



## PSI #6 Iatrogenic Pneumothorax

### Provider-Level Indicator

#### Numerator

Discharges with ICD-9-CM code for iatrogenic pneumothorax in any secondary diagnosis field among cases meeting the inclusion and exclusion rules for the denominator.

*ICD-9-CM Iatrogenic Pneumothorax diagnosis code:*

5121 IATROGENIC PNEUMOTHORAX

#### Denominator

All surgical and medical discharges age 18 years and older defined by specific DRGs or MS-DRGs.

See *Patient Safety Indicators Appendices*:

- Appendix B – Medical Discharge DRGs
- Appendix C – Medical Discharge MS-DRGs
- Appendix D – Surgical Discharge DRGs
- Appendix E – Surgical Discharge MS-DRGs

Exclude cases:

- with principal diagnosis of iatrogenic pneumothorax or secondary diagnosis present on admission
- MDC 14 (pregnancy, childbirth, and puerperium)
- with any diagnosis code of chest trauma or pleural effusion
- with a code of diaphragmatic surgery repair in any procedure field
- with any code indicating thoracic surgery, lung or pleural biopsy, or cardiac surgery

*ICD-9-CM Chest Trauma diagnosis codes:*

80700	FRACTURE RIB NOS-CLOSED	80715	FRACTURE FIVE RIBS-OPEN
80701	FRACTURE ONE RIB-CLOSED	80716	FRACTURE SIX RIBS-OPEN
80702	FRACTURE TWO RIBS-CLOSED	80717	FRACTURE SEVEN RIBS-OPEN
80703	FRACTURE THREE RIBS-CLOS	80718	FX EIGHT/MORE RIBS-OPEN
80704	FRACTURE FOUR RIBS-CLOSE	80719	FX MULT RIBS NOS-OPEN
80705	FRACTURE FIVE RIBS-CLOSE	8072	FRACTURE OF STERNUM-CLOS
80706	FRACTURE SIX RIBS-CLOSED	8073	FRACTURE OF STERNUM-OPEN
80707	FRACTURE SEVEN RIBS-CLOS	8074	FLAIL CHEST
80708	FX EIGHT/MORE RIB-CLOSED	8075	FX LARYNX/TRACHEA-CLOSED
80709	FX MULT RIBS NOS-CLOSED	8076	FX LARYNX/TRACHEA-OPEN
80710	FRACTURE RIB NOS-OPEN	8090	FRACTURE TRUNK BONE-CLOS
80711	FRACTURE ONE RIB-OPEN	8091	FRACTURE TRUNK BONE-OPEN
80712	FRACTURE TWO RIBS-OPEN	8600	TRAUM PNEUMOTHORAX-CLOSE
80713	FRACTURE THREE RIBS-OPEN	8601	TRAUM PNEUMOTHORAX-OPEN
80714	FRACTURE FOUR RIBS-OPEN	8602	TRAUM HEMOTHORAX-CLOSED

