

ERRATA for *Diagnostic & Interventional Cardiovascular Coding Reference* 2015 Edition

Text deletions are ~~crossed out~~. New text is **blue and bolded**. Ordered by appearance in text.

Page 41, Status Indicator I

Medicare uses another code for reporting of, and payment for, these services. Status indicator I is a commonly used indicator. It is most often used on HCPCS Level II codes describing supply items. It is also assigned to all the CPT Category II codes, as they are for performance monitoring and not payment. Code **99241** ~~92941~~ (office consultation) is assigned status indicator I.

Page 86, Coding Instructions

4. The ramus intermedius (RI) is an anatomical variant resulting from a trifurcation of the left main (normally there is a bifurcation of the left main into the LD and LC). Intervention in the ramus should be coded as a separate RI intervention. If interventions are performed in the LC, LD, and RI, all three are separately coded. Use vessel specific modifiers for coronary vessel interventions. ~~Add -59 modifier for duplicated base vessel interventional codes.~~

Page 88, Coding Instructions

19. ~~When the same base code is used to describe similar interventions in different vessels (e.g., stent in LD and stent in LC), it is recommended to add -59 modifier to one of the same base codes (e.g., 92928-LC, 92928-59LD).~~

Page 96, Coding Instructions

4. The ramus intermedius (RI) is an anatomical variant resulting from a trifurcation of the left main (normally there is a bifurcation of the left main into the LD and LC). Intervention in the ramus should be coded as a separate RI intervention. If interventions are performed in the LC, LD, and RI, all three are separately coded. Use vessel specific modifiers for coronary vessel interventions. ~~Add -59 modifier for duplicated base vessel interventional codes.~~

Pages 100-101, Example(s)

4) *Patient with known coronary artery stenosis in LC and ramus intermedius distribution. Guiding sheath is placed into the left main coronary artery, and measuring shots are obtained (no code). Variant anatomy of a small LD vessel with a ramus intermedius of moderate size is identified. Left circumflex is of moderate size. Stenoses in both ramus and circumflex arteries are identified. Both of these stenoses are treated with rotational atherectomy after placement of temporary pacing wire (no code for temporary pacemaker, as this is bundled in coronary intervention). Successful atherectomy is performed in both vessels (92924-LC, ~~92924-59RI~~, **92924-RI**). (The ramus is coded with the -RI modifier to represent intervention in a separate vessel in this variant anatomy.)*

6) *Patient with recurrent chest pain, three years status post coronary artery bypass grafting. Diagnostic coronary angiography is performed with placement of catheter into the native coronary arteries, three saphenous vein bypass grafts, as well as the left internal mammary artery. Contrast is injected and images obtained (93455-59). Native right coronary arterial occlusion is seen. One saphenous vein bypass graft to the LC is completely occluded. A second graft to a marginal artery demonstrates 90% proximal stenosis within the graft. This is treated with a drug-eluting stent (C9604-LC for hospital Medicare, 92937-LC for physicians). The right coronary artery bypass graft shows proximal 90% stenosis as well as distal anastomotic 70% stenosis. Distal stenosis is treated with a 3 mm balloon (bundled with proximal stent placement) and a drug-eluting **stent** in the proximal right coronary artery (~~C9604-59RC~~ **C9604-RC** for hospital Medicare, ~~92937-59RC~~ **92937-RC** for physicians). Internal mammary artery bypass graft to the LD remains patent.*

Page 108, Example(s)

1) Patient with abnormal nuclear stress test. Coronary angiography is performed via the right femoral approach. Selective right and left coronary angiography (93454-59) demonstrates lesions within the right coronary artery, left circumflex, and left anterior descending coronary artery of questionable significance. On the right side, a wave wire (intravascular Doppler) is performed with significant FFR identified (0.76) across questionable stenosis (93571-RC). For this reason, bare metal stent placement is performed (92928-RC). In the LAD, haziness is seen. An IVUS catheter is advanced and imaging shows a dissected plaque (92978-LD). A non-drug-eluting stent is placed at this location (~~92928-59LD~~ **92928-LD**). Follow-up IVUS shows excellent apposition of the stent to the arterial wall with 0% residual stenosis (no additional code for repeat study). IVUS in the LC (92979-LC) is unremarkable.

