Four new codes describing thrombolysis went into effect on January 1, 2013. These new codes bundle the surgical and the radiological supervision and interpretation portions of thrombolytic procedures but do not include the work of catheterizing and selecting the vessels to be treated. They also do not include any diagnostic imaging that may be required to diagnose the pathology and create a treatment plan for the individual patient. These codes also include the evaluation and management (E/M) work related to thrombolysis for that day of service (eg, dosing of lytic drug, phone calls to nursing staff, bedside assessments, pain management).

Only one thrombolysis code is reported per day for each surgical field treated. Per Current Procedural Terminology convention, a day of service is defined as one calendar date. The Centers for Medicare & Medicaid Services determined that each thrombolysis code may be reported only once per date. If more than one surgical field is treated, it may be covered if it can be reported as a bilateral procedure, using modifier -50 with a single lysis code (such as bilateral lower extremity deep venous thrombosis therapy). It is expected that if separate surgical fields (such as embolus to superior mesenteric artery and embolus to lower extremity) are treated, however, there will be denial of payment for the second surgical field.

A brief overview of these updated codes is shown in the New Thrombolysis Codes sidebar. This article provides clinical case examples to illustrate how to apply the codes in daily practice.

**CASE 1: ACUTE SYMPTOMATIC DVT**

Venography was performed from a left popliteal artery approach using ultrasound guidance, which showed occlusion of the left common femoral and iliac veins. A catheter was advanced into the inferior vena cava, and power-pulse administration of tissue plasminogen activator (tPA) was performed with the AngioJet system (Bayer HealthCare, Indianola, PA). The tPA was allowed to dwell at the site for 30 minutes, and follow-up angiography showed only minimal improvement. The entire segment was then treated with a 10-mm balloon in an attempt to further macerate the thrombus, but no antegrade flow was achieved.

An infusion catheter was placed across the entire area of thrombosis to infuse tPA overnight. Extensive patient care and infusion orders were written, and the patient was transferred to the intensive care unit (ICU). At 10:00 PM, the interventional radiologist was notified that the patient’s fibrinogen had decreased to 95 mg/dL and made appropriate changes to the infusion orders.

**Coding**

- 36010: Catheter placement into the IVC
- 75820: Unilateral extremity venography
- 76937: Ultrasound guidance puncture
- 37187: Mechanical thrombectomy with lytic drug
- 37212: Venous thrombolysis on the initial treatment day

No additional E/M reporting is used for the after-hours work because all E/M related to thrombolysis is included in the work described by 37212. Percutaneous transluminal angioplasty is not reported because the balloon was used for mechanical thrombectomy, not for treating an underlying stenosis.

**CASE 2: SECOND DAY OF LYTIC THERAPY**

For the same patient described in Case 1, a second day of lytic therapy was required. Follow-up angiography the next morning was performed through the infusion catheter/sheath, showing improvement. There was now a clearly defined tight stenosis observed in the common iliac vein, however. The patient was treated with stent placement; the stent was fully opened with a balloon.

Residual thrombus in the femoral segment was significantly impeding inflow, so the infusion catheter was replaced and positioned to deliver lytic drug to the residual thrombus, and lysis continued. The patient returned for imaging in the late afternoon, and his symptoms...
had significantly improved. Imaging showed good flow through the iliacs, with reasonable inflow, and lysis was stopped. Follow-up orders were written.

The patient experienced bleeding at the puncture site later in the evening, and the interventionist returned to the hospital to examine the patient, hold pressure, check lab work, and write additional orders.

**Coding**

• 37214 (lytic services on the final day of treatment) includes the work of all follow-up angiography, catheter repositioning/replacement, the decision to stop lytic therapy, removal of catheter/sheath and all E/M related to thrombolysis for the final day of lytic therapy. It is reported once, regardless of the number of times the patient was seen in the angiography suite. Even if no follow-up angiography or catheter exchange is performed on the final day of therapy, 37214 is reported once. The E/M of the patient’s late bleed is included in the work of 37214. (37213 would NOT be reported for services on the subsequent day because only one lysis code is reported for each calendar day. All E/M provided related to the lytic procedure is included in the lysis codes.)

• 37205, 75960 (stent placement) is reported, but venous angioplasty is not reported for postdilation of the stent.

**CASE 3: PATIENT WITH ACUTE COLD LEG**

A patient presented with an acute cold leg and was evaluated in the emergency department by an interventionist. He had a history of femoropopliteal bypass grafting, and his foot was pulseless and pale but had some residual motor and sensory function.

