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Coding  
Companion

# Cardiology/ Cardiothoracic/ Vascular Surgery

A comprehensive illustrated guide  
to coding and reimbursement

SAMPLE

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# 2017

## ICD-10

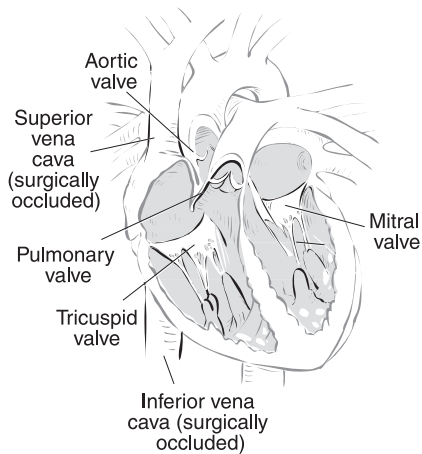
A full suite of resources including the latest code set, mapping products, and expert training to help you make a smooth transition. [www.optumcoding.com/ICD10](http://www.optumcoding.com/ICD10)

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## 33477

**33477** Transcatheter pulmonary valve implantation, percutaneous approach, including pre-stenting of the valve delivery site, when performed



Transcatheter implantation of pulmonary valve

### Explanation

Percutaneous placement of a prosthetic pulmonary valve is used primarily to treat patients with stenosis or regurgitation of a previously repaired right ventricular outflow tract (RVOT). The patient is prepped with general anesthesia in addition to endotracheal intubation. The provider inserts a needle through the skin and into an underlying vein, usually a lower extremity vein, although jugular access is also utilized. Angiography and hemodynamic studies are performed and a guidewire is threaded through the needle and advanced into the pulmonary artery. A balloon is inflated in the RVOT conduit to evaluate for coronary compression and an aortogram is performed to visualize the coronary arteries. Pre-stenting is commonly performed with a covered bare metal stent to decrease the risk of fractured stents and more than one stent may be required. The needle is removed and a catheter carrying the prosthetic valve is inserted. The prosthesis is positioned over the diseased pulmonary valve and a balloon is inflated, deploying the prosthetic valve in place. Angiography and hemodynamic evaluations are repeated. The catheter is removed and pressure is applied to stop bleeding at the access site. A single suture may provide hemostasis at the venous access.

### Coding Tips

This code is new for 2016. This code should be reported only once per encounter. This procedure includes angiography, cardiac catheterization, contrast injection, imaging guidance, and radiological supervision and interpretation necessary to perform the service. Diagnostic catheterization, diagnostic coronary angiography, and diagnostic pulmonary angiography codes may be reported separately in cases where a previous examination is not available or the anatomic visualization is poor quality, there has been a clinical change in the patient's condition since the previous examination, or complications arise during the course of the procedure requiring the additional study. Cardiopulmonary bypass may be necessary in addition to this procedure. For percutaneous peripheral bypass, see 33367; for open peripheral bypass, see 33368; and for central bypass, see 33369. Do not report 33477 in addition to 76000-76001, 93451, 93453-93461, 93530-93533, 93563, or 93566-93568 for angiography necessary to accomplish the procedure. Do not report this

code in addition to 37236-37237 or 92997-92998 for angioplasty, valvuloplasty, or stenting within the treatment site. For transcatheter ventricular assist during this procedure, see 33990-33993 for VAD; see 33946-33989 for ECMO/ECLS; and see 33967, 33970, or 33973 for balloon pump insertion.

### ICD-10-CM Diagnostic Codes

A52.03	Syphilitic endocarditis
I33.9	Acute and subacute endocarditis, unspecified
I37.0	Nonrheumatic pulmonary valve stenosis
I37.1	Nonrheumatic pulmonary valve insufficiency
I37.2	Nonrheumatic pulmonary valve stenosis with insufficiency
I37.8	Other nonrheumatic pulmonary valve disorders
I37.9	Nonrheumatic pulmonary valve disorder, unspecified
I97.0	Postcardiotomy syndrome
I97.110	Postprocedural cardiac insufficiency following cardiac surgery
I97.130	Postprocedural heart failure following cardiac surgery
I97.190	Other postprocedural cardiac functional disturbances following cardiac surgery
Q20.0	Common arterial trunk
Q20.1	Double outlet right ventricle
Q20.5	Discordant atrioventricular connection
Q21.3	Tetralogy of Fallot
Q22.0	Pulmonary valve atresia
Q22.1	Congenital pulmonary valve stenosis
Q22.2	Congenital pulmonary valve insufficiency
Q22.3	Other congenital malformations of pulmonary valve
Q24.3	Pulmonary infundibular stenosis

