Coding Changes for 2018

An overview of changes to interventional CPT coding that you need to know for practicing in 2018.

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There are several coding changes for endovascular and interventional radiology services for 2018. The set of codes for endovascular repair of infrarenal abdominal aortic aneurysms and iliac aneurysms has been completely revised. There are additions and revisions to the set of codes describing percutaneous therapy for incompetent veins, and a new code has been added for percutaneous cryoablation of lung tumors. The codes for upper extremity angiography have also been revised. Lastly, a few existing codes have been revalued.

ENDOVASCULAR REPAIR OF THE ABDOMINAL AORTA AND ILIAC ARTERIES

This entire section of codes was updated and revised, resulting in the deletion of codes 34800–34806, 34285-6, 34900, 75952-4, and 0255T. Five existing codes were retained but revised (34812, 34820, 34833, 34834, 0254T), and 16 new codes were added. These changes were made to address concerns of Centers for Medicare & Medicaid Services/Relative Value Update Committee (RUC), with the existing codes captured by a screen identifying codes frequently reported together. This resulted in a requirement to take a new look at the codes. The specialty societies were instructed to review the codes to determine whether any of the services should be bundled, and the specialties took this opportunity to bring the code set in line with current clini-

cal practice. The codes for fenestrated endovascular aortic repair (FEVAR) were not changed by this revision.

Highlights of the New Coding Structure for the Endograft Placement Codes (34701–34708)

The new codes for placement of endografts are based on the anatomy treated rather than the type of device used. There are codes for aortic tube graft (34701, 34702), aortounilateral iliac graft (34703, 34704), aortobilateral iliac graft (34705, 34706), and ilioiliac graft (34707, 34708). Specifically, for aortobilateral iliac endografts, there is no longer a distinction between the use of a unibody device, modular bifurcated device with single docking limb, and modular bifurcated device with two docking limbs.

Additionally, there are codes specific for nonruptured aneurysms and acute aneurysm rupture, and indications have been specified for the endorepair codes. For the abdominal aorta, indications include aneurysm, pseudoaneurysm, penetrating ulcer, and traumatic disruption of the vessel. For iliac repair, indications include aneurysm, pseudoaneurysm, arteriovenous malformation, and traumatic disruption. Atherosclerotic stenosis of the aortic bifurcation is specifically excluded for use of these codes, even if treated with covered stents extending from the aorta into both iliac arteries.

Codes 34701–34712 and 0254T include all services typically performed when placing an endograft. Bundled services include:
- Planning and sizing.
- All fluoroscopic/angiographic imaging required for

SUMMARY OF THE NEW CODES

- New codes to describe the endovascular repair procedures (34701–34708)
- New codes for ancillary services at the time of initial repair and/or at delayed episode (34709–34712)
- New codes for vessel access services used for endorepair (34713–34716), plus revision of the existing codes for vessel access (34812, 34820, 34833, 34834)

the placement, including diagnostic angiography, roadmapping, cone-beam or three-dimensional rotational angiography, vessel sizing, and conclusion angiography, including runoff to the lower extremities when performed. The separate codes for radiologic supervision and interpretation for these procedures have been deleted, and there is no longer any means of reporting imaging separately.

- Percutaneous access of the vessel is included and not separately reported when performed through a sheath that is < 12 F. It is also not reported if performed through a sheath ≥ 12 F when a closure device is not used.
- All nonselective catheterizations are now included and not separately reported. This includes catheterization of the aorta from all entry sites. For instance, if the aorta is catheterized from both groins, the arm, and/or the iliac arteries, no additional coding is reported, as these services are included in the endovascular graft placement codes. Selective catheterizations are not included in the endograft placement codes, as selective catheterizations are not typically performed. An exception is code 0254T, endovascular placement of a bifurcated device placed at the common iliac bifurcation. Because this always requires selective catheterization of the hypogastric artery, selective catheter placement in the hypogastric artery is included in 0254T and is not separately reported.
- Placement of the endograft, including all maneuvers required to properly introduce, position, and secure the device(s).
- Placement of extensions/cuffs that end in the treatment zone.
- Angioplasty, stenting, or embolization within the treatment zone.