Page 155, Coding Instructions

7. It is possible after a completed Fontan procedure that a fenestration, or hole, needs to be created from a percutaneous approach with a transeptal needle to create a communication between the Fontan baffle and the common atrium. This fenestration provides a “pop-off” for blood to enter the heart when pressures are too high in the pulmonary arteries, liver, and/or Fontan baffle. The creation of this fenestration is similar to the procedure of an atrial septostomy. Consider code 92992 for fenestration creation **of a neoatrial septum (Fontan)** with a balloon. If the decision is made to stent open the fenestration, additionally report code 93799 for the fenestration stent placement.

Pages 266-267, Coding Instructions

3. Code 36147 includes the advancement of the catheter centrally into the SVC, IVC, or right atrium. It does not include selective vein branch procedures (e.g., for branch embolization use codes 36011/36012 **and** 37241 ~~and 75791~~ **in addition to code 36147**).
5. If there are two access sites into the fistula, followed by a diagnostic shuntogram (36147, 36148), and then a venous collateral is selected for embolization, ~~delete code 36148 and~~ add code 36011 or 36012 for this selective catheter placement.
15. **Do not** report code 36147 more than once for access and evaluation of an AV graft or shunt. Access into the shunt may be single or multiple, but this code may only be used once to describe access and imaging for a diagnostic study. Use code 36148 for additional direct access into an AV graft or shunt **for intervention**.
21. If a graft study via direct access is performed (36147) followed by selection of two branch veins for embolization, ~~delete code 36147 and~~ add codes 36011 **and** 36011-59 (**in addition to 36147**) ~~and 75791~~ to describe this procedure. Add embolization (37241) for venous embolization. This **Code 37241** bundles follow-up angiography.

Page 268, References

SIR Interventional Radiology Coding Update 2015, page 110

Page 277, Coding Instructions

7. Use code 75831 for unilateral left renal/**gonadal** venography when performed to evaluate for reflux into the ~~gonadal~~ **gonadal** vein or to identify collaterals that contribute to ovarian vein congestion syndrome **or varicocele**. This includes **selective** gonadal venography. Bilateral selective iliac (pelvic) venography is reported with code 75822.
8. ~~Use code 75822 for bilateral selective testicular venography when iliac venography is also performed. Use -52 modifier if selective iliac (pelvic) venography is not performed.~~
9. A specific code does not exist for selective right gonadal venography. This vessel arises directly off the cava and is a first order selective vessel (36011). ~~Imaging should be considered part of lower extremity venography. Add -52 modifier if iliac (pelvic) venography is not performed.~~ **There is no corresponding S&I code.**

10. Bilateral testicular vein (for varicocele) or bilateral ovarian vein (for pelvic congestion syndrome) embolization is coded as two separate embolizations (37241, 37241-59). These are considered two surgical fields and require two separate surgical approaches. The surgical procedure may be performed unilaterally. There is some debate concerning ovarian vein embolization at this time. Discuss with your payer to determine if bilateral ovarian/pelvic vein embolization should be coded as one or two embolization procedures.

Page 278, Example(s)

1) Male patient with infertility presents for varicocele evaluation. Via a transjugular route, a catheter is placed into the left renal vein and then is **with imaging showing an enlarged gonadal vein with reflux. The catheter is advanced into down the enlarged left gonadal vein (36012, 75831).** This is then injected with imaging including the pelvic veins (36012, 75820). Varicocele is identified and collaterals noted. Embolization with boiling contrast and coils is performed (37241). Follow-up venogram (bundled) shows no residual abnormality. (If bilateral varicoceles are treated, add codes 36011-59 and 37241-59 for the right side.)