### HCPCS Equivalent Codes

N/A

### Terms To Know

**angiography.** Radiographic imaging of the arteries. Imaging may be performed to study the vasculature of any given organ, body system, or area of circulation such as the brain, heart, chest, kidneys, limbs, gastrointestinal tract, aorta, and pulmonary circulation to visualize the formation and the function of the blood vessels to detect problems such as a blockage or stricture. A catheter is inserted through an accessible blood vessel and the artery is injected with a radiopaque contrast material after which x-rays are taken.

**catheterization.** Use or insertion of a tubular device into a duct, blood vessel, hollow organ, or body cavity for injecting or withdrawing fluids for diagnostic or therapeutic purposes.

**intubation.** Insertion of a tube into a hollow organ, canal, or cavity within the body.

**regurgitation.** Abnormal backward flow.

### Medicare Edits

	Fac RVU	Non-Fac RVU	FUD	Status	MUE
<b>33477</b>	37.59	37.59	0	A	-

	Modifiers				Medicare Reference
<b>33477</b>	51	N/A	62*	80*	None

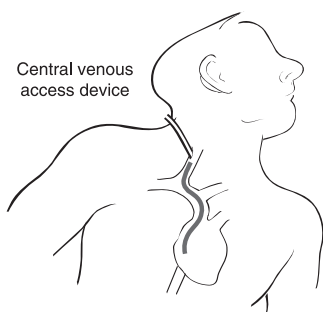
\* with documentation

# 36598

**36598** Contrast injection(s) for radiologic evaluation of existing central venous access device, including fluoroscopy, image documentation and report



Contrast is injected into the central venous access device; this procedure includes image documentation, report, and fluoroscopy



## Explanation

A previously placed central venous access device is evaluated for complications that may be interfering with its proper functioning or the ability to draw blood from the catheter. Complications may include the presence of a fibrin sheath around the end of the catheter, migration of the catheter tip, patency of the tubing, kinking, fracture, or leaks. A small amount of contrast agent is injected into the catheter and the central venous access device is examined under fluoroscopy as the flow is evaluated. Images are documented and a radiological report is prepared.

## Coding Tips

Fluoroscopic guidance is included in 36598. Do not report 36598 in conjunction with 76000. Do not report mechanical removal of pericatheter obstructive material separately (36595). Do not report mechanical removal of intraluminal (intracatheter) obstructive material separately (36596). For complete diagnostic studies (venography), see 75820, 75825, and 75827.

## ICD-10-CM Diagnostic Codes

- I82.210 Acute embolism and thrombosis of superior vena cava
- I82.211 Chronic embolism and thrombosis of superior vena cava
- I82.B11 Acute embolism and thrombosis of right subclavian vein
- I82.B12 Acute embolism and thrombosis of left subclavian vein
- I82.B13 Acute embolism and thrombosis of subclavian vein, bilateral
- I82.B19 Acute embolism and thrombosis of unspecified subclavian vein
- I82.B21 Chronic embolism and thrombosis of right subclavian vein
- I82.B22 Chronic embolism and thrombosis of left subclavian vein
- I82.B23 Chronic embolism and thrombosis of subclavian vein, bilateral
- I82.B29 Chronic embolism and thrombosis of unspecified subclavian vein
- I82.C11 Acute embolism and thrombosis of right internal jugular vein

