

## Local Coverage Determination Coding Guidelines

### LCD Title

Dialysis Shunt Maintenance

### Contractor's Determination Number

CV027

### CMS National Coverage Policy

Title XVIII of the Social Security Act section 1862 (a)(1)(A). This section allows coverage and payment of those services that are considered to be medically reasonable and necessary.

Title XVIII of the Social Security Act section 1862 (a)(7). This section excludes routine physical examinations and services

Title XVIII of the Social Security Act, section 1833 (e) This section prohibits Medicare payment for any claim that lacks the necessary information for processing.

### NCD for Percutaneous Transluminal Angioplasty (PTA) (20.7)

Publication Number 100-3, Manual Section Number 20.7

Effective Date of this Version 12/2009 (PTA of arteriovenous dialysis fistulae and grafts).

### Federal Register, November 15, 2004 Final Rule

### Fed. Register: 11/25/91, p. 59540

*The use of a simple handheld or other doppler device that does not permit analysis of bi-directional flow, is considered part of the physical exam of the vascular system and is not separately reimbursable. Doppler procedures performed with zero-crossers (e.g. analog [strip chart recorders] analysis) are also included in the patient examination.*

### CMS Publication 100-02, Medicare Benefit Policy Manual, Chapter 11: End Stage Renal Disease (ESRD):

#### 20.1 - Noninvasive Vascular Studies for End Stage Renal Disease (ESRD) Patients (Rev. 1, 10-01-03) PM AB-03-01, PM-AB-01-129

*For dialysis to take place there must be a means of access so that the exchange of waste products may occur. As part of the dialysis treatment, ESRD facilities are responsible for monitoring access, and when occlusions occur, must either declot the access or refer the patient for appropriate treatment. Procedures associated with monitoring access include taking venous pressure, aspirating thrombus, observing elevated recirculation time, reduced urea reduction ratios, or collapsed shunt, etc. All such procedures are covered under the composite rate.*

*Non-invasive vascular studies such as duplex and Doppler flow scans are not covered as a separately billable service if used to monitor a patient's vascular access site. Medicare pays for the technical component of the procedure in the composite payment rate.*

*An ESRD facility must furnish all necessary services, equipment, and supplies associated with a dialysis treatment, either directly or under arrangements that make the facility financially responsible for the service. If an ESRD facility or a renal physician decides to monitor the patient's access site with a non-*

*invasive vascular study and does not have the equipment to perform the procedure, the facility or physician may arrange for the service to be furnished by another source. The alternative source, such as an independent diagnostic testing facility must look to the ESRD facility for payment.*

*Doppler flow studies may be considered appropriate in the presence of signs or symptoms of possible failure of the ESRD patient's vascular access site, and when the results are used in determining the clinical course of the treatment for the patient. Routine monitoring by noninvasive Doppler flow studies is not covered outside the composite rate; however, if there are signs and symptoms of medical problems, these procedures are separately payable.*

*When a dialysis patient exhibits signs and symptoms of compromise to the vascular access site, Doppler flow studies may provide diagnostic information that will determine the appropriate medical intervention. Medicare considers a Doppler flow study appropriate when the beneficiary's dialysis access site manifests signs or symptoms associated with vascular compromise, and when the results of this test are necessary to determine the clinical course of treatment.*

*Examples supporting the medical necessity for Doppler flow studies include:*

- a. Elevated dynamic venous pressure >200mm HG when measured during dialysis with the blood pump set on a 200cc/min.,*
- b. Access recirculation of 12 percent or greater,*
- c. An otherwise unexplained urea reduction ratio <60 percent, and*
- d. An access with a palpable "water hammer" pulse on examination, (which implies venous outflow obstruction).*

*Unless the documentation is provided supporting the necessity of more than one study, Medicare will limit payment to either a Doppler flow study or an arteriogram (fistulogram, venogram), but not both.*

*An example of when both studies may be clinically necessary is when a Doppler flow study demonstrates: Reduced flow (blood flow rate less than 800cc/min or A decreased flow of 25 percent or greater from previous study) and The physician requires an arteriogram to further define the extent of the problem.*

*The patient's medical record(s) must provide documentation supporting the need for more than one imaging study.*

*This policy is applicable to claims from ESRD facilities and all other sources, such as independent diagnostic testing facilities, and hospital outpatient departments.*

