

## **Billing and Coding Guidelines**

### **Contractor Name**

Wisconsin Physicians Service Insurance Corporation

### **Contractor Number**

00951, 00952, 00953, 00954  
05101, 05201, 05301, 05401,  
05102, 05202, 05302, 05402, 52280

### **Title**

Billing and Coding Guidelines for Magnetic Resonance Angiography (RAD-023)

### **Original Effective Date**

04/15/2011

### **Revision Effective Date**

### **Text**

#### **Indications and Limitations of Coverage**

**Excerpt from CMS internet only Manual (IOM):  
NCD Pub 100-3 §220.2**

#### *A. General*

*Magnetic resonance angiography (MRA) is a non-invasive diagnostic test that is an application of magnetic resonance imaging (MRI). By analyzing the amount of energy released from tissues exposed to a strong magnetic field, MRA provides images of normal and diseased blood vessels as well as visualization and quantification of blood flow through these vessels.*

*Phase contrast (PC) and time-of-flight (TOF) are the available MRA techniques at the time these instructions are being issued. PC measures the difference between the phases of proton spins in tissue and blood and measures both the venous and arterial blood flow at any point in the cardiac cycle. TOF measures the difference between the amount of magnetization of tissue and blood and provides information on the structure of blood vessels, thus indirectly indicating blood flow. Two-dimensional (2D) and three dimensional (3D) images can be obtained using each method.*

*Contrast-enhanced MRA (CE-MRA) involves blood flow imaging after the patient receives an intravenous injection of a contrast agent. Gadolinium, a non-ionic element, is the foundation of all contrast agents currently in use. Gadolinium affects the way in which tissues respond to magnetization, resulting in better visualization of structures when compared to un-enhanced studies. Unlike ionic (i.e., iodine-based) contrast agents used in conventional contrast angiography (CA), allergic reactions to gadolinium are extremely rare. Additionally, gadolinium does not cause the kidney failure occasionally seen with ionic contrast agents. Digital subtraction angiography (DSA) is a computer augmented form of CA that obtains digital blood flow images as contrast agent courses through a blood vessel. The computer “subtracts” bone and other tissue from the image, thereby improving visualization of blood vessels. Physicians elect to use a specific MRA or CA technique based upon clinical information from each patient.*

#### *B. Nationally Covered MRI and MRA Indications*

#### *2. MRA (MRI for Blood flow)*

*\*Currently covered indications include using MRA for specific conditions to evaluate flow in internal carotid vessels of the head and neck, peripheral arteries of lower extremities, abdomen, and pelvis and the chest. Coverage is limited to MRA units that have received FDA premarket approval, and such units must be operated within the parameters specified for approval. In addition, the services must be reasonable and necessary for the diagnosis or treatment of the specific patient involved.*

a. *Head and Neck*

*Effective April 15, 2003, studies have proven that MRA is effective for evaluating flow in internal carotid vessels of the head and neck. However, not all potential applications of MRA have been shown to be reasonable and necessary. All of the following criteria must apply in order for Medicare to provide coverage for MRA of the head and neck:*

- *MRA is used to evaluate the carotid arteries, the circle of Willis, the anterior, middle or posterior cerebral arteries, the vertebral or basilar arteries or the venous sinuses;*
- *MRA is performed on patients with conditions of the head and neck for which surgery is anticipated may be found to be appropriate based on the MRA. These conditions include, but are not limited to, tumor, aneurysms, vascular malformations, vascular occlusion, or thrombosis. Within this broad category of disorders, medical necessity is the underlying determinant of the need for an MRA. Because MRA and CA perform the same diagnostic function, the medical records should clearly justify and demonstrate the existence of medical necessity; and*
- *MRA and CA are not expected to be performed on the same patient for diagnostic purposes prior to the application of anticipated therapy. Only one of these tests will be covered routinely unless the physician can demonstrate the medical need to perform both tests.*

b. *Peripheral Arteries of Lower Extremities*

*Effective April 15, 2003, studies have proven that MRA of peripheral arteries is useful in determining the presence and extent of peripheral vascular disease in lower extremities. This procedure is noninvasive and has been shown to find occult vessels in some patients for which those vessels were not apparent when CA was performed. Medicare will cover either MRA or CA to evaluate peripheral arteries of the lower extremities. However, both MRA and CA may be useful in some cases, such as:*