- I82.C12 Acute embolism and thrombosis of left internal jugular vein
- I82.C13 Acute embolism and thrombosis of internal jugular vein, bilateral
- I82.C19 Acute embolism and thrombosis of unspecified internal jugular vein
- I82.C21 Chronic embolism and thrombosis of right internal jugular vein
- I82.C22 Chronic embolism and thrombosis of left internal jugular vein
- I82.C23 Chronic embolism and thrombosis of internal jugular vein, bilateral
- I82.C29 Chronic embolism and thrombosis of unspecified internal jugular vein
- I87.1 Compression of vein
- I87.8 Other specified disorders of veins
- I87.9 Disorder of vein, unspecified
- T82.41XA Breakdown (mechanical) of vascular dialysis catheter, initial encounter
- T82.514A Breakdown (mechanical) of infusion catheter, initial encounter
- T82.524A Displacement of infusion catheter, initial encounter
- T82.534A Leakage of infusion catheter, initial encounter
- T82.594A Other mechanical complication of infusion catheter, initial encounter
- T82.598A Other mechanical complication of other cardiac and vascular devices and implants, initial encounter
- T82.7XXA Infection and inflammatory reaction due to other cardiac and vascular devices, implants and grafts, initial encounter
- T82.818A Embolism of vascular prosthetic devices, implants and grafts, initial encounter
- T82.828A Fibrosis of vascular prosthetic devices, implants and grafts, initial encounter
- T82.838A Hemorrhage of vascular prosthetic devices, implants and grafts, initial encounter
- T82.848A Pain from vascular prosthetic devices, implants and grafts, initial encounter
- T82.858A Stenosis of vascular prosthetic devices, implants and grafts, initial encounter
- T82.868A Thrombosis of vascular prosthetic devices, implants and grafts, initial encounter
- T82.898A Other specified complication of vascular prosthetic devices, implants and grafts, initial encounter
- T82.9XXA Unspecified complication of cardiac and vascular prosthetic device, implant and graft, initial encounter
- Z45.2 Encounter for adjustment and management of vascular access device
- Z45.89 Encounter for adjustment and management of other implanted devices
- Z46.89 Encounter for fitting and adjustment of other specified devices

## HPCS Equivalent Codes

N/A

## Terms To Know

**central venous access device.** Catheter or other device introduced through a large vein, such as the subclavian or femoral vein, terminating in the superior or inferior vena cava or the right atrium and used to measure venous pressure or administer medication or fluids.

**contrast material.** Radiopaque substance placed into the body to enable a system or body structure to be visualized, such as nonionic and low osmolar contrast media (LOCM), ionic and high osmolar contrast media (HOCM), barium, and gadolinium.

**embolism.** Obstruction of a blood vessel resulting from a clot or foreign substance.

**fluoroscopy.** Radiology technique that allows visual examination of part of the body or a function of an organ using a device that projects an x-ray image on a fluorescent screen.

**injection.** Forcing a liquid substance into a body part such as a joint or muscle.

**stenosis.** Narrowing or constriction of a passage.

**thrombosis.** Condition arising from the presence or formation of blood clots within a blood vessel that may cause vascular obstruction and insufficient oxygenation.

### Medicare Edits

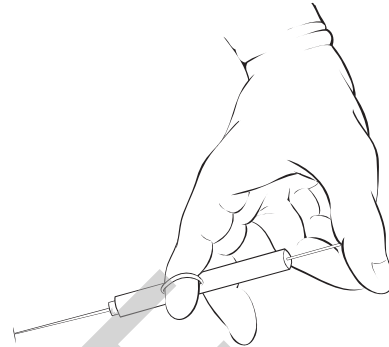
	Fac RVU	Non-Fac RVU	FUD	Status	MUE
36598	1.07	3.14	0	T	2(3)

	Modifiers				Medicare Reference
36598	51	50	N/A	80*	None

\* with documentation

# 36600

**36600** Arterial puncture, withdrawal of blood for diagnosis



Any artery is punctured by a needle to withdraw blood for testing

### Explanation

The physician inserts a needle through the skin and punctures the artery to withdraw blood for testing. No catheter is left in the artery. Pressure is applied to the puncture site to stop the flow of blood.

### Coding Tips

Report 36600 only once when multiple tests are performed on the same arterial blood draw. This procedure does not include laboratory analysis. If specimen is transported to an outside laboratory, report 99000 for handling or conveyance. This service is included in the codes for critical care services including 99291-99292 and 99468-99476.

### ICD-10-CM Diagnostic Codes

The application of this code is too broad to adequately present ICD-10-CM diagnostic code links here. Refer to your ICD-10-CM book.

### HCPSC Equivalent Codes

N/A

### Medicare Edits

	Fac RVU	Non-Fac RVU	FUD	Status	MUE
36600	0.45	0.9	N/A	A	4(3)

	Modifiers				Medicare Reference
36600	51	N/A	N/A	N/A	None

\* with documentation