*The professional component of the procedure is included in the monthly capitation payment (MCP). The professional component is denied if billed by the MCP physician. Medically necessary services that are included or bundled into the MCP (e.g., test interpretations) are separately payable when furnished by physicians other than the MCP physician. The MCP physician is identified by the performing provider number that billed MCP services identified by the HCPCS code 90995.*

## **Medicare Claims Processing Manual**

### **Chapter 8 - Outpatient ESRD Hospital, Independent Facility, and Physician/Supplier Claims**

#### **140 - Monthly Capitation Payment Method for Physicians' Services Furnished to Patients on**

#### **Maintenance Dialysis; (Rev. 1456, Issued: 02-22-08, Effective: 03-24-08, Implementation: 03-24-08)**

**(Regulations from the above section specific to vascular access management.)**

**A. Services Included in Monthly Capitation Payment**

*The following physician services are included in the MCP:*

*Assessment and determination of which type of dialysis access is best suited for a given patient and arrangement for creation of dialysis access*

*Periodic assessment of the adequacy and function of the patient's dialysis access appropriate tests and antibiotic therapy.*

*Interpretations of the following tests:*

*Noninvasive vascular diagnostic studies of hemodialysis access (CPT codes 93925, 93926, 93930, 93931, and 93990);*

**B. Services Excluded from Monthly Capitation Payment**

*The following physician services furnished to the physician's ESRD patients are excluded from the MCP and should be paid in accordance with the physician fee schedule:*

*2. Surgical services such as:*

*Temporary or permanent hemodialysis catheter placement;*

*Repair of existing dialysis accesses;*

*Placement of catheter(s) for thrombolytic therapy;*

*Thrombolytic therapy (systemic, regional, or access catheter only; hemodialysis or peritoneal dialysis);*

*Thrombectomy of clotted cannula;*

**Medicare Claims Processing Manual**

**Chapter 8 - Outpatient ESRD Hospital, Independent Facility, and Physician/Supplier Claims**

**180 - Noninvasive Studies for ESRD Patients - Facility and Physician Services**

**(Rev. 1, 10-01-03) AB-01-189, AB-03-001**

*For Medicare coverage of noninvasive vascular studies, see the Medicare Benefit Policy Manual, Chapter 11.*

*For dialysis to take place there must be a means of access so that the exchange of waste products may occur. As part of the dialysis treatment, ESRD facilities are responsible for monitoring access, and when occlusions occur, either declot the access or refer the patient for appropriate treatment. Procedures associated with monitoring access involve taking venous pressure, aspirating thrombus, observing elevated recirculation time, reduced urea reduction ratios, or collapsed shunt, etc. All such procedures are covered under the composite rate.*

*ESRD facilities may not monitor access through noninvasive vascular studies such as duplex and Doppler flow scans and bill separately for these procedures. Noninvasive vascular studies are not covered as a separately billable service if used to monitor a patient's vascular access site.*

*Medicare pays for the technical component of the procedure in the composite payment rate.*

*Where there are signs and symptoms of vascular access problems, Doppler flow studies may be used as a means to obtain diagnostic information to permit medical intervention to address the problem. Doppler flow studies may be considered medically necessary in the presence of signs or symptoms of possible failure of the ESRD patient's vascular access site, and when the results are used in determining the*

*clinical course of the treatment for the patient. The only Current Procedural Terminology (CPT) billing code for noninvasive vascular testing of a hemodialysis access site is 93990. Carriers must deny separate billing of the technical component of this code if it is performed on any patient for whom the ESRD composite rate for dialysis is being paid, unless there is appropriate medical indication of the need for a Doppler flow study.*

*When a dialysis patient exhibits signs and symptoms of compromise to the vascular access site, Doppler flow studies may provide diagnostic information that will determine the appropriate medical intervention. Medicare considers a Doppler flow study medically necessary when the beneficiary's dialysis access site manifests signs or symptoms associated with vascular compromise, and when the results of this test are necessary to determine the clinical course of treatment.*

*Examples supporting the medical necessity for Doppler flow studies include:*

- a. Elevated dynamic venous pressure >200mm HG when measured during dialysis with the blood pump set on a 200cc/min.,*
- b. Access recirculation of 12 percent or greater,*
- c. An otherwise unexplained urea reduction ration <60 oercebtm abd*
- d. An access with a palpable —water hammer□ pulse on examination, (which implies venous outflow obstruction).*