8603	TRAUM HEMOTHORAX-OPEN	9012	INJ SUPERIOR VENA CAVA
8604	TRAUM PNEUMOHEMOTHOR-CL	9013	INJ INNOMIN/SUBCLAV VEIN
8605	TRAUM PNEUMOHEMOTHOR-OPN	90140	INJ PULMONARY VESSEL NOS
86100	HEART INJURY NOS-CLOSED	90141	INJURY PULMONARY ARTERY
86101	HEART CONTUSION-CLOSED	90142	INJURY PULMONARY VEIN
86102	HEART LACERATION-CLOSED	90181	INJ INTERCOSTAL ART/VEIN
86103	HEART CHAMBER LACERAT-CL	90182	INJ INT MAMMARY ART/VEIN
86110	HEART INJURY NOS-OPEN	90183	INJ MULT THORACIC VESSEL
86111	HEART CONTUSION-OPEN	90189	INJ THORACIC VESSEL NEC
86112	HEART LACERATION-OPEN	9019	INJ THORACIC VESSEL NOS
86113	HEART CHAMBER LACER-OPN	9110	ABRASION TRUNK
86120	LUNG INJURY NOS-CLOSED	9111	ABRASION TRUNK-INFECTED
86121	LUNG CONTUSION-CLOSED	9118	SUPERFIC INJU TRUNK NEC
86122	LUNG LACERATION-CLOSED	9119	SUPERFIC INJU TRUNK NEC-INF
86130	LUNG INJURY NOS-OPEN	9220	CONTUSION OF BREAST
86131	LUNG CONTUSION-OPEN	9221	CONTUSION OF CHEST WALL
86132	LUNG LACERATION-OPEN	9223	BACK CONTUSION
8620	DIAPHRAGM INJURY-CLOSED	92231	BACK CONTUSION
8621	DIAPHRAGM INJURY-OPEN	92233	INTERSCPLR REG CONTUSION
86221	BRONCHUS INJURY-CLOSED	9228	MULIPLE CONTUSION TRUNK
86222	ESOPHAGUS INJURY-CLOSED	9229	CONTUSION OF TRUNK
86229	INTRATHORACIC INJ NEC-CL	92611	CRUSHING INJURY BACK
86231	BRONCHUS INJURY-OPEN	92619	CRUSHING INJ TRUNK NEC
86232	ESOPHAGUS INJURY-OPEN	9268	MULT CRUSHING INJ TRUNK
86239	INTRATHORAC INJ NEC-OPEN	9269	CRUSHING INJ TRUNK NOS
8628	INTRATHORACIC INJ NOS-CL	9290	CRUSH INJ MULT SITE NEC
8629	INTRATHORAC INJ NOS-OPEN	9299	CRUSHING INJURY NOS
8750	OPEN WOUND OF CHEST	9541	INJ SYMPA NERVE NEC
8751	OPEN WOUND CHEST-COMPL	9548	INJURY TRUNK NERVE NEC
8760	OPEN WOUND OF BACK	9549	INJURY TRUNK NERVE NOS
8761	OPEN WOUND BACK-COMPL	95911	INJURY OF CHEST WALL NEC
9010	INJURY THORACIC AORTA	95919	TRUNK INJURY-SITES NEC
9011	INJ INNOMIN/SUBCLAV ART	9599	INJURY-SITE NOS

*ICD-9-CM Pleural Effusion diagnosis codes:*

0101	TUBERCULOUS PLEURISY IN PRIMARY PROGRESSIVE TUBERCULOSIS	01172	TPNEU, BACTERIAL OR HISTOLOGICAL EXAM UNKNOWN
01010	TUBERCULOUS PLEURISY IN PRIMARY PROGRESSIVE TUBERCULOSIS, UNSPECIFIED	01173	TPNEU, TUBERCLE BACILI FOUND BY MICROSCOPY
01011	TPIPPT, BACTERIAL OR HISTOLOGICAL EXAM NOT DONE	01174	TPNEU, TUBERCLE BACILI NOT FOUND BY MICROSCOPY BUT BY BACTERIAL CULTURE
01012	TPIPPT, BACTERIAL OR HISTOLOGICAL EXAM UNKNOWN	01175	TPNEU, TUBERCLE BACILI NOT FOUND BY BACTERIOLOGICAL BUT CONFIRMED HISTOLOGICALLY
01013	TPIPPT, TUBERCLE BACILI FOUND BY MICROSCOPY	01176	TPENU, TUBERCLE BACILI NOT FOUND BY BACTERIOLOGICAL OR HISTOLOGICAL BUT CONFIRMED OTHER METHODS
01014	TPIPPT, TUBERCLE BACILI NOT FOUND BY MICROSCOPY BUT BY BACTERIAL CULTURE	0120	TUBERCULOUS PLEURISY
01015	TPIPPT, TUBERCLE BACILI NOT FOUND BY BACTERIOLOGICAL BUT CONFIRMED HISTOLOGICALLY	01200	TUBERCULOUS PLEURISY, UNSPECIFIED
01016	TPIPPT, TUBERCLE BACILI NOT FOUND BY BACTERIOLOGICAL OR HISTOLOGICAL BUT CONFIRMED OTHER METHODS	01201	TP, BACTERIAL OR HISTOLOGICAL EXAM NOT DONE
0117	TUBRCULOUS PNEUMOTHORAX	01202	TP, BACTERIAL OR HISTOLOGICAL EXAM UNKNOWN
01170	TUBRCULOUS PNEUMOTHORAX, UNSPECIFIED	01203	TP, TUBERCLE BACILI FOUND BY MICROSCOPY
01171	TPNEU, BACTERIAL OR HISTOLOGICAL EXAM NOT DONE	01204	TP, TUBERCLE BACILI NOT FOUND BY MICROSCOPY BUT BY BACTERIAL CULTURE

