

LCD for Interventional Cardiology (L26608)

Contractor Information

Contractor Name

Wisconsin Physicians Service Insurance Corporation

Contractor Number

05101, 05201, 05301, 05401

Contractor Type

MAC - Part A

LCD Information

LCD ID Number

L26608

LCD Title

Interventional Cardiology

Contractor's Determination Number

AMA CPT / ADA CDT Copyright Statement

CPT codes, descriptions and other data only are copyright 2009 American Medical Association (or such other date of publication of CPT). All Rights Reserved. Applicable FARS/DFARS Clauses Apply. Current Dental Terminology, (CDT) (including procedure codes, nomenclature, descriptors and other data contained therein) is copyright by the American Dental Association. © 2002, 2004 American Dental Association. All rights reserved. Applicable FARS/DFARS apply.

CMS National Coverage Policy

Title XVIII of the Social Security Act, section 1833 (e) prohibits Medicare Payment for any claim which lacks the necessary information to process the claim.

Title XVIII of the Social Security Act, section 1862 (a)(1)(A) excludes Medicare coverage for "items or services that are not reasonable and necessary for the diagnosis or treatment of illness or injury or to improve the functioning of a malformed body member."

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

42CFR 411.15 (a)(1) excludes coverage for routine physical check-ups and examinations performed for a purpose other than treatment or diagnosis of a specific illness, symptom, complaint, or injury.

- Medicare Benefit Policy Manual, Pub.100-2, Chapter 6, §70.4 for outpatient observation services

Oversight Region

Region I

Original Determination Effective Date

For services performed on or after 02/01/2008

Original Determination Ending Date**Revision Effective Date**

For services performed on or after 10/01/2009

Revision Ending Date**Indications and Limitations of Coverage and/or Medical Necessity**

Cardiac catheterization involves the introduction positioning and repositioning of catheter(s) and when necessary, recording intracardiac and intravascular pressure, acquiring blood samples for measurement of blood gases or dilution curves and cardiac output (e.g., Fick or other method) with or without rest and exercise studies. Cardiac catheterization may include in its work, electrode catheter placement and/or endomyocardial biopsy. Cardiac catheterization involves evaluation of a clinical condition with a report.

Right heart catheterization is a diagnostic study on the right side of the heart. Right heart catheterization is a component of right and left heart catheterization.

Heart catheterization includes the necessary pre- and post-operative care. The procedure includes accomplishing tasks like local anesthesia, introduction of needles or catheter(s), injection of contrast media or drugs accomplishing hemostatis by any method or device (i.e., percutaneous vascular closure devices (PVCD)).

Right heart catheterization is indicated to aid in the diagnoses of a clinical condition and medical decision-making concerning the therapeutic options for the condition. It is indicated only if comparable results cannot be obtained from non-invasive tests.

Right heart catheterization is useful in the evaluation of valvular heart disease, pulmonary hypertension, congenital heart disease, intracardiac shunts, and other conditions. Right heart catheterization may be indicated for the following diseases or findings:

- Abnormal right ventricular test(s)
- Angina unstable
- Atypical chest pain with the following characteristics:

1. abnormal stress test(s)
2. abnormal left ventricular function
3. coronary spasm suspected

- Cardiomyopathy
- Congenital heart disease
- Congestive heart failure secondary to either:

1. pulmonary hypertension
2. pulmonary interstitial disease

- Evaluation of heart or lung transplant
- Follow-up of heart transplant
- Intracardiac shunt
- Myocardial infarction with:

1. recurrent life threatening ventricular arrhythmia
2. heart failure
3. ventricular aneurysm
4. ruptured intraventricular septum
5. tricuspid regurgitation

- Pericardial tamponade
- Pericarditis constrictive
- Pulmonary artery hypertension
- Valvular heart disease

Reasons for Denial

There may be clinical reasons to perform right heart catheterization when a left heart catheterization is performed; the former is not indicated in all cases. Right heart catheterization will be denied as not medically necessary for indications other than those listed under “Indications and Limitations of Coverage.”