Note: Code 36011 is added if right testicular vein is selected and imaged (75820 becomes 75822). Modifier -52 should be added to 75820/75822 if iliac venography not performed. If only left renal venography is performed to evaluate for reflux and collaterals, use code 75831.

Page 278, References

SIR Interventional Radiology Coding Update 2015, page 115

Pages 323-326, Coding Instructions

3. Code 37241 describes embolization to treat venous vascular abnormalities other than those due to venous insufficiency. This code can be used for treatment of esophageal or visceral varices due to portal hypertension, varicoceles, pelvis venous congestion syndrome, venous malformations (e.g., Klippel-Trenaunay syndrome, hemangiomas) by catheter or direct access technique, and to occlude competitive venous branches of a non-maturing AV dialysis fistula. This code also describes embolization of a venous abnormality (hemangioma) via a transcatheter arterial approach **and percutaneous treatment of lymphatic malformations.**
7. **Do not Use** venous embolization code 37241 for micro- or macrocytic lymphatic malformation treatment with direct access technique and alcohol or other medication injection. Per the **AMA (2014) SIR (2015)** this is best described by **unlisted code 38999 code 37241 and was the original intent of the code.**
8. When a stent is used as a lattice to facilitate a peripheral or visceral embolization procedure (e.g., wide-mouthed aneurysm), only report the CPT code for the embolization (e.g., 37242). When a **covered** stent is used as the sole treatment (e.g., stent for venous rupture, covered stent for gunshot wound to subclavian artery), report the appropriate stent code (37238 or 37236, respectively) instead of code 37244. If both coils and a stent are placed to embolize a single site, only submit the appropriate embolization code (37241-37244), not a stent code.
12. Do code at least one **for two** embolization procedures (37241 x 2) if **both the pelvic veins and the central veins (proximal ovarian veins near the level of the renal veins) are embolized** bilateral ovarian vein/pelvic vein embolizations for complex pelvic venous congestion syndrome are performed in the female. **This is new guidance from the SIR (2015).** This remains a grey zone that is under discussion. It may be appropriate to code two embolizations in the case of truly bilateral embolizations. Discuss with payer.
13. If only one side is treated for **embolized for treatment of** varicocele or pelvic venous congestion syndrome, only code one embolization procedure (37241). Do code all diagnostic venography and catheter placements as documented.

23. Use code 37243 to describe embolization for treatment of benign prostatic hypertrophy (BPH). This is similar to fibroid embolization and is used to “shrink” the overall size of the prostate in men with urinary retention symptoms secondary to BPH. ~~This procedure may be considered experimental.~~ Discuss with your payer.

Pages 328-329, Example(s)

4) Patient with clotted AV dialysis fistula. Two punctures: one for diagnostic imaging and the other for therapeutic intervention (36147, 36148); shuntogram including all imaging necessary to evaluate the arterial inflow, the AV fistula, and venous outflow to the right atrium (included in 36147); and thrombectomy of the fistula (36870) show no evidence of stenosis, but a poorly developed fistula due to two large collaterals. Both collaterals are selected (~~add~~ 36011, 36011-59 ~~delete 36148~~) and embolized with coils (37241). Follow-up angiography (bundled) shows improved flow in the shunt.

6) Thirty-eight year old female with severe symptoms of pelvic venous congestion syndrome. From a right femoral vein approach, a catheter is advanced into the right ovarian (36011-59), left renal, and the left ovarian veins (36012). Contrast is injected and imaging performed (75833-59). These images show renal vein reflux into massively dilated venous structures supplying numerous pelvic varicosities on the left side. Embolization with foam and coils is performed ~~on the left side~~ **bilaterally in the pelvis** (37241). The catheter is then used to select the right (36011-59) and left internal iliac veins with venography performed (75822-59). Three enlarged branches off the left internal iliac (36012-59 x 3) are selected and embolized (no additional codes). Follow-up imaging (bundled) shows marked improvement. (If the ~~right pelvic branches and~~ **central** ovarian vein(s) ~~is/are~~ embolized, add ~~-50 modifier to~~ code 37241-59.)