01205	TP, TUBERCLE BACILI NOT FOUND BY BACTERIOLOGICAL BUT CONFIRMED HISTOLOGICALLY	5118	OTHER SPECIFIED FORM OF EFFUSION, EXCEPT TUBERCULOUS
01206	TP, TUBERCLE BACILI NOT FOUND BY BACTERIOLOGICAL OR HISTOLOGICAL BUT CONFIRMED OTHER METHODS	51181	MALIGNANT PLEURAL EFFUSION OCT08-
1972	SECOND MALIG NEO PLEURA	51189	OTHER SPECIFIED FORMS OF EFFUSION, EXCEPT TUBERCULOSIS OCT08-
5111	WITH EFUSION, WITH MENTION OF A BACTERIAL CAUSE OTHER THAN TUBERCULOSIS	5119	UNSPECIFIED PLEURAL EFFUSION

*ICD9-CM Diaphragmatic Surgery Repair codes:*

537	ABD REPAIR-DIAPHR HERNIA	5380	THOR REP-DIAPH HERN NOS
5371	LAPAROSCOPIC REPAIR OF DIAPHRAGMATIC HERNIA, ABDOMINAL APPROACH OCT08-	5381	DIAPHRAGMATIC PPLICATION
5372	OTHER AND OPEN REPAIR OF DIAPHRAGMATIC HERNIA, ABDOMINAL APPROACH OCT08-	5382	PARASTERN HERNIA REPAIR
5375	REPAIR OF DIAPHRAGMATIC HERNIA, ABDOMINAL APPROACH, NOS OCT08-	5583	LAPAROSCOPIC REPAIR OF DIAPHRAGMATIC HERNIA, WITH THORACIC APPROACH OCT08-
		5584	OTHER AND OPEN REPAIR OF DIAPHRAGMATIC HERNIA, WITH THORACIC APPROACH OCT08-

*ICD-9-CM Thoracic Surgery procedure codes:*

0522	SYMPATHECTOMY CERVICAL	323	SEGMENTAL RESECTION OF LUNG
0523	SYMPATHECTOMY LUMBAR	3230	THORAC SEG LUNG RESECT
0529	OTHER SYMPATHECTOMY AND GANGLIONECTOMY	3239	OTH SEG LUNG RESECT NOS
0780	THYMECTOMY, NOT OTHERWISE SPECIFIED	324	LOBECTOMY OF LUNG
0781	OTHER PARTIAL EXCISION OF THYMUS	3241	THORAC LOBECTOMY LUNG
0782	OTHER TOTAL EXCISION OF THYMUS	3249	OTHER LOBECTOMY OF LUNG
0783	THORACOSCOPIC PARTIAL EXCISION OF THYMUS	325	COMPLETE PNEUMONECTOMY
0784	THORACOSCOPIC TOTAL EXCISION OF THYMUS	3250	THORACOSPC PNEUMONECTOMY
3121	MEDIASTINAL TRACHEOSTOMY	3259	OTHER PNEUMONECTOMY NOS
3145	OPEN BIOPSY OF LARYNX OR TRACHEA	326	RADICAL DISSECTION OF THORACIC STRUCTURES
3173	CLOSURE OF OTHER FISTULA OF TRACHEA	329	OTHER EXCISION OF LUNG
3179	OTHER REPAIR AND PLASTIC OPERATIONS ON TRACHEA	330	INCISION OF BRONCHUS
3199	OTHER OPERATIONS ON TRACHEA	331	INCISION OF LUNG
3209	OTHER LOCAL EXCISION OR DESTRUCTION OF LESION OR TISSUE OF BRONCHUS	3320	THORACOSCOPC LUNG BIOPSY
321	OTHER EXCISION OF BRONCHUS	3325	OPEN BIOPSY OF BRONCHUS
3220	THORAC EXC LUNG LESION	3326	CLOSE [PERCUTANEOUS][NEEDLE] BIOPSY OF LUNG
	<u>Local excision or destruction of lesion or tissue of lung</u>	3327	CLOSED ENDOSCOPIC BIOPSY OF LUNG
3221	PLICATION OF EMPHYSEMATIOUS BLEB	3328	OPEN BIOPSY OF LUNG
3222	LUNG VOLUME REDUCTION SURGERY	3331	DESTRUCTION OF PHRENIC NERVE FOR COLLAPSE OF LUNG (NO LONGER PERFORMED)
3223	OPEN ABLTN LUNG LES/TISS OCT06-	3332	ARTIFICIAL PNEUMOTHORAX FOR COLLAPSE OF LUNG
3224	PERC ABLTN LUNG LES/TISS OCT06-	3334	THORACOPLASTY
3225	THOR ABLTN LUNG LES/TISS OCT06-	3339	OTHER SURGICAL COLLAPSE OF LUNG
3226	ABLTN LUNG TISS NEC/NOS OCT06-		<u>Repair and plastic operation on lung and bronchus</u>
3228	ENDOSCOPIC EXCISION OR DESTRUCTION OF LESION OR TISSUE OF LUNG	3341	SUTURE OF LACERATION OF BRONCHUS
3229	OTHER LOCAL EXCISION OR DESTRUCTION OF LESION OR TISSUE OF LUNG	3342	CLOSURE OF BRONCHIAL FISTULA
		3343	CLOSURE OF LACERATION OF LUNG
		3348	OTHER REPAIR AND PLASTIC OPERATIONS ON BRONCHUS
		3349	OTHER REPAIR AND PLASTIC OPERATIONS ON LUNG