Other Comments

This LCD was developed in order to avoid frequent denials through provider education. Many right-heart catheterizations have been performed in the past using the following ICD-9-CM codes. Although this list is not all-inclusive, the following codes will no longer be paid. Codes other than those listed among section titled “ICD-9 Codes that Support Medical Necessity” will be denied.

- 410.10 Acute myocardial infarction of other anterior wall; episode of care unspecified
- 411.1 Other acute and subacute forms of ischemic heart disease; intermediate coronary syndrome
- 413.9 Other an unspecified angina pectoris
- 414.00 Coronary atherosclerosis; of unspecified type of vessel, native or graft
- 414.01 Coronary atherosclerosis; of native coronary artery
- 414.02 Coronary atherosclerosis; of autologous vein bypass graft
- 786.05 Shortness of breath
- 786.50 Chest pain, unspecified
- 786.59 Chest pain; other

Because of the statement of the American College of Cardiology and the Society for Cardiac Angiography and Interventions, that the additional information gained from right-heart catheterization in patients with suspected coronary artery disease and chest pain is minimal, the codes above would not fulfill the medical necessity requirement for coverage. Continued submission of right-heart catheterization procedures for these patients will result in a high rate of denial of reimbursement. This LCD is written to avoid those denials.

Cardiac catheterization and coronary angiography are the key means for assessing the function of heart ventricles and valves and the anatomy of coronary arteries, in order to render the most appropriate medical or surgical treatment or to determine the effectiveness of therapy for a heart condition.

Cardiac catheterization involves the passage of a catheter into the heart, usually from a peripheral blood vessel (e.g., femoral artery), and as indicated, recording intracardiac and intravascular pressures, injecting contrast material, obtaining samples for blood gas and cardiac output measurements, placing electrodes, and performing endomyocardial biopsy. Coronary angiography involves catheter placement within and then contrast material injection into coronary arteries. The conduct and evaluation of either or both of these procedures are then documented by the physician, in a report.

Left Heart Catheterization

Left heart catheterization and coronary angiography, performed separately or combined as appropriate, are indicated and so can be covered by Medicare principally when:

1. Noninvasive cardiac studies, such as routine ECG, exercise stress test, myocardial perfusion and cardiac blood pool imaging at rest and during stress, and echocardiogram suggest coronary artery disease (CAD), whether or not the angina or other symptoms associated with CAD are currently being experienced.
2. Medical (e.g., coronary vasodilator medication) or surgical (e.g., coronary angioplasty, coronary artery bypass grafting) treatment of CAD have unsuccessfully controlled angina or other symptoms associated with CAD.
3. Myocardial infarction (MI) is occurring secondary to CAD.
4. Cardiac arrest thought due to myocardial ischemia or infarction, secondary to CAD, has occurred.
5. Post-MI symptoms and noninvasive cardiac studies suggest the presence of persistent local myocardial ischemia or multivessel CAD, or the occurrence of a recurrent life-threatening ventricular arrhythmia, heart failure, ventricular aneurysm, ruptured interventricular septum, or mitral regurgitation due to MI.
6. Open heart surgery (e.g., repair of atrial septal defect, placement of aortic valve) is being considered, but angina and other symptoms, and noninvasive cardiac studies suggest that CAD could increase operative risk.
7. Major vascular surgery (e.g., repair of aortic aneurysm) is being considered, but angina and other symptoms, and noninvasive cardiac studies suggest that CAD could increase operative risk.
8. Noninvasive cardiac studies do not identify the cause, extent, or degree of left ventricular dysfunction or left heart failure.
9. A coronary artery anomaly (e.g., congenital coronary artery stenosis, anomalous origin of left coronary artery) is still suspected after a negative aortogram, or requires further definition.
10. The extent of coronary ostium involvement by a disease of the aorta is a factor that determines that management of the disease.
11. A congenital or acquired heart condition (e.g., ventricular septal defect, idiopathic hypertrophic subaortic stenosis, mitral insufficiency, intracardiac tumor) is being considered for surgical correction.
12. A cardiomyopathy or myocarditis is suspected.
13. An endocarditis requiring valvular surgical repair.
14. A transplanted heart is being assessed for rejection.
15. Unstable angina

