
Did the patient leave the hospital with tracheal appliance? (tracheostomy, T-tube or stent)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Patient Died In Hospital
At 30 Days Post – Operative Patient is:	
Stent/tube free	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Patient Died Within 30 Days of Procedure
At 90 Days Post – Operative Patient is:	
Stent/tube free	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Patient Died Within 90 Days of Procedure

J. Hiatal Hernia / GERD	
Symptoms	
Heartburn	<input type="checkbox"/> Yes <input type="checkbox"/> No
Regurgitation	<input type="checkbox"/> Yes <input type="checkbox"/> No
Dysphagia	<input type="checkbox"/> Yes <input type="checkbox"/> No
Epigastric/chest pain	<input type="checkbox"/> Yes <input type="checkbox"/> No
Early satiety	<input type="checkbox"/> Yes <input type="checkbox"/> No
Anemia	<input type="checkbox"/> Yes <input type="checkbox"/> No
Cough	<input type="checkbox"/> Yes <input type="checkbox"/> No
Hoarseness	<input type="checkbox"/> Yes <input type="checkbox"/> No
Sore throat	<input type="checkbox"/> Yes <input type="checkbox"/> No
Asthma	<input type="checkbox"/> Yes <input type="checkbox"/> No
Reflux laryngitis	<input type="checkbox"/> Yes <input type="checkbox"/> No
PPIs	
PPI use	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If Yes →</i> PPI relief <input type="checkbox"/> Complete <input type="checkbox"/> Partial <input type="checkbox"/> No
EGD	
Esophagitis	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If Yes →</i> LA Grade: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
Barrett's metaplasia	<input type="checkbox"/> Yes, with low grade dysplasia <input type="checkbox"/> Yes, with high grade dysplasia <input type="checkbox"/> No
pH Testing <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If Yes ↓</i>	Manometry
DeMeester score _____	Manometry performed: <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If Yes →</i> Motility: <input type="checkbox"/> normal <input type="checkbox"/> decreased <input type="checkbox"/> aperistalsis
LES resting pressure _____	% of failed swallows _____
Imaging	
Imaging performed	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If Yes →</i> Type of imaging <input type="checkbox"/> bariums swallow/ upper GI <input type="checkbox"/> CT Scan <input type="checkbox"/> CXR
Hiatal hernia size (cm) _____	Hiatal hernia type: <input type="checkbox"/> I <input type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/> IV
Hernia repair status <input type="checkbox"/> Primary repair <input type="checkbox"/> Re-operation	
<i>If re-operation →</i> Surgical approach used in the initial procedure: <input type="checkbox"/> Laparoscopic <input type="checkbox"/> Laparotomy <input type="checkbox"/> Thoracotomy <input type="checkbox"/> Not documented	
Procedure Approach (check all that apply)	
Laparoscopic	<input type="checkbox"/> Yes <input type="checkbox"/> No
Robotic	<input type="checkbox"/> Yes <input type="checkbox"/> No
Laparotomy	<input type="checkbox"/> Yes <input type="checkbox"/> No
Thoracotomy	<input type="checkbox"/> Yes <input type="checkbox"/> No
Fundoplication	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If Yes →</i> Type <input type="checkbox"/> Partial <input type="checkbox"/> Complete
Gastroplasty	<input type="checkbox"/> Yes <input type="checkbox"/> No
Mesh	<input type="checkbox"/> Yes <input type="checkbox"/> No
Relaxing incision	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is patient alive at 1 month post – Op? <input type="checkbox"/> Yes <input type="checkbox"/> No	Is patient alive at 1 year post – Op? <input type="checkbox"/> Yes <input type="checkbox"/> No
<i>If Yes →</i> 1 Month Post – Operative Follow Up	<i>If Yes →</i> 1 Year Post – Operative Follow Up
Radiographic recurrence	<input type="checkbox"/> Yes <input type="checkbox"/> No
Symptomatic recurrence	<input type="checkbox"/> Yes <input type="checkbox"/> No
Endoscopic Intervention	<input type="checkbox"/> Yes <input type="checkbox"/> No
Redo Operation	<input type="checkbox"/> Yes <input type="checkbox"/> No
Radiographic recurrence	<input type="checkbox"/> Yes <input type="checkbox"/> No
Symptomatic recurrence	<input type="checkbox"/> Yes <input type="checkbox"/> No
Endoscopic Intervention	<input type="checkbox"/> Yes <input type="checkbox"/> No
Redo operation	<input type="checkbox"/> Yes <input type="checkbox"/> No