<u>Lung transplant</u>		3485	IMPLANTATION OF DIAPHRAGMATIC PACEMAKER
335	LUNG TRANSPLANTATION	3489	OTHER OPERATIONS ON DIAPHRAGM
3350	LUNG TRANSPLANTATION, NOS	3493	REPAIR OF PLEURA
3351	UNILATERAL LUNG TRANSPLANTATION	3499	OTHER OPERATIONS ON THORAX, OTHER
3352	BILATERAL LUNG TRANSPLANTATION		
336	COMBINED HEART-LUNG TRANSPLANTATION	<u>Operations on thoracic duct</u>	
3392	LIGATION OF BRONCHUS	4061	CANNULATION OF THORACIC DUCT
3393	PUNCTURE OF LUNG	4062	FISTULIZATION OF THORACIC DUCT
3398	OTHER OPERATIONS ON BRONCHUS	4063	CLOSURE OF FISTULA OF THORACIC DUCT
3399	OTHER OPERATIONS ON LUNG	4064	LIGATION OF THORACIC DUCT
3329	OTHER DIAGNOSTIC PROCEDURE ON LUNG AND BRONCHUS	4069	OTHER OPERATIONS ON THORACIC DUCT
3333	PNEUMOPERITONEUM FOR COLLAPSE OF LUNG	<u>Esophagotomy</u>	
3401	INCISION OF CHEST WALL	4201	INCISION OF ESOPHAGEAL WEB
3402	EXPLORATORY THORACOTOMY	4209	OTHER INCISION OF ESOPHAGUS
3403	REOPENING OF RECENT THORACOTOMY SITE	4210	ESOPHAGOSTOMY, NOS
3405	CREATION OF PLEUROPERITONEAL SHUNT	4211	CERVICAL ESOPHAGOSTOMY
3409	OTHER INCISION OF PLEURA	4212	EXTERIORIZATION OF ESOPHAGEAL POUCH
341	INCISION OF MEDIASTINUM	4219	OTHER EXTERNAL FISTULIZATION OF ESOPHAGUS
<u>Diagnostic procedures on chest wall, pleura, mediastinum, and diaphragm</u>		4221	OPERATIVE ESOPHAGOSCOPY BY INCISION
3420	THORACOSCOPIC PLEURAL BX	4225	OPEN BIOPSY OF ESOPHAGUS
3421	TRANSPLEURAL THORACOSCOPY	4231	LOCAL EXCISION OF ESOPHAGEAL DIVERTICULUM
3422	MEDIASTINOSCOPY	4232	LOCAL EXCISION OF OTHER LESION OR TISSUE OF ESOPHAGUS
3423	BIOPSY OF CHEST WALL	<u>Excision of esophagus</u>	
3424	PLEURAL BIOPSY	4239	OTHER DESTRUCTION OF LESION OR TISSUE OF ESOPHAGUS
3425	CLOSED [PERCUTANEOUS][NEEDLE] BIOPSY OF MEDIASTINUM	4240	ESOPHAGECTOMY, NOS
3426	OPEN BIOPSY OF MEDIASTINUM	4241	PARTIAL ESOPHAGECTOMY
3427	BIOPSY OF DIAPHRAGM	4242	TOTAL ESOPHAGECTOMY
3428	OTHER DIAGNOSTIC PROCEDURES ON CHEST WALL, PLEURA, AND DIAPHRAGM	<u>Intrathoracic anastomosis of exophagus</u>	
3429	OTHER DIAGNOSTIC PROCEDURES ON MEDIASTINUM	4251	INTRATHORACIC ESOPHAGOESOPHAGOSTOMY
343	EXCISION OR DESTRUCTION OF LESION OR TISSUE OF MEDIASTINUM	4252	INTRATHORACIC ESOPHAGOGASTROSTOMY
344	EXCISION OR DESTRUCTION OF LESION OF CHEST WALL	4253	INTRATHORACIC ESOPHAGEAL ANASTOMOSIS W/ INTERPOSITION OF SMALL BOWEL
3451	DECORTICATION OF LUNG	4254	OTHER INTRATHORACIC ESOPHAGOENTEROSTOMY
3452	THORACOSCOPIC DECORT LUNG	4255	INTRATHORACIC ESOPHAGEAL ANASTOMOSIS W/ INTERPOSITION OF COLON
3459	OTHER EXCISION OF PLEURA	4256	OTHER INTRATHORACIC ESOPHAGOCOLOSTOMY
<u>Repair of chest wall</u>		4258	INTRATHORACIC ESOPHAGEAL ANASTOMOSIS W/ OTHER INTERPOSITION
3471	SUTURE OF LACERATION OF CHEST WALL	4259	OTHER INTRATHORACIC ANASTOMOSIS OF ESOPHAGUS
3472	CLOSURE OF THORACOSTOMY	<u>Antesternal anastomosis</u>	
3473	CLOSURE OF OTHER FISTULA OF THORAX	4261	ANTESTERNAL ESOPHAGOESOPHAGOSTOMY
3474	REPAIR OF PECTUS DEFORMITY	4262	ANTESTERNAL ESOPHAGOGASTROSTOMY
3479	OTHER REPAIR OF CHEST WALL		
<u>Operations on diaphragm</u>			
3481	EXCISION OF LESION OR TISSUE OF DIAPHRAGM		
3482	SUTURE OF LACERATION OF DIAPHRAGM		
3483	CLOSURE OF FISTULA OF DIAPHRAGM		
3484	OTHER REPAIR OF DIAPHRAGM		