Right Heart Catheterization

Right heart catheterization, performed along with left heart catheterization, coronary angiography, or both, is seldom medically reasonable and necessary unless one disease process appears to affect both sides of the heart, or a different disease process appears to affect each side of the heart. This procedure is indicated and is deemed medically necessary for the following reasons:

1. Post-MI symptoms and noninvasive cardiac studies suggest the occurrence of a recurrent life-threatening ventricular arrhythmia, heart failure, ventricular aneurysm, ruptured interventricular septum, or tricuspid regurgitation due to MI.
2. Noninvasive cardiac studies do not identify the cause, extent or degree of right ventricular dysfunction or right heart failure.
3. Pulmonary arterial system disease (e.g., pulmonary hypertension) is suspected.
4. A congenital or acquired heart condition (e.g., tricuspid stenosis, atrial septal defect, pseudoaneurysm) is being considered for surgical correction.
5. A cardiomyopathy or myocarditis is suspected.
6. An endocarditis requiring valvular surgical repair.

7. A transplanted heart is being assessed for rejection.

Right-Heart Catheterization During the Evaluation of Coronary Artery Disease

The routine use of right-heart catheterization in a patient whose symptoms and objective studies suggest coronary artery disease without associated mitral regurgitation or congestive heart failure is discouraged. The additional information gained from a right-heart catheterization in patients with chest pain and suspected coronary artery disease is minimal. Unless concomitant valvular heart disease, presumed pulmonary hypertension, intracardiac shunts, or other diagnoses are suspected, a routine right-heart catheterization should not be performed. If it is anticipated that knowledge of right-heart pressures and cardiac output would be helpful in patients with left ventricular dysfunction and provide information that would enhance the safety of the procedure or affect decision making afterward, right-heart catheterization is acceptable. 6

Coding Information

Bill Type Codes:

Contractors may specify Bill Types to help providers identify those Bill Types typically used to report this service. Absence of a Bill Type does not guarantee that the policy does not apply to that Bill Type. Complete absence of all Bill Types indicates that coverage is not influenced by Bill Type and the policy should be assumed to apply equally to all claims.

13x	Hospital-outpatient (HHA-A also) (under OPPTS 13X must be used for ASC claims submitted for OPPTS payment -- eff. 7/00)
14x	Non-Patient Laboratory Specimens
83x	Special facility or ASC surgery-ambulatory surgical center (Discontinued for Hospitals Subject to Outpatient PPS; hospitals must use 13X for ASC claims submitted for OPPTS payment -- eff. 7/00)
85x	Special facility or ASC surgery-rural primary care hospital (eff 10/94)

Revenue Codes:

Contractors may specify Revenue Codes to help providers identify those Revenue Codes typically used to report this service. In most instances Revenue Codes are purely advisory; unless specified in the policy services reported under other Revenue Codes are equally subject to this coverage determination. Complete absence of all Revenue Codes indicates that coverage is not influenced by Revenue Code and the policy should be assumed to apply equally to all Revenue Codes.

Contractors may specify Revenue Codes to help providers identify those Revenue Codes typically used to report this service. In most instances Revenue Codes are purely advisory; unless specified in the policy services reported under other Revenue Codes are equally subject to this coverage determination. Complete absence of all Revenue Codes indicates that coverage is not influenced by Revenue Code and the policy should be assumed to apply equally to all Revenue Codes.

036X	Operating room services-general classification
048X	Cardiology-general classification

CPT/HCPCS Codes

Bill types 13X and 14X require HCPCS coding on claims for the services covered by this policy. Providers should choose the appropriate code(s) from the list below when submitting claims to Medicare.

The following short descriptors are in accordance with the AMA copyright agreement. Please refer to the current CPT book for full descriptions.