- *A patient has had CA and this test was unable to identify a viable run-off vessel for bypass. When exploratory surgery is not believed to be a reasonable medical course of action for this patient, MRA may be performed to identify the viable runoff vessel; or*
- *A patient has had MRA, but the results are inconclusive.*

c. *Abdomen and Pelvis*

- i. *Pre-operative Evaluation of Patients Undergoing Elective Abdominal Aortic Aneurysm (AAA) Repair*

*Effective July 1, 1999, MRA is covered for pre-operative evaluation of patients undergoing elective AAA repair if the scientific evidence reveals MRA is considered comparable to CA in determining the extent of AAA, as well as in evaluating aortoiliac occlusion disease and renal artery pathology that may be necessary in the surgical planning of AAA repair. These studies also reveal that MRA could provide a net benefit to the patient. If preoperative CA is avoided, then patients are not exposed to the risks associated with invasive procedures, contrast media, end-organ damage, or arterial injury.*

*ii.. Imaging the Renal Arteries and the Aortoiliac Arteries in the Absence of AAA or Aortic Dissection*

*Effective July 1, 1999, MRA coverage is expanded to include imaging the renal arteries and the aortoiliac arteries in the absence of AAA or aortic dissection. MRA should be obtained in those circumstances in which using MRA is expected to avoid obtaining CA, when physician history, physical examination, and standard assessment tools provide insufficient information for patient management, and obtaining an MRA has a high probability of positively affecting patient management. However, CA may be ordered after obtaining the results of an MRA in those rare instances where medical necessity is demonstrated.*

*d. Chest*

*i. Diagnosis of Pulmonary Embolism*

*Current scientific data has shown that diagnostic pulmonary MRAs are improving due to recent developments such as faster imaging capabilities and gadolinium-enhancement. However, these advances in MRA are not significant enough to warrant replacement of pulmonary angiography in the diagnosis of pulmonary embolism for patients who have no contraindication to receiving intravenous iodinated contrast material. Patients who are allergic to iodinated contrast material face a high risk of developing complications if they undergo pulmonary angiography or computed tomography angiography. Therefore, Medicare will cover MRA of the chest for diagnosing a suspected pulmonary embolism only when it is contraindicated for the patient to receive intravascular iodinated contrast material.*

*ii. Evaluation of Thoracic Aortic Dissection and Aneurysm*

*Studies have shown that MRA of the chest has a high level of diagnostic accuracy for pre-operative and post-operative evaluation of aortic dissection of aneurysm. Depending on the clinical presentation, MRA is used as an alternative to other non-invasive imaging technologies, such as transesophageal echocardiography and CT. Generally, Medicare will provide coverage only for MRA or for CA when used as a diagnostic test. However, if both MRA and CA of the chest are used, the physician must demonstrate the medical need for performing these tests.*

*While the intent of this policy is to provide reimbursement for either MRA or CA, CMS is also allowing flexibility for physicians to make appropriate decisions concerning the use of these tests based on the needs of individual patients. CMS anticipates, however, low utilization of the combined use of MRA and CA. As a result, CMS encourages contractors to monitor the use of these tests and, where indicated, requires evidence of the need to perform both MRA and CA.*

*Effective June 3, 2010 all other uses of MRI and MRA for which CMS has not specifically indicated coverage or non-coverage continue to be eligible for coverage through individual local contractor discretion.*

## **Coding Guidelines**

### **General Guidelines for claims submitted to Carriers or Intermediaries or Part A or Part B MAC:**

Procedure codes may be subject to National Correct Coding Initiative (NCCI) edits or OPPS packaging edits. Refer to NCCI and OPPS requirements prior to billing Medicare.

For services requiring a referring/ordering physician, the name and NPI of the referring/ordering physician must be reported on the claim.

A claim submitted without a valid ICD-9-CM diagnosis code will be returned to the provider as an incomplete claim under Section 1833(e) of the Social Security Act.

The diagnosis code(s) must best describe the patient's condition for which the service was performed. For diagnostic tests, report the result of the test if known; otherwise the symptoms prompting the performance of the test should be reported.

When submitting claims for MRAs done to evaluate for possible renal artery stenosis, ICD-9-CM code 401.0 should be used for "accelerated hypertension." When coding for "drug-resistant hypertension", the appropriate code will generally be 401.1.

