

Vascular Embolization and Occlusion Procedures

CPT® Assistant.

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In April 2010, the American Medical Association (AMA)/Specialty Society Relative Value Scale (RVS) Update Committee (RUC) Relativity Assessment Workgroup recommended that a new Current Procedural Terminology (CPT®) code be established to bundle embolization surgical code 37204, Transcatheter occlusion or embolization (eg, for tumor destruction, to achieve hemostasis, to occlude a vascular malformation), percutaneous, any method, non-central nervous system, non-head or neck), with radiological supervision and interpretation code 75894, Transcatheter therapy, embolization, any method, radiological supervision and interpretation, and code 75898, Angiography through existing catheter for follow-up study for transcatheter therapy, embolization or infusion, other than for thrombolysis. A review by the Centers for Medicare and Medicaid Services (CMS) determined that these codes were reported together more than 75% of the time.

This article addresses the four new CPT codes established to report bundled vascular embolization and occlusion procedures and the guidelines for their use. We will also discuss the deletion of the existing surgical code (37204) and the deletion of code 37210, Uterine fibroid embolization (UFE, embolization of the uterine arteries to treat uterine fibroids, leiomyomata), percutaneous approach inclusive of vascular access, vessel selection, embolization, and all radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance necessary to complete the procedure, as these services are now reported with a code in the new family of embolization codes (see code 37243).

Why Embolization?

The purpose of embolization is to block, reduce, or arrest blood flow to an area of the body with an endovascular abnormality (eg, a tumor). An embolization procedure is a minimally invasive intravascular alternative to surgery. Embolization may be performed in various organs of the body for a wide variety of medical conditions including but not limited to arteriovenous malformations, peripheral vascular aneurysms, uterine fibroids, kidney and liver lesions and neoplasms, gastrointestinal hemorrhage, scrotal varices, osseous neoplasms, dialysis shunts, and trauma of the spleen, liver, kidney, or pelvis. Although this list of examples is extensive, it is not exhaustive. There are many other reasons why embolization may be performed.

CPT codes 37241-37244 were created to describe vascular embolization and occlusion procedures. Arteries, veins, and lymphatics may all be the target of this service. Once the vessel to be occluded is selected, the embolization material (eg, coils, microscopic particles, plugs, or foam) is introduced to deliberately block the vessel, thus decreasing the blood flow to the tissues beyond the induced blockage. Images are then taken to ensure that the deployment and occlusion endpoint were successful.

Coding Tip

When reporting embolization codes 37241-37244, code(s) for catheter placement(s) and diagnostic examinations may be separately reported using the appropriate diagnostic angiography codes with an appropriate modifier appended (eg, modifier 59).

37241

Vascular embolization or occlusion, inclusive of all radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance necessary to complete the intervention; venous, other than hemorrhage (eg, congenital or acquired venous malformations, venous and capillary hemangiomas, varices, varicoceles)

▶(For sclerosis of veins or endovenous ablation of incompetent extremity veins, see 36468-36479)◀

▶(Do not report 37241 in conjunction with 36468, 36470, 36471, 36475-36479, 75894, 75898 in the same surgical field)◀

Code 37241 is reported for vascular venous embolization of conditions other than hemorrhage. Examples include embolization of venous malformations, capillary hemangiomas, varicoceles, visceral varices, and side branch(es) of an outflow vein from a hemodialysis arteriovenous fistula.

37242

arterial, other than hemorrhage or tumor (eg, congenital or acquired arterial malformations, arteriovenous malformations, arteriovenous fistulas, aneurysms, pseudoaneurysms)

▶(For percutaneous treatment of extremity pseudoaneurysm, use 36002)◀

Code 37242 is reported for arterial embolization of conditions other than hemorrhage or tumor such as arteriovenous malformations and fistulas (congenital or acquired), aneurysms,

and pseudoaneurysms.

 37243

for tumors, organ ischemia, or infarction

Code 37243 is reported for the purpose of embolization for tissue ablation and organ infarction or ischemia. Conditions treated include benign or malignant tumors of the liver, kidney, uterus (eg, uterine fibroid), or other organs.

Coding Tip

When chemotherapy is given as part of an embolization procedure, additional codes (eg, 96420) may be separately reported. Also, when a radioisotope (eg, Yttrium-90) is injected as part of an embolization, additional codes (eg, 79445) may be separately reported.

 37244

for arterial or venous hemorrhage or lymphatic extravasation

▶(Do not report 37242-37244 in conjunction with 75894, 75898 in the same surgical field)◀

▶(For embolization procedures of the central nervous system or head and neck, see 61624, 61626, 61710)◀

Code 37244 is reported for embolization in the treatment of hemorrhage or vascular or lymphatic extravasation. Examples include embolization performed for management of gastrointestinal bleed, trauma-induced hemorrhage of the viscera or pelvis, embolization of the thoracic duct for chylous effusion, bronchial artery embolization for hemoptysis, and embolization of the uterine arteries for management of hemorrhage (eg, postpartum hemorrhage).

