Case Requirements for Thoracic Surgery Pathways

Review Committee for Thoracic Surgery

The Review Committee for Thoracic Surgery announces a new pathway for integrated thoracic surgery programs. The new pathway, called the cardiac pathway, will be available for selection in addition to the two current pathways of thoracic and cardiothoracic. Residents will be able to elect this pathway for education training that began July 1, 2022.

An overview of the requirements for each pathway is as follows:

Requirements	**Existing Thoracic Pathway**		**Existing Cardiothoracic Pathway**		**New Cardiac Pathway**	
	Subtotal	**Total**	**Subtotal**	**Total**	**Subtotal**	**Total**
CONGENITAL HEART DISEASE						
Congenital Heart Disease		**10**		**20**		**20**
Primary Surgeon			5		5	
First Assistant	10		15		15	
ADULT CARDIAC						
Acquired Valvular Heart Disease		**30**		**60**		**90**
Aortic Valve Repair/Replacement	15		25		25	
Mitral Valve Repair/Replacement	5		15			
Mitral Valve Repair					10	
Mitral Valve Replacement					5	
Tricuspid Valve Repair/Replacement, Annuloplasty	5		5		5	
TAVR as primary			5		20	
TAVR as assistant	5		10		20	
Transcatheter Mitral/Tricuspid Intervention					5	
Myocardial Revascularization		**35**		**80**		**80**
Primary CABG					60	

Requirements	Existing Thoracic Pathway		Existing Cardiothoracic Pathway		New Cardiac Pathway	
	Subtotal	**Total**	**Subtotal**	**Total**	**Subtotal**	**Total**
Complex CABG (Multiple Arterial, Hybrid, Beating Heart, Redo)					20	
Redo Sternotomy** (Can be double counted with any cardiac procedure; not counted in Adult Cardiac Total)		**5**		**15**		**15**
Interventional Wire-Based Procedures				**5**		**35**
Left heart catheter, PCI, TEVAR, Mitral Clip			5		20	
Intravascular ultrasound** (may be double counted)						
Transeptal puncture** (may be double counted)					10	
Ultrasound guided access** (may be double counted)					5	
Conduit Dissection and Preparation Open or endoscopic saphenous/radial vein harvest and preparation** (Can be double counted with CABG)		**5**		**5**		**10**
Radial Artery Harvest (open or endoscopic)					5	
Saphenous Vein Open Harvest					5	
Aortic Procedures Any combination of ascending aorta/aortic root replacement, descending aortic replacement, aortic dissection, aortic trauma** (Can be double counted with CABG/Valve Procedures)		**5**		**10**		**25**
TEVAR and EVAR			5		15	

Requirements	Existing Thoracic Pathway		Existing Cardiothoracic Pathway		New Cardiac Pathway	
	Subtotal	**Total**	**Subtotal**	**Total**	**Subtotal**	**Total**
Aortic Root Replacement (including VSRR or Composite Valve Graft)					5	
Replacement of Ascending Aorta, Arch, Descending Aorta; Surgery for Aortic Dissection					5	
Arrhythmia Surgery				**10**		**15**
Left atrial or biatrial maze, pulmonary vein isolation, right-sided maze, isthmus ablation ** (Can be double counted with CABG/ valve procedures)			5		10	
Pacemaker insertion or pacemaker removal			5		5	
Cardiopulmonary Bypass Set-up and Pump Run with Perfusionist		**5**		**5**		**5**
Circulatory Assist Any combination of ECMO, VAD** (Can be double counted with another operation)		**10**		**20**		**35**
Intra-aortic balloon pump	5		10		5	
Ventricular Assist Device Implant (Temporary Endovascular, Paracorporeal Ventricular Assist or implantable Durable Ventricular Support)					15	
Extracorporeal membrane oxygenator support (VA or VV)					10	
Thoracic Transplant (any combination of heart or lung implant, heart, or lung procurement)					5	

Requirements	Existing Thoracic Pathway		Existing Cardiothoracic Pathway		New Cardiac Pathway	
	Subtotal	**Total**	**Subtotal**	**Total**	**Subtotal**	**Total**
Subtotal Adult Cardiac (and Congenital Heart Disease) Experience (Note: The American Board of Thoracic Surgery does not include congenital cases in this total number)		**100**		**215**		**315**
GENERAL THORACIC						
Lung		**105**		**60**		**45**
Major anatomic resections: open, VATS, or RATS (segmentectomy, lobectomy, pneumonectomy, lung transplantation**) **Only 1 pneumonectomy can be counted along with bilateral lung transplant.	50		30		30	
VATS/RATS lobectomy specifically	25		5			
Open or VATS lung biopsy/wedge resection	30		25			
MIS Lobectomy, Biopsy, Wedge Resection					15	
Pleura		**25**		**10**		**10**
Major (empyema decortication, pleurectomy decortication, other pleural tumor resection)	5					
Minor (biopsy, pleurectomy, VATS sympathectomy, VATS Bleb resection, VATS pleurodesis, evacuation of hemothorax)	15					
Interventional: In-dwelling cuffed pleural catheter insertion	5					