4263	ANTESTERNAL ESOPHAGEAL ANASTOMOSIS W/ INTERPOSITION OF SMALL BOWEL	4282	SUTURE OF LACERATION OF ESOPHAGUS
4264	OTHER ANTESTERNAL ESOPHAGOENTEROSTOMY	4283	CLOSURE OF ESOPHAGOSTOMY
4265	ANTESTERNAL ESOPHAGEAL ANASTOMOSIS W/ INTERPOSITION OF COLON	4284	REPAIR OF ESOPHAGEAL FISTULA, NEC
4266	OTHER ANTESTERNAL ESOPHAGOCOLOSTOMY	4285	REPAIR OF ESOPHAGEAL STRICTURE
4268	OTHER ANTESTERNAL ESOPHAGEAL ANASTOMOSIS W/ INTERPOSITION	4286	PRODUCTION OF SUBCUTANEOUS TUNNEL W/O ESOPHAGEAL ANASTOMOSIS
4269	OTHER ANTESTERNAL ANASTOMOSIS OF ESOPHAGUS	4287	OTHER GRAFT OF ESOPHAGUS
<hr/>		4289	OTHER REPAIR OF ESOPHAGUS
Other repair of esophagus		4465	ESOPHAGOGASTROPLASTY
427	ESOPHAGOMYOTOMY	4466	OTHER PROCEDURES FOR CREATION OF ESOPHAGOGASTRIC SPHINCTERIC COMPETENCE
4281	INSERTION OF PERMANENT TUBE INTO ESOPHAGUS	8104	DORSAL AND DORSO-LUMBAR FUSION, ANTERIOR TECHNIQUE
		8134	REFUSION OF DORSAL AND DORSOLUMBAR SPINE, ANTERIOR TECHNIQUE