Services that are not bundled and that may be separately reported include:
- Percutaneous transluminal angioplasty/stenting/embolization outside of the treatment zone. Note that the definition for *treatment zone* is different than with the old coding structure (as explained later).
- Selective catheterization of branches of the aorta or iliacs. The exception (as previously described) is that selective catheterization of the hypogastric artery is included in code 0254T and is not separately reported with this code.
- Intravascular ultrasound.
- Any procedure for vessel access except percutaneous access with a sheath < 12 F or percutaneous access with a sheath ≥ 12 F but not requiring a closure device.
- Extensions beyond the target vessels for each device.
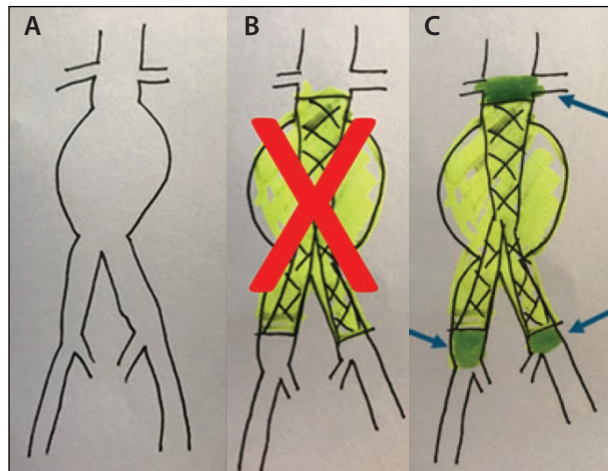- Placement of an enhanced fixation device(s).

Figure 1. An infrarenal abdominal aortic aneurysm (A). The old definition of target treatment zone included only the portions of vessel that contained the endograft (B); this definition is not valid for the new codes introduced in 2018. The new definition of treatment zone includes the entirety of each vessel treated with an endograft (C). This extends the treatment zone beyond the endograft anastomosis. For the aorta, the treatment zone extends to the renal origins. For the iliac arteries, the treatment zone extends to the origin of the external iliac arteries. The arrows point to the additional vessel segments included in the new definition of treatment zone.

The defined segment of vessel included in the treatment zone has changed. With the new codes, all treatment that is performed within the entirety of all vessels targeted for treatment is included in the endorepair codes. For the aorta, this includes the entire segment from the origins of the renal arteries to the aortic bifurcation, even if the device does not include this entire segment. For the iliac arteries, this treatment zone includes the entire vessel—typically the common iliac artery is treated, so the treatment vessel includes the entire common iliac artery to the external iliac origin. The entire common iliac artery is included in the treatment zone, even if the device lands well above the external iliac origin. With the previous set of codes, the target treatment zone was defined as any segment of vessel that was treated with the endograft (Figure 1).

This distinction is important for determining how to report ancillary services. Previously, any ancillary service provided outside the endograft could be separately reported. This has changed with the new set of codes. Now all angioplasty, placement of extension(s), and/or placement of noncovered stents anywhere in the vessel(s) treated is included and not separately reported. This is true regardless of whether these ser-
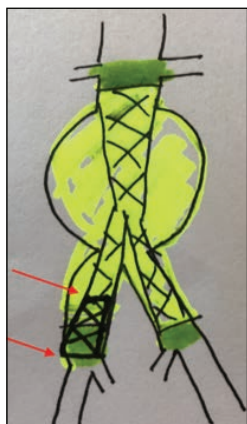
Figure 2. If a cuff is placed into the common iliac artery at the time of initial endorepair, no additional code is reported for the cuff placement. However, if this cuff is placed at a delayed encounter, it would be reported with 34710.

vices are performed before, during, or after endograft placement. For example, if the proximal anastomosis is below the renal arteries but a seal is not achieved, placement of a stent or an extension up to the level of the renal artery origin(s) to try to achieve a seal is included and not separately reported.

For the iliac arteries, any adjunctive angioplasty or stenting of the common iliac arteries is included and not separately reported, even if it is performed for stenosis or dissection beyond the landing zone of the endograft but still within the common iliac artery. Similarly, if extensions are required within the common iliac artery, those are included in the endograft placement codes and are not separately reported.