*Unless the documentation is provided supporting the necessity of more than one study, Medicare will limit payment to either a Doppler flow study or an arteriogram (fistulogram, venogram), but not both. An example of when both studies may be clinically necessary is when a Doppler flow study demonstrates reduced flow (blood flow rate less than 800cc/min or a decreased flow of 25 percent or greater from previous study) and the physician requires an arteriogram to further define the extent of the problem. The patient's medical record(s) must provide documentation supporting the need for more than one imaging study.*

*This policy is applicable to claims from ESRD facilities and all other sources, such as independent diagnostic testing facilities, and hospital outpatient departments.*

*Carriers shall develop LMRP for Doppler flow studies if this service meets the criteria listed in the Medicare Program Integrity Manual, Chapter 1. This provides guidance to contractors on the scope, purpose, and meaning of LMRP.*

*The professional component of the procedure is included in the monthly capitation payment (MCP) (See §140 above.) The professional component should be denied for code 93990 if billed by the MCP physician. Medically necessary services that are included or bundled into the MCP (e.g., test interpretations) are separately payable when furnished by physicians other than the MCP physician. If the claim is denied, carriers report this on a remittance advice with group code —CO,□ and claim adjustment reason code 24, —Payment for charges denied. Charges are covered under a capitation agreement.*

*The Medicare Summary Notice denial message number is 16.32; —Medicare does not pay separately for this service.*

*Billing for monitoring of hemodialysis access using CPT codes for noninvasive vascular studies other than 93990 is considered a misrepresentation of the service actually provided and contractors will consider this action for fraud investigation. They will conduct data analysis on a periodic basis for noninvasive diagnostic studies of the extremities (including CPT codes 93922, 93923, 93924, 93925, 93926, 93930, 93931, 93965, 93970, 93971). Contractors should handle aberrant findings under normal program safeguard processes by taking whatever corrective action is deemed necessary*

**Program Memorandums: AB-00-44, AB-00-55, B-01-28, AB-01-129; AB-01-129.1**

- a. *Medicare Coverage of Non-Invasive Vascular Studies (93990) and Hemodialysis Flow Studies (90940), When Used to Monitor the Access Site of End Stage Renal Disease (ESRD) Patients.*

*Medicare pays for outpatient maintenance dialysis services furnished by ESRD facilities based on a composite payment rate. This rate is a comprehensive payment and includes all services, equipment, supplies, and certain laboratory tests and drugs that are necessary to furnish a dialysis treatment.*

*For dialysis to take place there must be a means of access so that the exchange of waste products may occur. As part of the dialysis treatment, ESRD facilities are responsible for monitoring access, and when occlusions occur, either declot the access or refer the patient for appropriate treatment. Procedures associated with monitoring access involve taking venous pressure, aspirating thrombus, observing elevated recirculation time, reduced urea reduction ratios, or collapsed shunt, etc. All such procedures are covered under the composite rate.*

*Non-invasive vascular studies are not covered as a separately billable service if used to monitor a patient's vascular access site. Medicare pays for the technical component of the procedure in the composite payment rate. ESRD facilities, monitoring access through non-invasive vascular studies such as duplex and Doppler flow scans, cannot bill separately for these procedures*

*An ESRD facility must furnish all necessary services, equipment, and supplies associated with a dialysis treatment, either directly or under arrangements that make the facility financially responsible for the service. If an ESRD facility or a renal physician decides to monitor the patient's access site with a non-invasive vascular study and does not have the equipment to perform the procedure, the facility or physician may arrange for the service to be furnished by another source. The alternative source, such as an independent diagnostic testing facility must look to the ESRD facility for payment. No separate payment for non-invasive vascular studies for monitoring the access site of an ESRD patient, whether coded as the access site or peripheral site, is permitted to any entity.*

- b. *Doppler Flow Studies (93990):*

*Where there are signs and symptoms of vascular access problems, Doppler flow studies may be used as a means to obtain diagnostic information to permit medical intervention to address the problem. Doppler flow studies may be considered medically necessary in the presence of signs or symptoms of possible failure of the ESRD patient's vascular access site, and when the results are used in determining the clinical course of the treatment for the patient. However, if the Doppler flow study is appropriate, then other diagnostic services, such as venography, would be considered duplicative services and would not be covered by Medicare.*

*The only Current Procedural Terminology (CPT) billing code for non-invasive vascular testing of a hemodialysis access site is 93990. Medicare will deny separate payment of the technical component of this code if it is performed on any patient for whom the ESRD composite rate for dialysis is being paid, unless there is appropriate medical indication*