Page 330, References

SIR Interventional Radiology Coding Update 2015, pages 110 & 115

Page 358, Coding Instructions

The following should be added as a brand new coding instruction following instruction #14:

15. If both a stenosis (occlusive disease) and an aneurysm (non-occlusive disease) are treated with stents in a single vessel, only submit a code for the primary indicated procedure (e.g., only one stent in the femoral/popliteal territory can be submitted, either code 37226 for stenosis or 37236 for aneurysm).

Page 359, Coding Instructions

The following should be added as a brand new coding instruction following instruction #4:

5. Code 37236 describes stent placement in the right brachiocephalic artery when placed via a right retrograde brachial approach.

Page 362, Example(s)

5) Patient with right carotid bifurcation stenosis on MRI. Via a right transfemoral approach, a catheter is placed in the right common carotid artery, and a diagnostic angiogram is performed (catheter placement imaging and follow-up are bundled into the carotid stent code). The stenosis is confirmed, and a filter wire/stent deployment device successfully crosses the lesion. The filter is deployed, followed by the stent (37215) and subsequent dilation with a balloon. Both the filter and balloon are removed. Follow-up angiography shows excellent placement.

Note: Ipsilateral imaging, catheter placement, angioplasty, stenting, and follow-up angiography are bundled into the carotid stenting codes. **Cervicocerebral arch imaging (36221) may be submitted if diagnostic and not previously performed.**

Page 371, Coding Instructions

The following should be added as a brand new coding instruction following instruction #53:

54. If stent grafts are placed for treatment of both stenosis and aneurysm in the same vessel, only submit the code for the primary indication (e.g., either code 37226 for fem-pop stenosis or code 37236 for fem-pop an-

eurysm, but not both).

Page 381, Coding Instructions

24. Use code 37236 for percutaneous or open stent placement in the right subclavian or left subclavian arteries **or the brachiocephalic artery via a retrograde right brachial approach**. Use code 37217 for retrograde right brachiocephalic or common carotid artery stent placement via carotid cutdown. Use code 37218 for antegrade right brachiocephalic or common carotid artery stent placement (usually femoral or **left** brachial approach). Do not use these codes for cervical carotid, vertebral, coronary, or intracranial stents.

Page 382, Coding Instructions

The following should be added as a brand new coding instruction following instruction #31:

32. Use code 37236 for percutaneous or open retrograde stent placement in the right brachiocephalic artery via a right brachial access. Do code the imaging and catheter placement in addition to code 37236.

35. The Pipeline, Surpass, and FRED embolization devices are used for transcatheter permanent occlusion to treat similar wide-mouthed intracranial aneurysms. We have recommended using code 61624, even though they are similar in appearance to a stent. **These devices are considered flow diverters, not covered stents.** The Pipeline device is FDA-approved as a new class of embolization devices. The Surpass and FRED devices are not FDA-approved at the time of writing this book. See updates on the web. ~~Due to new verbiage in the CPT Codebook regarding codes 37241-37244 and the use of “stents” to occlude an aneurysm, a grey zone has developed. If one considers these devices to be “embolization devices”, use code 61624. If considered “stents”, consider use of code 61635. This issue should be discussed with your payer.~~

Page 385, Example(s)

8) *Patient with bilateral proximal vertebral and left common carotid origin stenosis on recent angiogram presents for multiple stenting. Preliminary angiography confirms these lesions (no code). Stents are then placed successfully in all three vessels via a transfemoral percutaneous route (0075T, 0076T, 37218) without complication.*

Note: All preliminary angiography, catheter placements, angioplasty, stent deployment, and follow-up imaging are bundled. These are still inpatient-only status indicator C procedures. Use code 37217 when common carotid stent procedure is performed via open carotid retrograde access, **and use code 37236 when brachiocephalic stent procedure is performed via open or percutaneous retrograde right brachial access.**