Highlights of the New Coding Structure for Ancillary Procedures (34709–34712)

There are separate codes for placement of extensions (cuffs) at the time of the initial endograft repair (34709) and for placement of extensions (cuffs) at a later episode of care (34710, 34711). If cuffs are placed at the time of the initial endorepair, only extensions placed outside the treatment zone are separately reported (see the previously mentioned definition for treatment zone, as it has changed from the old coding structure) (Figure 2). Extensions or cuffs placed outside the treatment vessels (ie, above the renal origins or below the external iliac origins) may be separately reported. One code is reported for each vessel treated with extensions (34709) (ie, code per vessel treated rather than per extension module placed).

If cuffs are placed at a separate encounter, the service may be reported, even if the extensions are placed within the original treatment zone (Figure 2). For instance, if an extension is placed into a common iliac artery to extend a device already in that common iliac artery, the extension may be reported (34710). If a second extension is then placed, extending the device into the external iliac artery, this is reported as a single extension and not as an additional cuff (ie, 34710). All

devices placed into the ipsilateral iliac would be reported as a single extension. If an extension is placed in the aorta and/or the contralateral iliac, that second/third vessel treated would be reported with the add-on code for an additional extension (34711). 34711 is reported only once, even if two additional vessels are treated with extensions.

If an enhanced fixation device is used, this service is separately reported at either the time of the endograft placement or when performed at a delayed encounter (34712). This code is reported once per encounter regardless of the number of enhanced fixation devices placed and the number of vessels treated with an enhanced fixation device.

The existing codes for iliac artery occlusion (34808) and placement of a femoral-femoral bypass graft at the time of an endorepair (34813) were not changed and remain valid. The lists of base codes for these two add-on codes will likely be updated in 2018 to capture any pertinent base codes that are missing.

Highlights of the New Coding Structure for the Vessel Access Codes (34713, 34812, 34714, 34820, 34833, 34834, 34715, 34716)

All of the access codes are now add-on codes and cannot be separately reported. The existing codes for femoral, iliac, and brachial open exposure were minimally revised to reflect the add-on status, but with no substantial change to the services described by codes 34812, 34820, 34833, and 34834.

A new code for percutaneous access has been added (34713). This is used for percutaneous access when the access includes a sheath ≥ 12 F and requires use of a closure device. Ultrasound guidance for puncture and/or closure of the vessel is included with code 34713 and is not separately reported. This code may also be used with FEVAR (codes 34841–34848) and with thoracic endovascular aortic repair (TEVAR) (codes 33880–33886). It is not to be used for placement of aortic or iliac stents for atherosclerotic stenotic disease (even if covered stents are placed), extracorporeal membrane oxygenation (ECMO), or transcatheter aortic valve replacement (TAVR), as access for vessels is already included in these service codes.

New codes were added for open femoral artery access with placement of a conduit (34714), open axillary/subclavian artery exposure (34715), and open axillary/subclavian artery exposure with placement of a conduit (34716). The access codes may be used with several services other than endovascular repair of abdominal aortic and iliac artery aneurysms. CPT includes lists of all services that these access codes may be reported with. These access codes may be used for FEVAR and TEVAR procedures. They should not be

reported with ECMO, TAVR, permanent aortic counterpulsation ventricular assistance device placement, or balloon angioplasty or stenting of vessels for atherosclerotic occlusive disease.

The codes for endorepair for an acute rupture (34702, 34704, 34706, 34708) should be used when there is an acute rupture requiring emergent repair. These codes are valued to include the additional work of performing the repair urgently and include the expected additional follow-up care required in the 90-day global period for these sicker patients. These codes all additionally include placement of a temporary occlusion balloon when performed. They are not to be used for chronic, contained ruptures, which are accurately described as "pseudoaneurysms." These codes may be used for treatment of an acute iliac or aortic rupture during balloon angioplasty or stenting. They are appropriate to use when the rupture creates hemodynamic instability due to active extravasation and the rupture is treated with a covered stent. It would not be appropriate to report these codes for covered stent placement for a subintimal or otherwise contained "rupture" of a vessel in a hemodynamically stable patient.

All of the codes for aortic and iliac endorepair may be reported with cosurgeon or assistant surgeon modifiers. The new and revised codes for 2018 are listed in the following section. Note that there are a few existing codes that were not deleted and are not included in this list.

