

ICD-10-PCS: Percutaneous Transluminal Cardiac Angioplasty (PTCA)

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What is a PTCA?

Percutaneous transluminal coronary angioplasty (PTCA) is a minimally invasive procedure to open up blocked coronary arteries, allowing blood to circulate unobstructed to the heart muscle. The procedure begins with the doctor injecting local anesthesia into the groin area and putting a needle into the femoral artery. A guide wire is placed through the needle and the needle is removed. This is the **percutaneous approach** to the heart and great vessels.

An introducer is then placed over the guide wire, after which the wire is removed. A different sized guide wire is put in its place. Next, a diagnostic catheter is advanced through the introducer over the guide wire, into the blood vessel. This catheter is then guided to the aorta and the guide wire is removed. Once the catheter is placed in the opening of one of the coronary arteries, the doctor injects dye and takes an image.

If a treatable blockage is noted, the first catheter is exchanged for a guiding catheter. Once the guiding catheter is in place, a guide wire is advanced across the blockage, and then a balloon catheter is advanced to the blockage site. The balloon is inflated for a few seconds to compress the blockage against the artery wall. Then the balloon is deflated. The PTCA is coded to the **Root Operation: Dilation**. [Dilation - Definition: Expanding an orifice or the lumen of a tubular body part.] The doctor may repeat this a few times, each time increasing the pressure a little more to widen the passage for the blood to flow through.

This treatment may be repeated at each blocked site in the coronary arteries. [The coronary arteries are classified as a single body part that is further specified by number of sites treated and not by name or number of arteries. Separate body part values are used to specify the number of sites treated when the same procedure is performed on multiple sites in the coronary arteries.] A stent may be placed within the coronary artery to keep the vessel open. If a stent is placed it is considered to be a **Device**. [A device is coded only if a device remains after the procedure is completed.] Once the compression has been performed, contrast media is injected and an image is taken to check for any change in the arteries. Following this, the catheter is removed and the procedure is completed.

Example:

Procedure: PTCA of proximal-mid left anterior descending artery and obtuse marginal with insertion of a drug-eluting stent of the proximal-mid left anterior descending (LAD) coronary artery

Description of Procedure: The patient was brought to the procedure room and prepped and draped in the sterile fashion. The right femoral artery was accessed and a French guide catheter and wire were used. Immediately after the origin of the large diagonal branch, there was about 80% LAD disease. Mid and distal LAD otherwise appeared to be unremarkable.

1. The obtuse marginal revealed only minimal disease requiring only angioplasty which was accomplished by balloon which was positioned and inflated to 6 atmospheres for 15 seconds and then deflated.
2. A drug-eluting stent was deployed to the proximal-mid LAD, covering the entire moderately diseased proximal site and post dilator with balloon up to 15 atmospheres. This resulted in a fully deployed stent with no evidence of dissection, thrombosis or distal embolization.

Guide catheter and wires were removed. Left femoral arterial sheath was removed. Patient tolerated procedure well.

What does the coder need to know to code a PTCA?

- The root operation is a Dilation
- The body part being dilated is coronary arteries
- How many coronary arteries are being dilated
- What is the approach?
- Is a stent (device) being used?
 - Is every artery being treated receiving a stent?
 - Is the stent drug eluting or non-drug eluting?
- Is the procedure being performed on a bifurcation?

Example Part 1:

The obtuse marginal revealed only minimal disease requiring only angioplasty which was accomplished by balloon which was positioned and inflated to 6 atmospheres for 15 seconds and then deflated. **02703ZZ**

ICD-10-PCS Index

Dilation

Artery

Coronary

Four or More Sites **0273**

One Site **0270** ←

Three Sites **0272**

Two Sites **0271**

ICD-10-PCS Tabular

Section	0 Medial and Surgical		
Body System	2 Heart and Great Vessels		
Operation	7 Dilation: Expanding an orifice or the lumen of a tubular body part		
Body Part	Approach	Device	Qualifier
0 Coronary Artery, One Site ← 1 Coronary Artery, Two Sites 2 Coronary Artery, Three Sites 3 Coronary Artery, Four or More Sites	0 Open ← 3 Percutaneous ← 4 Percutaneous Endoscopic	4 Intraluminal Device, Drug-eluting ← D Intraluminal Device T Intraluminal Device, Radioactive Z No Device ←	6 Bifurcation ← Z No Qualifier ←

Example Part 2:

A drug-eluting stent was deployed to the proximal-mid LAD, covering the entire moderately diseased proximal site and post dilator with balloon up to 15 atmospheres. This resulted in a fully deployed stent with no evidence of dissection, thrombosis or distal embolization. **027034Z**

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Final codes for "PTCA of proximal-mid left anterior descending artery and obtuse marginal with insertion of a drug-eluting stent of the proximal-mid left anterior descending (LAD) coronary artery"

- Angioplasty of the obtuse marginal coronary artery: **02703ZZ**
- Angioplasty of the proximal-mid left anterior descending (LAD) coronary artery with drug eluting stent: **027034Z**

Note: The coder must be guided by documentation in the medical record of each individual case to make the correct code selections.