K. Disposition	
Patient Disposition:	<input type="checkbox"/> ICU <input type="checkbox"/> Intermediate Care Unit <input type="checkbox"/> Regular Floor Bed
	<input type="checkbox"/> Not Applicable (Expired in OR) <input type="checkbox"/> Outpatient or Observation Status
ICU Admit this admission:	<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>If Yes →</i> Initial ICU Days: _____	

ICU Readmit: Yes No

If Yes → Additional ICU Days: _____

L. Post-Operative 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.

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

If Post-Operative Events Yes →	Unanticipated post-operative invasive procedure? <input type="checkbox"/> Yes <input type="checkbox"/> No		
	If unanticipated post-operative invasive procedure →	Primary Reason for Procedure: <input type="checkbox"/> Bleeding <input type="checkbox"/> Bronchopleural Fistula <input type="checkbox"/> Empyema <input type="checkbox"/> Middle lobectomy for torsion <input type="checkbox"/> Conduit necrosis/failure following esophageal surgery <input type="checkbox"/> Other	
		Anastomotic leak following esophageal surgery <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If Yes →</i>	Surgical drainage and repair <input type="checkbox"/> Yes <input type="checkbox"/> No Stent placement <input type="checkbox"/> Yes <input type="checkbox"/> No Additional chest tube placement <input type="checkbox"/> Yes <input type="checkbox"/> No
		Chylothorax Present <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If Yes →</i> Chylothorax req. surgical ligation of thoracic duct <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If No → Thoracic duct embolization attempted</i> <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If Yes → Was Thoracic duct embolization successful?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No	
	Pulmonary		
	Air leak > 5 days duration <input type="checkbox"/> Yes <input type="checkbox"/> No	Atelectasis req. bronchoscopy <input type="checkbox"/> Yes <input type="checkbox"/> No	Pleural Effusion req. drainage <input type="checkbox"/> Yes <input type="checkbox"/> No
	Pneumonia <input type="checkbox"/> Yes <input type="checkbox"/> No	Acute Respiratory Distress Syndrome (ARDS) <input type="checkbox"/> Yes <input type="checkbox"/> No	Respiratory Failure <input type="checkbox"/> Yes <input type="checkbox"/> No
	Bronchopleural Fistula <input type="checkbox"/> Yes <input type="checkbox"/> No	Pulmonary Embolus <input type="checkbox"/> Yes <input type="checkbox"/> No	Pneumothorax req. CT reinsertion <input type="checkbox"/> Yes <input type="checkbox"/> No
	Initial Vent Support > 48 Hr <input type="checkbox"/> Yes <input type="checkbox"/> No	Tracheostomy <input type="checkbox"/> Yes <input type="checkbox"/> No	Other Pulmonary Event <input type="checkbox"/> Yes <input type="checkbox"/> No
	Cardiovascular		
Atrial arrhythmia req. treatment <input type="checkbox"/> Yes <input type="checkbox"/> No	Ventricular arrhythmia req. treatment <input type="checkbox"/> Yes <input type="checkbox"/> No	Myocardial infarct <input type="checkbox"/> Yes <input type="checkbox"/> No	
Deep venous thrombosis (DVT) req. treatment <input type="checkbox"/> Yes <input type="checkbox"/> No	Other CV event <input type="checkbox"/> Yes <input type="checkbox"/> No		
Gastrointestinal			
Ileus <input type="checkbox"/> Yes <input type="checkbox"/> No	Anastomotic leak requiring medical treatment only <input type="checkbox"/> Yes <input type="checkbox"/> No	Dilation esophagus <input type="checkbox"/> Yes <input type="checkbox"/> No	
Conduit Necrosis Requiring Surgery <input type="checkbox"/> Yes <input type="checkbox"/> No	Delayed conduit emptying requiring intervention (pyloric dilatation or botox) or maintenance of NG drainage > 7days post op <input type="checkbox"/> Yes <input type="checkbox"/> No		