●**34701** Endovascular repair of the infrarenal aorta by deployment of an aortoaortic tube endograft including preprocedure sizing and device selection, all nonselective catheterization(s), all associated radiologic supervision and interpretation, all endograft extension(s) placed in the aorta from the level of the renal arteries to the aortic bifurcation, and all angioplasty/stenting performed from the level of the renal arteries to the aortic bifurcation; for other than rupture (eg, for aneurysm, pseudoaneurysm, dissection, penetrating ulcer)

●**34702** for rupture including temporary aortic and/or iliac balloon occlusion, when performed (eg, for aneurysm, pseudoaneurysm, dissection, penetrating ulcer, traumatic disruption)

●**34703** Endovascular repair of infrarenal aorta and/or iliac artery(ies) by deployment of an aorto-uni-iliac endograft including preprocedure sizing and device selection, all nonselective catheterization(s), all associated radiologic supervision and interpretation, all endograft extension(s) placed in the aorta from the level of the renal arteries to the iliac bifurcation, and all angioplasty/stenting performed from the level of the renal arteries to the iliac bifurcation; for other than rupture (eg, for aneurysm, pseudoaneurysm, dissection, penetrating ulcer)

●**34704** for rupture including temporary aortic and/or iliac balloon occlusion, when performed (eg, for aneurysm, pseudoaneurysm, dissection, penetrating ulcer, traumatic disruption)

●**34705** Endovascular repair of infrarenal aorta and/or iliac artery(ies) by deployment of an aorto-bi-iliac endograft including preprocedure sizing and device selection, all nonselective catheterization(s), all associated radiologic supervision and interpretation, all endograft extension(s) placed in the aorta from the level of the renal arteries to the iliac bifurcation, and all angioplasty/stenting performed from the level of the renal arteries to the iliac bifurcation; for other than rupture (eg, for aneurysm, pseudoaneurysm, dissection, penetrating ulcer)

●**34706** for rupture including temporary aortic and/or iliac balloon occlusion, when performed (eg, for aneurysm, pseudoaneurysm, dissection, penetrating ulcer, traumatic disruption)

●**34707** Endovascular repair of iliac artery by deployment of an ilioiliac tube endograft including preprocedure sizing and device selection, all nonselective catheterization(s), all associated radiologic supervision and interpretation, and all endograft extension(s) proximally to the aortic bifurcation and distally to the iliac bifurcation, and treatment zone angioplasty/stenting, when performed, unilateral; for other than rupture (eg, for aneurysm, pseudoaneurysm, dissection, arteriovenous malformation)

●**34708** for rupture including temporary aortic and/or iliac balloon occlusion, when performed (eg, for aneurysm, pseudoaneurysm, dissection, arteriovenous malformation, traumatic disruption)

●**+34709** Placement of extension prosthesis(es) distal to the common iliac artery(ies) or proximal to the renal artery(ies) for endovascular repair of infrarenal abdominal aortic or iliac aneurysm, false aneurysm, dissection, penetrating ulcer, including preprocedure sizing and device selection, all nonselective catheterization(s), all associated radiologic supervision and interpretation, and treatment zone angioplasty/stenting, when performed, per vessel treated (list separately in addition to code for primary procedure)

●**34710** Delayed placement of distal or proximal extension prosthesis for endovascular repair of infrarenal abdominal aortic or iliac aneurysm, false aneurysm, dissection, endoleak, or endograft migration, including preprocedure sizing and device selection, all nonselective catheterization(s), all associated radiologic supervision and interpretation, and treatment zone angioplasty/stenting, when performed; initial vessel treated

●**+34711** each additional vessel treated

●**34712** Transcatheter delivery of enhanced fixation device(s) to the endograft (eg, anchor, screw, tack) and all associated radiologic supervision and interpretation

●**+34713** Percutaneous access and closure of femoral artery for delivery of endograft through a large sheath (12 F or larger), including ultrasound guidance, when performed, unilateral

▲**+34812** Open femoral artery exposure for delivery of endovascular prosthesis, by groin incision, unilateral

▲**+34820** Open iliac artery exposure for delivery of endovascular prosthesis or iliac occlusion during endovascular therapy, by abdominal or retroperitoneal incision, unilateral