ICD-9-CM diagnosis code V82.9 (Special screening of other conditions, unspecified condition) should be used to indicate a screening test performed in the absence of a diagnosis of a specific sign, symptom, or complaint.

### **For claims submitted to the carrier or Part B MAC:**

Physicians, non-physician professionals and other providers submitting claims to the carrier should use the following CPT codes to bill MRA services:

- MRA of chest - 71555
- MRA of abdomen - 74185
- MRA of peripheral vessels of lower extremities - 73725
- MRA of pelvis - 72198
- MRA of head and neck - 70544, 70545, 70546, 70547, 70548, 70549

ICD-9-CM diagnosis code V82.9 (Special screening of other conditions, unspecified condition) should be used to indicate a screening test performed in the absence of a diagnosis of a specific sign, symptom, or complaint.

Provider should be aware of the multiple procedure reduction of the technical component (TC) component of certain diagnostic imaging procedures, effective January 1, 2006. (Refer to Pub. 100-04, *Medicare Claims Processing Manual*, Transmittal 732, CR 4034.)

The diagnosis code(s) must best describe the patient's condition for which the service was performed.

Claims for Magnetic Resonance Angiography (MRA) services are payable under Medicare Part B in the following places of service:

- The global or technical components are payable in office (11) and independent clinic (49).
- The professional component is payable in office (11), inpatient hospital (21), outpatient hospital (22), or emergency room (23).

**For claims submitted to the fiscal intermediary or Part A MAC:**

Hospital Inpatient Claims:

- The hospital should report the patient's principal diagnosis in Form Locator (FL) 67 of the UB-04. *The principal diagnosis is the condition established after study to be chiefly responsible for this admission.*
- *The hospital enters ICD-9-CM codes for up to eight additional conditions in FLs 67A-67Q if they co-existed at the time of admission or developed subsequently, and which had an effect upon the treatment or the length of stay. It may not duplicate the principal diagnosis listed in FL 67.*
- For inpatient hospital claims, the admitting diagnosis is required and should be recorded in FL 69. (See CMS Publication 100-04, *Medicare Claims Processing Manual*, Chapter 25, Section 75 for additional instructions.)

Hospital Outpatient Claims:

- *The hospital should report the full ICD-9-CM code for the diagnosis shown to be chiefly responsible for the outpatient services in FL 67. If no definitive diagnosis is made during the outpatient evaluation, the patient's symptom is reported. If the patient arrives without a referring diagnosis, symptom or complaint, the provider should report an ICD-9-CM code for Persons Without Reported Diagnosis Encountered During Examination and Investigation of Individuals and Populations (V70-V82).*
- *The hospital enters the full ICD-9-CM codes in FLs 67A-67Q for up to eight other diagnoses that co-existed in addition to the diagnosis reported in FL 67.*

Providers subject to Outpatient Prospective Payment System (OPPS) submitting claims to the fiscal intermediary (FI) or Part A MAC should use the following HCPCS/CPT codes to bill MRA services:

- MRA of chest - C8909, C8910, C8911
- MRA of abdomen - C8900, C8901, C8902
- MRA of peripheral vessels of lower extremities - C8912, C8913, C8914
- MRA of pelvis - C8918, C8919, C8920
- MRA of head and neck - 70544, 70545, 70546, 70547, 70548, 70549

Providers not subject to OPPS submitting claims to the FI or Part A MAC should use the following HCPCS/CPT codes to bill MRA services:

- MRA of chest - 71555
- MRA of abdomen - 74185
- MRA of peripheral vessels of lower extremities - 73725
- MRA of pelvis - 72198
- MRA of head and neck - 70544, 70545, 70546, 70547, 70548, 70549

**Source**

NCD Pub 100-3 §220.2

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An asterisk (\*) indicates the most current revision.

NCDs are binding on all carriers, fiscal intermediaries, MAC Contractors, quality improvement organizations, health maintenance organizations, competitive medical plans, and health care prepayment plans. Under 42 CFR 422.256(b), an NCD that expands coverage is also binding on Medicare Advantage Organizations. In addition, an administrative law judge may not review an NCD. (See §1869(f)(1)(A)(i) of the Social Security Act.)

### **Revision History and Explanation**