*ICD-9-CM Lung or Pleural Biopsy procedure codes:*

3326	CLOSED [PERCUTANEOUS] [NEEDLE] BIOPSY OF LUNG	3328	OPEN BIOPSY OF LUNG
		3424	PLEURAL BIOPSY

*ICD9-CM Cardiac Procedure codes:*

3510	OPEN HEART VALVULOPLASTY WITHOUT REPLACEMENT, UNSPECIFIED VALVE	3533	ANNULOPLASTY
3511	OPEN HEART VALVULOPLASTY OF AORTIC VALVE WITHOUT REPLACEMENT	3534	INFUNDIBULECTOMY
3512	OPEN HEART VALVULOPLASTY OF MITRAL VALVE WITHOUT REPLACEMENT	3535	OPERATIONS ON TRABECULAE CARNEAE CORDIS
3513	OPEN HEART VALVULOPLASTY OF PULMONARY VALVE WITHOUT REPLACEMENT	3539	OPERATIONS ON OTHER STRUCTURES ADJACENT TO VALVES OF HEART
3514	OPEN HEART VALVULOPLASTY OF TRICUSPID VALVE WITHOUT REPLACEMENT	3550	REPAIR OF UNSPECIFIED SEPTAL DEFECT OF HEART WITH PROSTHESIS
3520	REPLACEMENT OF UNSPECIFIED HEART VALVE	3551	REPAIR OF ATRIAL SEPTAL DEFECT WITH PROSTHESIS, OPEN TECHNIQUE
3521	REPLACEMENT OF AORTIC VALVE WITH TISSUE GRAFT	3553	REPAIR OF VENTRICULAR SEPTAL DEFECT WITH PROSTHESIS, OPEN TECHNIQUE
3522	OTHER REPLACEMENT OF AORTIC VALVE	3554	REPAIR OF ENDOCARDIAL CUSHION DEFECT WITH PROSTHESIS
3523	REPLACEMENT OF MITRAL VALVE WITH TISSUE GRAFT	3560	REPAIR OF UNSPECIFIED SEPTAL DEFECT OF HEART WITH TISSUE GRAFT
3524	OTHER REPLACEMENT OF MITRAL VALVE	3561	REPAIR OF ATRIAL SEPTAL DEFECT WITH TISSUE GRAFT
3525	REPLACEMENT OF PULMONARY VALVE WITH TISSUE GRAFT	3562	REPAIR OF VENTRICULAR SEPTAL DEFECT WITH TISSUE GRAFT
3526	OTHER REPLACEMENT OF PULMONARY VALVE	3563	REPAIR OF ENDOCARDIAL CUSHION DEFECT WITH TISSUE GRAFT
3527	REPLACEMENT OF TRICUSPID VALVE WITH TISSUE GRAFT	3570	OTHER AND UNSPECIFIED REPAIR OF UNSPECIFIED SEPTAL DEFECT OF HEART
3528	OTHER REPLACEMENT OF TRICUSPID VALVE	3571	OTHER AND UNSPECIFIED REPAIR OF ATRIAL SEPTAL DEFECT
3531	OPERATIONS ON PAPILLARY MUSCLE	3572	OTHER AND UNSPECIFIED REPAIR OF VENTRICULAR SEPTAL DEFECT
3532	OPERATIONS ON CHORDAE TENDINEAE	3573	OTHER AND UNSPECIFIED REPAIR OF ENDOCARDIAL CUSHION DEFECT
		3581	TOTAL REPAIR OF TETRALOGY OF FALLOT