▲**+34833** Open iliac artery exposure with creation of conduit for delivery of endovascular prosthesis or for establishment of cardiopulmonary bypass, by abdominal or retroperitoneal incision, unilateral

▲**+34834** Open brachial artery exposure for delivery of endovascular prosthesis, unilateral

●**+34714** Open femoral artery exposure with creation of conduit for delivery of endovascular prosthesis or for establishment of cardiopulmonary bypass, by groin incision, unilateral

●**+34715** Open axillary/subclavian artery exposure for delivery of endovascular prosthesis, by infraclavicular or supraclavicular incision, unilateral

●**+34716** Open axillary/subclavian artery exposure with creation of conduit for delivery of endovascular prosthesis or for establishment of cardiopulmonary bypass, by infraclavicular or supraclavicular incision, unilateral

▲**0254T** Endovascular repair of iliac artery bifurcation (eg, aneurysm, pseudoaneurysm, arteriovenous malformation, trauma, dissection) using bifurcated endograft from the common iliac artery into both the external and internal iliac artery, including all selective and/or nonselective catheterization(s) required for device placement and all associated radiologic supervision and interpretation, unilateral

PERCUTANEOUS TREATMENT OF INCOMPETENT VEINS

There are new codes for percutaneous ablation of incompetent extremity veins. The codes for venous sclerotherapy were revised. The new codes for percutaneous ablation of incompetent extremity veins include two codes for percutaneous ablation of a truncal vein using a chemical adhesive such as cyanoacrylate. 36482 describes treatment of the first truncal vein with chemical adhesive in a single extremity, and 36483 is an add-on code that describes treatment of any additional vein(s) in the same extremity with chemical adhesive at the same setting.

There are also two new codes to report when treating a truncal extremity vein with foam sclerosant to ablate the truncal vein. 36465 is reported when a single truncal vein is treated in a single extremity with noncompounded sclerosant, and 36466 is reported if multiple truncal veins are treated in the same extremity. The sclerotherapy codes for truncal veins do not follow the coding conventions for the other venous ablation codes (radiofrequency, laser, and mechanicochemical), where the initial vein treated is reported with a base code and all additional veins treated in the same leg reported with an add-on code. The new codes for sclerotherapy ablation of truncal veins follow the coding convention for sclerotherapy of superficial veins, where the first code describes a single vein treated and the second code is not an add-on code but is instead the base code when multiple veins are treated in the same extremity.

For all four of these new codes for venous ablation, all portions of the procedure are included in the base code. Ultrasound and fluoroscopic guidance, local anesthesia, catheterization, ablative maneuvers, and vessel closure are included. Application of compression stockings and/or compression dressing is also included.

For the codes 36465 and 36466, the service requires use of a noncompounded sclerosant and is specific to truncal veins (ie, great saphenous, small saphenous, accessory saphenous). Use of sclerosant in other extremity veins is reported with codes 36468, 36470, and/or 36471. A noncompounded sclerosant is one that is sold as a foam by the manufacturer and is not a foam created or altered by the physician, staff, or local pharmacy. If compounded foam sclerosant (eg, sclerosant that the physician, staff, or pharmacist makes into foam) is used to treat a truncal vein, code 36470 or 36471 would be reported. If sclerosant that is not foam is injected to treat truncal veins, code 36470 or 36471 would be reported. If the sclerosant is delivered via catheter/device into the vein in conjunction with maneuvers to mechanically disrupt the venous intima, codes 36473/36474 would be reported (codes 36473/36474 were introduced in 2017). If any vein other than a truncal vein is treated with foam sclerosant (included noncompounded foam sclerosant), code 36470 or 36471 would be reported.

● **36482** Endovenous ablation therapy of incompetent vein, extremity, by transcatheter delivery of a chemical adhesive (eg, cyanoacrylate) remote from the access site, inclusive of all imaging guidance and monitoring, percutaneous; first vein treated

●**+36483** subsequent vein(s) treated in a single extremity, each through separate access sites
●**36465** Injection of noncompounded foam sclerosant with ultrasound compression maneuvers to guide dispersion of the injectate, inclusive of all imaging guidance and monitoring; single incompetent extremity truncal vein (eg, great saphenous vein, accessory saphenous vein)
●**36466** multiple incompetent truncal veins (eg, great saphenous vein, accessory saphenous vein), same leg

The codes for venous sclerotherapy were updated for 2018. Codes 36470 and 36471 now specify that the vein(s) being treated are incompetent veins and are not telangectasia. Instead, use code 36468, which is specific for telangiectasia. These codes also were reviewed by RUC, and the work relative value units (wRVUs) for both 36470 and 36471 decreased in 2018 (Table 1).