A surgical field is defined as the area immediately surrounding and directly involved in a treatment/procedure. Only one embolization code should be reported for each surgical field. The following examples represent uses of the new embolization codes where a surgical field can determine the number of embolization codes that should be reported.

- Embolization of one or more venous side branches in a single arm for a patient with a dialysis arteriovenous fistula (one surgical field) would be reported only once per

session with code 37241.

- Embolization of multiple renal artery branches in a trauma case (one surgical field) would be reported once with code 37242.
- Embolizations of a liver tumor with 2 separate lesions that have been unresponsive to chemotherapy (two surgical fields) would be reported with code 37243 for the first lesion and code 37243 with modifier 59 appended to the code for the second lesion to indicate that this lesion is separate and distinct from the first lesion.
- Pelvic embolization for trauma resulting from a motorcycle accident in which bilateral internal iliac artery embolization is performed (one surgical field) would be reported once with code 37244.
- Embolization procedures performed at a single patient encounter and involving multiple surgical fields (eg, a patient with poly-trauma with bleeding from the pelvis and the spleen) may be reported with multiple embolization codes with the appropriate modifier (eg, modifier 59).
- In embolization, different organs are typically different surgical fields. In some cases, the same organ may consist of more than one surgical field, such as a metastatic liver tumor, where two specific lesions (eg, in the right and left lobe) are targeted for embolization and are located in separate surgical fields.

Coding Tip

If the physician performs the clinical staff activities, his or her time may be counted toward the required clinical staff time to meet the elements of the appropriate coordination/management of care CPT code.

- The complex care coordination office/practice must have the following capabilities:
- provide 24/7 access to physicians, other qualified health care professionals, or clinical staff;
- use a standardized methodology to identify patients who require chronic complex care coordination services;
- have an internal care coordination process/function whereby a patient identified as meeting the requirements for these services starts receiving them in a timely manner;
- use a form and format in the medical record that is standardized within the practice; and
- be able to engage and educate patients and caregivers as well as coordinate care among all service professionals, as appropriate, for each patient.

Coding Tip

Code 75894 may continue to be reported in conjunction with CPT code 61624, Transcatheter permanent occlusion or embolization (eg, for tumor destruction, to achieve hemostasis, to occlude a vascular malformation), percutaneous, any method; central nervous system (intracranial, spinal cord), code 61626, Transcatheter permanent occlusion or embolization (eg, for tumor destruction, to achieve hemostasis, to occlude a vascular malformation), percutaneous, any method; non-central nervous system, head or neck (extracranial, brachiocephalic branch), and code 61710, Surgery of aneurysm, vascular malformation or carotid-cavernous fistula; by intra-arterial embolization, injection procedure, or balloon

catheter.

Coding Tip

Vascular embolization and occlusion procedures (37241-37244) include:

- all associated radiological supervision and interpretation;
- intra-procedural guidance and road mapping;
- imaging necessary to document completion of the procedure; and moderate sedation.

Vascular embolization and occlusion procedures (37241-37244) **do not** include:

- vessel selection(s) and catheter placement(s);
- ultrasound guidance for vascular access;
- diagnostic studies (eg, diagnostic angiography or venography);
- chemotherapy administration (eg, 96420); or
- injection of a radioisotope (eg, 79445).

Questions and Answers

Question: When there are several overlapping indications for an embolization procedure, how do you decide which embolization code to report?

Answer: The code for the immediate indication for the embolization should be selected and only a single code from this series may be reported per patient session/encounter. For instance, if the immediate cause for embolization is bleeding in a patient with an aneurysm, code 37244 would be reported.

Question: When an embolization procedure is performed and an intravascular stent is used in the procedure (eg, 37205), is a CPT code reported for both the placement of the stent and the embolization procedure?

Answer: No. Depending on the circumstances, either the embolization code or the stent code is reported. When a stent is placed for the purpose of providing a latticework for deployment of embolization coils (eg, for embolization of an aneurysm), the embolization code is reported, and not the stent code. However, if a stent is deployed as the sole management of an aneurysm, pseudoaneurysm, or vascular extravasation, the stent deployment code (eg, 37205) is reported, and not the embolization code.

Question: A patient with a dialysis arteriovenous fistula has embolization performed of several venous side branches (accessory veins) in a single arm. Would this be considered



embolization in multiple surgical fields?

Answer: No. Only one embolization code (37241) would be reported for this session. This is considered one surgical field. ♦