Requirements	Existing Thoracic Pathway		Existing Cardiothoracic Pathway		New Cardiac Pathway	
	Subtotal	**Total**	**Subtotal**	**Total**	**Subtotal**	**Total**
Chest Wall and Diaphragm Chest wall resection**, rib resection, rib plating, pectus repair, diaphragm resection or plication, repair of Morgagni, Bochdalek, traumatic hernia (**chest wall resection may be double counted with pulmonary resection)		**10**		**5**		**3**
Mediastinum Tumor/cyst/mass resection via open, VATS, or robotic technique		**10**		**5**		
Tracheobronchial – Airway Surgery** Tracheal resection, laryngotracheal resection, sleeve lobectomy, carinal pneumonectomy, transplantation airway anastomosis (**Sleeve lobectomy and carinal pneumonectomy can be double counted with major anatomic lung resection)		**5**				
Esophagus		**35**		**10**		**5**
Esophagectomy (Open or MIE)	20		5			
Benign Esophagus: Repair of perforation, drain perforation, diverticulectomy, myotomy, hiatal hernia repair	10		5			
Laparoscopic hiatal or paraesophageal repair	5					
Subtotal General Thoracic Experience		**190**		**90**		**63**

Requirements	Existing Thoracic Pathway		Existing Cardiothoracic Pathway		New Cardiac Pathway	
	Subtotal	**Total**	**Subtotal**	**Total**	**Subtotal**	**Total**
TOTAL MAJOR OPERATIVE EXPERIENCE		**290**		**305**		**378**
MINOR PROCEDURES **All minor procedures may be double-counted**						
Bronchoscopy		**40**		**30**		**20**
Simple (BAL, diagnostic, TBBx, Bx)	30					
Complex (laser, dilation, stent, navigational bronchoscopy, photodynamic therapy, cryotherapy)	10					
UGI - Endoscopy		**30**		**10**		**5**
Simple (diagnostic, Bx)	20					
Complex (dilation, stent, EUS, EMR)	10					
Mediastinal Assessment		**55**		**15**		**10**
Mediastinoscopy, Chamberlain (mediastinotomy)	15		5			
EBUS/FNA	10					
Mediastinal node dissection/systematic sampling during lung resection	30		10			
Subtotal Minor Procedures		**125**		**55**		**35**
TOTAL OPERATIVE EXPERIENCE		**415**		**360**		**413**

Programs are reminded that each resident must select the correct pathway within the Accreditation Data System (ADS) as graduate case log minimums will account for selected pathway. More information regarding the new cardiac pathway can be found on the Documents and Resources section of the Thoracic Surgery page of the ACGME website.

CT Critical Care Management Documentation

Select the patients that best represent all the essential aspects of intensive care unit (ICU) management. Each resident must develop a CT Critical Care Index Case (CCIC) log of at least 20 patients that best represent the full breadth of critical care management. At least two out of the seven categories listed below should be applicable to each chosen patient. The completed CCIC log should include experience, with at least one patient, in all seven of the following essential categories:

1. Ventilatory management
    a. Etiology/indications
    b. Ventilatory modes/techniques
    c. Ventilator days
    d. Weaning method

2. Bleeding (non-trauma) greater than three (3) units necessitating transfusion/monitoring in ICU setting
    a. Etiology
    b. Coagulopathy
    c. Hypothermia
    d. Autotransfusion

3. Hemodynamic instability
    a. Etiology
    b. Volume resuscitation
    c. Inotropic/pressure support
    d. Mechanical assistance of cardiac failure (IABP, LVAD, BiVAD)

4. Organ dysfunction/failure (etiology/mode of management)
    a. Pulmonary
    b. Renal
    c. Hepatic
    d. Central nervous system
    e. Endocrine (hypothyroidism, adrenal insufficiency, panhypopituitarism, diabetes insipidus, SIADH)

5. Dysrhythmias
    a. Etiology
    b. Drug management
    c. Therapeutic interventions
    d. Monitoring

6. Invasive line management/monitoring
    a. Arterial cannulation
    b. Pulmonary artery catheter
    c. Intracardiac catheter
    d. Complications

7. Nutrition
    a. Route (parenteral/enteral)
    b. Indications/contraindications

For I-6 Junior Years (PGY-1-3)

Case Requirements

Vascular	25
Skin, Soft Tissue, Breast	10
Head/Neck	5
Alimentary tract	20
Abdomen	30
Operative Trauma	5
Pediatric	10
Plastic	5
Lap-basic	30
Lap-advanced	10

TOTAL
Junior residents must have at least 150 American Board of Surgery (ABS) core cases in the first three years (from the above list).

At least another 125 **cardiothoracic** cases are required in the first three years as well, but 50 of these cardiothoracic cases may come in the form of “component cases” (including but not limited to sternotomy and closure, thoracotomy and closure, LIMA takedown, saphenous vein harvest, aortic and venous cannulation, proximal and distal anastomosis, other vascular anastomosis, gastric/esophageal mobilization) while on the cardiac, thoracic, and congenital services.

In addition to the 275 cases specified above, another 100 must come from either the ABS list or from cardiothoracic cases.

The total number of cases in the first three years of the I-6 must meet or exceed 375 cases, or 125 per year.