▲ **36468** Injection(s) of sclerosant for spider veins (telangiectasia), limb or trunk

▲**36470** Injection of sclerosant, single incompetent vein (other than telangiectasia)

▲**36471** multiple incompetent veins (other than telangiectasia)

PERCUTANEOUS ABLATION OF PULMONARY TUMOR

There is a new category I code to report percutaneous cryoablation of pulmonary tumors (32994). The category III

TABLE 1. COMPARISON OF VALUES FOR REVISED CODES			
CPT Code	Descriptor	2017 wRVU	2018 wRVU
36468	Injection of spider veins	Not valued	Not valued
36470	Injection of incompetent vein (nonspider)	1.10	0.75
36471	Injection of multiple incompetent veins (nonspider)	1.65	1.50
Abbreviations: wRVU, work relative value unit.			

code previously used (0340T) has been deleted. The new code includes imaging guidance when performed (eg, CT, magnetic resonance, ultrasound, and/or fluoroscopy).

The existing code for percutaneous radiofrequency ablation of pulmonary tumor (32998) was modified. It now includes imaging guidance when performed. The imaging guidance codes (76940, 77013, 77002) should not be reported with either 32994 or 32998.

▲**32998**   Ablation therapy for reduction or eradication of one or more pulmonary tumor(s) including pleura or chest wall when involved by tumor extension, percutaneous, including imaging guidance when performed, unilateral; radiofrequency

     ●**32994**   cryoablation

UPPER EXTREMITY ANGIOGRAPHY

The old code 36120 (introduction of needle or intracatheter; retrograde brachial artery) and its companion radiologic supervision and interpretation code 75658 (angiography, brachial, retrograde, radiologic supervision and interpretation) were deleted.

The existing code 36140 was modified to specify its use in either upper or lower extremity arteries.

▲**36140**   Introduction of needle or intracatheter, upper or lower extremity artery

The deleted codes represented a service that has not been performed for many years and thus were obsolete. This led to confusion about what the codes were intended to describe. The original service involved placement of a needle or catheter retrograde into the brachial artery, with forceful retrograde injection to enhance and study the proximal subclavian, axillary, and brachial arteries. Elimination of these codes is intended to clarify the use of 36140 for nonselective catheterization of either an upper or lower extremity artery. 75710 (angiography, extremity, unilateral, radiological supervision and interpretation) is reported for a study of either an upper or lower extremity.

REVALUED CODES

As part of the continual process of maintaining an accurate code set, some codes are selected for reconsideration to be sure that the assigned wRVUs continue to accurately represent the service. For 2018, several codes pertinent to endovascular work were resurveyed by specialty societies and presented to RUC (Table 2). This resulted in a change in wRVUs for some codes. The existing value was reconfirmed for some of the codes that were resurveyed. ■

TABLE 2. COMPARISON OF VALUES FOR RESURVEYED CODES			
CPT Code	Descriptor	2017 wRVU	2018 wRVU
36215	First order selective arterial catheterization above diaphragm	4.67	4.17
36216	Second order selective arterial catheterization above diaphragm	5.27	5.27
36217	Third order selective arterial catheterization above diaphragm	6.29	6.29
36218	Each additional second/third order selective arterial catheterization above diaphragm	1.01	1.01
36555	Nontunneled CVC < 5 years old	2.43	1.93
36556	Nontunneled CVC ≥ 5 years old	2.50	1.75
36220	Arterial sampling	1.15	1.00
93503	Swan-Ganz catheter placement	2.91	2.00

Abbreviations: CVC, central venous catheter; wRVU, work relative value unit.

CONTACT US

If you have any questions or topics you would like Dr. Krol to address in a future column, please contact us at evteditorial@bmctoday.com.

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Disclosures: None.