The patient was then taken to the angiography suite. Arterial access was achieved via the contralateral groin, with the catheter placed into the aorta at the level of the renal arteries and at the bifurcation for oblique views of the iliofemoral arteries. Selective catheterization of the contralateral common femoral artery was then performed to visualize the affected leg, which showed occlusion of the bypass graft.

It was decided to proceed with thrombolysis, and a sheath was placed at the right groin. Right lower extremity angiography was then performed. The contralateral graft was selected, and a wire was negotiated through the distal anastomosis. An infusion catheter and wire system was placed across the occluded segment, and thrombolytic infusion was started. Extensive patient care and infusion orders were written, and the patient was transferred to the ICU.

**Coding**

• 36247: Third-order selective catheter placed into the contralateral popliteal artery

<table>
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<tr>
<th>NEW THROMBOLYSIS CODES</th>
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<tr>
<td>• 37211: Arterial thrombolytic infusion, initial treatment day</td>
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<tr>
<td>• 37212: Venous thrombolytic infusion, initial treatment day</td>
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<tr>
<td>• 37213: Arterial or venous thrombolytic infusion, subsequent day (reported once per date, even if patient goes to the angiography lab for study/adjustment more than once)</td>
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<tr>
<td>• 37214: Cessation of thrombolysis, including removal of catheter and vessel closure (final day of thrombolytic administration); 37214 is not reported if lysis is completed on the same day that lysis is begun</td>
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<tr>
<td>• 75625/75716: Diagnostic abdominal aortography with bilateral lower extremity arteriography</td>
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<td>• 37211: Arterial thrombolysis on the initial day</td>
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An E/M code may be billed for the emergency department evaluation if criteria are met and documented for the E/M evaluation. Modifier -57 should be appended to this E/M code, indicating that the decision to treat was based on this E/M service. All subsequent E/M services provided on this date that are related to thrombolysis are not separately reported.

**CASE 4: FURTHER TREATMENT FOR ACUTE COLD LEG ON DAY 1**

The patient returned to the angiography suite 8 hours later. His leg was now warm and pink with a palpable foot pulse. Angiography showed that the graft now had antegrade flow, but there was a tight stenosis at the distal anastomosis, which was believed to be the underlying cause of the acute occlusion.

This stenosis was treated with balloon angioplasty, with good result. Lysis was stopped, and the sheath was removed.

**Coding**

• 37224: Popliteal artery angioplasty

Modifier -52 (reduced service) may be needed because code 37224 includes the work of selective catheterization of the popliteal artery, which has already been performed and reported with code 36247. Because this service was performed on the same day, it would also be appropriate to report 37224 without a modifier if 36247 is not reported separately for initial catheter placement for thrombolysis. 37214 (thrombolytic therapy on the final day of treatment) would not be reported because only one lysis code can be reported per calendar date.
If the patient returned to the angiography suite for follow-up imaging and angioplasty of the distal anastomotic stenosis the subsequent day (rather than the same day), 37214 would be reported with 37224.

**CASE 5: FURTHER TREATMENT FOR ACUTE COLD LEG ON DAY 2**

In an alternate scenario to Case 4, the patient stayed in the hospital until day 2 while undergoing thrombolytic therapy. Clinical examination showed no significant improvement in the appearance of the foot, and follow-up angiography was performed. The graft was open but with poor flow, and there was a new occlusion in the posterior tibial artery (the only outflow vessel) due to embolization of thrombus from the graft.

A large-bore catheter was advanced to the embolus and was used to remove the embolus with suction technique. The infusion catheter was then repositioned, and lysis was continued for an additional 6 hours to clear the graft of residual nonocclusive thrombus.

Follow-up angiography was performed late in the day and showed good flow with no residual thrombus. The patient had a palpable posterior tibial pulse, and the foot was warm and pink. The catheter was removed, and the arteriotomy was closed using a closure device. Orders were written, and the patient returned to the ICU.

The patient had a groin bleed 3 hours later, requiring additional compression. The physician was called and returned to the hospital to evaluate the patient. Additional orders were written, and the patient and nursing staff were given instructions.

**Coding**

- Code 37214 (final day of thrombolysis) would be reported once for all services related to thrombolysis for that day, including both sessions of follow-up angiography and subsequent replacement of the infusion catheter and reinstitution of thrombolytic infusion in the morning. This also includes the E/M service related to the postprocedure site complication. Code 37213 (subsequent day of thrombolysis) would not be reported because only one thrombolytic code is reported per day, and 37214 is always used on the final day of lytic therapy. If the groin complication had occurred after midnight, and the additional E/M work related to the groin bleed was provided after midnight, an additional E/M code may be reported.
- Code 37186 would be used to report the suction embolectomy.

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