3582	TOTAL REPAIR OF TOTAL ANOMALOUS PULMONARY VENOUS CONNECTION	3731	PERICARDIECTOMY
3583	TOTAL REPAIR OF TRUNCUS ARTERIOSUS	3732	EXCISION OF ANEURYSM OF HEART
3584	TOTAL CORRECTION OF TRANSPOSITION OF GREAT VESSELS, NOT ELSEWHERE CLASSIFIED	3733	EXCISION OR DESTRUCTION OF OTHER LESION OR TISSUE OF HEART, OPEN APPROACH
3591	INTERATRIAL TRANSPOSITION OF VENOUS RETURN	3735	PARTIAL VENTRICULECTOMY
3592	CREATION OF CONDUIT BETWEEN RIGHT VENTRICLE AND PULMONARY ARTERY	3736	EXCISION OR DESTRUCTION OF LEFT ATRIAL APPENDAGE (LAA) OCT08-
3593	CREATION OF CONDUIT BETWEEN LEFT VENTRICLE AND AORTA	3741	IMPLANTATION OF PROSTHETIC CARDIAC SUPPORT DEVICE AROUND THE HEART
3594	CREATION OF CONDUIT BETWEEN ATRIUM AND PULMONARY ARTERY	3749	OTHER REPAIR OF HEART AND PERICARDIUM
3595	REVISION OF CORRECTIVE PROCEDURE ON HEART	3751	HEART TRANSPLANTATION
3598	OTHER OPERATIONS ON SEPTA OF HEART	3752	IMPLANTATION OF TOTAL REPLACEMENT HEART SYSTEM
3599	OTHER OPERATIONS ON VALVES OF HEART	3753	REPLACEMENT OF REPAIR OF THORACIC UNIT OF TOTAL REPLACEMENT HEART SYSTEM
3603	OPEN CHEST CORONARY ARTERY ANGIOPLASTY	3754	REPLACEMENT OR REPAIR OF OTHER IMPLANTABLE COMPONENT OF TOTAL REPLACEMENT HEART SYSTEM
3610	AORTOCORONARY BYPASS FOR HEART REVASCULARIZATION, NOT OTHERWISE SPECIFIED	3755	REMOVAL OF INTERNAL BIVENTRICULAR HEART REPLACEMENT SYSTEM OCT08-
3611	(AORTO)CORONARY BYPASS OF ONE CORONARY ARTERY	3760	IMPLANTATION OR INSERTION OF BIVENTRICULAR EXTERNAL HEART ASSIST SYSTEM OCT08-
3612	(AORTO)CORONARY BYPASS OF TWO CORONARY ARTERIES	3761	IMPLANT OF PULSATION BALLOON
3613	(AORTO)CORONARY BYPASS OF THREE CORONARY ARTERIES	3762	INSERTION OF NON-IMPLANTABLE HEART ASSIST SYSTEM
3614	(AORTO)CORONARY BYPASS OF FOUR OR MORE CORONARY ARTERIES	3763	REPAIR OF HEART ASSIST SYSTEM
3615	SINGLE INTERNAL MAMMARY-CORONARY ARTERY BYPASS	3764	REMOVAL OF HEART ASSIST SYSTEM
3616	DOUBLE INTERNAL MAMMARY-CORONARY ARTERY BYPASS	3765	IMPLANT OF EXTERNAL HEART ASSIST SYSTEM
3617	ABDOMINAL -CORONARY ARTERY BYPASS	3766	INSERTION OF IMPLANTABLE HEART ASSIST SYSTEM
3619	OTHER BYPASS ANASTOMOSIS FOR HEART REVASCULARIZATION	3767	IMPLANTATION OF CARDIOMYOSTIMULATION SYSTEM
362	HEART REVASCULARIZATION BY ARTERIAL IMPLANT	3791	OPEN CHEST CARDIAC MASSAGE
3631	OPEN CHEST TRANSMYOCARDIAL REVASCULARIZATION	3804	INCISION OF VESSEL, AORTA
3632	OTHER TRANSMYOCARDIAL REVASCULARIZATION	3805	INCISION OF VESSEL, OTHER THORACIC
3639	OTHER HEART REVASCULARIZATION	3844	RESECTION OF ABDOMINAL AORTA WITH GRAFT REPLACEMENT
3691	REPAIR OF ANEURYSM OF CORONARY VESSEL	3845	RESECTION OF THORACIC VESSEL WITH GRAFT REPLACEMENT
3699	OTHER OPERATIONS ON VESSELS OF HEART	3864	EXCISION OF LESION OF AORTA
370	PERICARDIOCENTESIS	3865	EXCISION OF LESION OTHER THORACIC VESSEL
3710	INCISION OF HEART, NOT OTHERWISE SPECIFIED	3884	LIGATION , DIVISION OF AORTA
3711	CARDIOTOMY	3885	LIGATION, DIVISION OF OTHER THORACIC VESSELS
3712	PERICARDIOTOMY	390	SYSTEMIC TO PULMONARY ARTERY SHUNT
		3921	CAVAL-PULMONARY ARTERY ANASTOMOSIS
		3922	AORTA-SUBCLAVIAN-CAROTID BYPASS
		3923	OTHER INTRATHORACIC VASCULAR SHUNT OR BYPASS