Page 388, Example(s)

21) *Patient with dural AV fistula. Via a transfemoral approach, selective bilateral vertebral (36226-50) and bilateral CCA injections with cervical and cerebral imaging (36223-50) are performed. A catheter is advanced into the meningohypophyseal trunk off the left ICA (36228) and left (PCOM) posterior communicating artery (36228) with imaging. The left thyrocervical trunk (36218, 75774), two branches off this vessel (36218, 75774 x 2), and the **left** costocervical trunk (36218, 75774) are selected with imaging to further evaluate the fistula. The fistula is then embolized with coils and glue (61624, 75894). Follow-up shows occlusion (75898).*

Page 401, Coding Instructions

17. Report two AV shunt access codes (36147 and 36148) when access for diagnostic and therapeutic intervention performed. Code 36147 includes the access for diagnostic imaging while code 36148 is used to describe a second graft puncture for therapy. Code 36148 may be used more than once, although this would be uncommon. If a collateral vein is selected **for embolization**, change **add** code 36148 to 36011 **for each collateral selected and embolized**. If the SVC is reached with a catheter, there is no change in catheter placement codes. ~~If a collateral vein is selected with only one original access into the graft, delete code 36147 and add codes 36011/75791 (see the following coding instruction):~~

18. Do report embolization of collateral vein(s) (e.g., with coils) as one surgical site with codes 36011 x _ and 37241. **Selective venous catheter placements (36011) are reported in addition to** code 36147 (if the only access) would become 75791. If two accesses, keep code 36147 and delete code 36148. This is different from advancement of **If you place** a catheter into the native artery substantially away from the peri-anastomotic region, where you are allowed to report code 36215 in addition to 36147. (If the catheter is advanced further centrally into the aorta, catheter placement code 36215 remains the same and does not change to 36200.) In the case of **Similarly, when** venous branch selections **are made**, code 36011 **replaces is added to** 36147 or 36148 (and AV shunt imaging may need to be described by code 75791 when only one AV access is used).

Page 403, Example(s)

4) *Patient with slow maturation of an AV fistula. Single wall puncture of the venous outflow near the anastomosis is performed (36147). Fistulogram shows three collateral channels, preventing enlargement of the primary venous outflow. An 80% stenosis is seen in the basilic vein. Each collateral is selected (~~add 75791~~, 36011, 36011-59, 36011-59 ~~delete 36147~~) and embolized with a combination of 4-6 mm fiber coils (37241). Follow-up angiography (bundled) shows occlusion of the collaterals. Basilic venoplasty (35476, 75978) with a 6 mm balloon gives a good result. The existing tunneled central dialysis catheter is exchanged over a guide wire (36581) using fluoroscopic guidance (77001).*

Page 404, References

[SIR Interventional Radiology Coding Update 2015, page 110](#)

Page 422, Procedure

Another common location for arterial aneurysm is the popliteal artery. Code **37236 (arterial stent placement)** 37226 (femoral/popliteal stent placement) is recommended to describe placement of a stent graft across a popliteal aneurysm. Codes for treatment of an iliac bifurcation aneurysm with a bifurcated iliac stent graft device are available.

Page 461, Coding Instructions

7. During dual ICD generator replacement, if right ventricular and/or right atrial leads are placed as well, use codes 33233 **33241** and 33249.
17. There is no additional code if laser is required for removal of a lead. Consider using modifier -22 for physician billing. If TEE is used during lead removal to monitor for development of pericardial fluid (bleeding), modifier -52 for physicians and modifier -74 for hospitals should be added to the TEE code.

Page 540, Coding Instructions

6. Use code 93312-52 when transesophageal echocardiography is used to guide laser lead extraction during pacemaker or ICD procedures for physician billing. Hospitals use code 93312-74.