Clostridium Difficile infection	<input type="checkbox"/> Yes <input type="checkbox"/> No	Other GI event	<input type="checkbox"/> Yes <input type="checkbox"/> No
Hematology			
Packed red blood cells	<input type="checkbox"/> Yes <input type="checkbox"/> No	*transfusions documented here do not include	If Yes → # Units _____
Urologic			
Urinary tract infection	<input type="checkbox"/> Yes <input type="checkbox"/> No	Urinary retention req. Catheterization	<input type="checkbox"/> Yes <input type="checkbox"/> No
		Discharged with Foley catheter	<input type="checkbox"/> Yes <input type="checkbox"/> No
Infection			
Empyema req. treatment	<input type="checkbox"/> Yes <input type="checkbox"/> No	Surgical Site Infection	<input type="checkbox"/> None <input type="checkbox"/> Superficial <input type="checkbox"/> Deep
Sepsis	<input type="checkbox"/> Yes <input type="checkbox"/> No	Another infection req. IV antibiotics	<input type="checkbox"/> Organ space <input type="checkbox"/> Yes <input type="checkbox"/> No
Neurology			
New central neurological event	<input type="checkbox"/> Yes <input type="checkbox"/> No	Recurrent laryngeal nerve paresis -unexpected	<input type="checkbox"/> Yes <input type="checkbox"/> No
Delirium	<input type="checkbox"/> Yes <input type="checkbox"/> No	Other neurological event	<input type="checkbox"/> Yes <input type="checkbox"/> No
Miscellaneous			
New renal failure per RIFLE criteria	<input type="checkbox"/> Yes <input type="checkbox"/> No	Chylothorax req. medical intervention	<input type="checkbox"/> Yes <input type="checkbox"/> No
Other events req. OR with gen. anesthesia	<input type="checkbox"/> Yes <input type="checkbox"/> No	Unexpected Admission to ICU	<input type="checkbox"/> Yes <input type="checkbox"/> No

M. Discharge	
Patient is still in the hospital <input type="checkbox"/> Yes <input type="checkbox"/> No	
<i>If No →</i>	Date of Discharge: ____/____/____
	Discharge Status: <input type="checkbox"/> Alive <input type="checkbox"/> Dead
	<i>If Discharged Alive →</i>
	Discharge location: <input type="checkbox"/> Home <input type="checkbox"/> Extended Care/Transitional Care Unit /Rehab <input type="checkbox"/> Other Hospital <input type="checkbox"/> Nursing Home <input type="checkbox"/> Hospice <input type="checkbox"/> Other
	Discharged with chest tube: <input type="checkbox"/> Yes <input type="checkbox"/> No
	Discharged with home O2 (new; not using O2 pre-op) <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If Yes → On O2 at 30 days postoperative?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Patient Died Within 30 Days Post Op
	Readmit to any hospital within 30 days of discharge: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <i>If Yes → Readmission related to operative procedure?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Status at 30 days after surgery: <input type="checkbox"/> Alive <input type="checkbox"/> Dead <input type="checkbox"/> Unknown	

N. Follow Up	
Date of Last Follow-Up: ____/____/____	
Mortality Status at Last Follow-Up: <input type="checkbox"/> Alive <input type="checkbox"/> Dead	
Mortality Date: ____/____/____	

O. Quality Measures			
IV antibiotics ordered to be given within 1 hour before incision:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not indicated for procedure
IV antibiotics given within 1 hour before incision:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not indicated for procedure
Cephalosporin Antibiotic Ordered	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Not indicated for procedure	<input type="checkbox"/> Documented allergy or indication for therapeutic substitution

Prophylactic Antibiotic Discontinuation Ordered within 24 hour	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not indicated for procedure	<input type="checkbox"/> No, due to documented infection
Smoking Cessation Counseling	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Patient refused	<input type="checkbox"/> Nonsmoker
DVT Prophylaxis Measures	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not applicable	