*of the need for a Doppler flow study. See the policy on noninvasive vascular testing for further coverage information of this test.*

*When a dialysis patient exhibits signs and symptoms of compromise to the vascular access site, Doppler flow studies may provide diagnostic information that will determine the appropriate medical intervention. Medicare considers a Doppler flow study medically necessary when the beneficiary's dialysis access site manifests signs or symptoms associated with vascular compromise, and when the results of this test are necessary to determine the clinical course of treatment.*

*Examples supporting the medical necessity for Doppler flow studies include:*

- Elevated dynamic venous pressure >200mm HG when measured during dialysis with the blood pump set on a 200cc/min.,*
- Access recirculation of 12 percent or greater,*
- An otherwise unexplained urea reduction ratio <60 percent, and- an access with a palpable "water hammer" pulse on examination, (which implies venous outflow obstruction)*

*Unless the documentation is provided supporting the necessity of more than one study, Medicare will limit payment to either a Doppler flow study or an arteriogram,) (fistulogram, venogram), but not both.*

*An example of when both studies may be clinically necessary is when a Doppler flow study demonstrates reduced flow (blood flow rate less than 800cc/min or a decreased flow of 25% or greater from previous study) and the physician requires an arteriogram to further define the extent of the problem. The patient's medical record(s) must provide documentation supporting the need for more than one imaging study.*

*This policy is applicable to claims from ESRD facilities and all other sources, such as independent diagnostic testing facilities, and hospital outpatient departments.*

*The professional component of the procedure is included in the monthly capitation payment (MCP) (see '15060.1 of Medicare Carriers Manual, Part 3). The professional component will be denied for code 93990 if billed by the MCP physician. Medically necessary services that are included or bundled into the MCP (e.g., test interpretations) are separately payable when furnished by physicians other than the MCP physician.*

*Billing for monitoring of hemodialysis access using CPT codes for non-invasive vascular studies other than 93990 is considered a misrepresentation of the service actually provided.*

## **Coding Guidelines**

1. Claims reporting maintenance of malfunctioning dialysis shunts for patients with end stage renal disease (ESRD) should be coded with the appropriate CPT code(s)
2. CPT code 37201 may only be used for infusions as defined in the policy.
3. CPT codes 35475 and 35476 should not be reported on the same day for the graft alone since it is considered a single vessel for the purposes in this policy.

4. Intermittent boluses of anticoagulant or thrombolytic agents are integral to and included with percutaneous thrombectomy of a dialysis access (36870) and are not separately coded. However, if a thrombus is present outside the graft and requires separately identifiable thrombolytic therapy, this portion of the procedure would be separately coded using 37201 and 75896 plus the appropriate catheterization code(s). This therapy typically involves selection of the vessel, negotiation of an infusion catheter into the thrombus and prolonged infusion of the drug to dissolve the thrombus.  
Declotting by thrombolytic agent of implanted vascular access device or catheter (36593): This code reports declotting of completely implanted devices and catheters. This procedure necessitates the use of a thrombolytic agent (e.g., Urokinase) that is introduced through a syringe and then slowly instilled into the device or catheter. (This is generally considered to be a single bolus of thrombolytic agent.)  
This code is not to be used for routine flushing of vascular access devices with saline or heparin. This type of flushing is considered inclusive to dialysis services and is not reported separately.
5. Procedure codes 36831, 36832 and 36833 are open procedures and should not be reported when percutaneous procedures are performed.
6. CCI precludes the billing of certain combination of codes on the same date of service.
7. The following add-on codes must be reported in conjunction with the primary codes:
  - Procedure code 75964 must be used in conjunction with procedure code 75962.
  - Procedure code 36218 must be used in conjunction with procedure code 36217.
  - Procedure code 36248 must be used in conjunction with procedure code 36246 or 36247
  - Procedure code 36148 must be used in conjunction with procedure code 36147
8. Do not report 36870 with 36593  
Do not report 36838 in conjunction with 35512, 35522, 25523, 36832, 37607, 37618
9. Modifier LT or RT must accompany the appropriate CPT codes.

**Revision Effective date**  
07/16/2012

**Revision History**

06/01/2012 - This guideline is effective for J-8 providers in Michigan MAC B 07/16/12, Michigan MAC A 07/23/12, Indiana MAC A 07/23/12 and Indiana MAC B 08/20/12.