93501	RIGHT HEART CATHETERIZATION
93508	CATHETER PLACEMENT IN CORONARY ARTERY(S), ARTERIAL CORONARY CONDUIT(S), AND/OR VENOUS CORONARY BYPASS GRAFT(S) FOR CORONARY ANGIOGRAPHY WITHOUT CONCOMITANT LEFT HEART CATHETERIZATION
93510	LEFT HEART CATHETERIZATION, RETROGRADE, FROM THE BRACHIAL ARTERY, AXILLARY ARTERY OR FEMORAL ARTERY; PERCUTANEOUS
93511	LEFT HEART CATHETERIZATION, RETROGRADE, FROM THE BRACHIAL ARTERY, AXILLARY ARTERY OR FEMORAL ARTERY; BY CUTDOWN
93514	LEFT HEART CATHETERIZATION BY LEFT VENTRICULAR PUNCTURE
93524	COMBINED TRANSSEPTAL AND RETROGRADE LEFT HEART CATHETERIZATION
93526	COMBINED RIGHT HEART CATHETERIZATION AND RETROGRADE LEFT HEART CATHETERIZATION
93527	COMBINED RIGHT HEART CATHETERIZATION AND TRANSSEPTAL LEFT HEART CATHETERIZATION THROUGH INTACT SEPTUM (WITH OR WITHOUT RETROGRADE LEFT HEART CATHETERIZATION)
93528	COMBINED RIGHT HEART CATHETERIZATION WITH LEFT VENTRICULAR PUNCTURE (WITH OR WITHOUT RETROGRADE LEFT HEART CATHETERIZATION)
93529	COMBINED RIGHT HEART CATHETERIZATION AND LEFT HEART CATHETERIZATION THROUGH EXISTING SEPTAL OPENING (WITH OR WITHOUT RETROGRADE LEFT HEART CATHETERIZATION)
93530	RIGHT HEART CATHETERIZATION, FOR CONGENITAL CARDIAC ANOMALIES
93531	

COMBINED RIGHT HEART CATHETERIZATION
AND RETROGRADE LEFT HEART
CATHETERIZATION, FOR CONGENITAL
CARDIAC ANOMALIES

93532

COMBINED RIGHT HEART CATHETERIZATION
AND TRANSSEPTAL LEFT HEART
CATHETERIZATION THROUGH INTACT
SEPTUM WITH OR WITHOUT RETROGRADE
LEFT HEART CATHETERIZATION, FOR
CONGENITAL CARDIAC ANOMALIES

93533

COMBINED RIGHT HEART CATHETERIZATION
AND TRANSSEPTAL LEFT HEART
CATHETERIZATION THROUGH EXISTING
SEPTAL OPENING, WITH OR WITHOUT
RETROGRADE LEFT HEART
CATHETERIZATION, FOR CONGENITAL
CARDIAC ANOMALIES

93539

INJECTION PROCEDURE DURING CARDIAC
CATHETERIZATION; FOR SELECTIVE
OPACIFICATION OF ARTERIAL CONDUITS (EG,
INTERNAL MAMMARY), WHETHER NATIVE OR
USED FOR BYPASS

93540

INJECTION PROCEDURE DURING CARDIAC
CATHETERIZATION; FOR SELECTIVE
OPACIFICATION OF AORTOCORONARY
VENOUS BYPASS GRAFTS, 1 OR MORE
CORONARY ARTERIES

93541

INJECTION PROCEDURE DURING CARDIAC
CATHETERIZATION; FOR PULMONARY
ANGIOGRAPHY

93542

INJECTION PROCEDURE DURING CARDIAC
CATHETERIZATION; FOR SELECTIVE RIGHT
VENTRICULAR OR RIGHT ATRIAL
ANGIOGRAPHY

93543

INJECTION PROCEDURE DURING CARDIAC
CATHETERIZATION; FOR SELECTIVE LEFT
VENTRICULAR OR LEFT ATRIAL
ANGIOGRAPHY

93544

INJECTION PROCEDURE DURING CARDIAC
CATHETERIZATION; FOR AORTOGRAPHY

93545

INJECTION PROCEDURE DURING CARDIAC
CATHETERIZATION; FOR SELECTIVE
CORONARY ANGIOGRAPHY (INJECTION OF
RADIOPAQUE MATERIAL MAY BE BY HAND)

93555

IMAGING SUPERVISION, INTERPRETATION
AND REPORT FOR INJECTION PROCEDURE(S)
DURING CARDIAC CATHETERIZATION;
VENTRICULAR AND/OR ATRIAL
ANGIOGRAPHY

93556

IMAGING SUPERVISION, INTERPRETATION
AND REPORT FOR INJECTION PROCEDURE(S)
DURING CARDIAC CATHETERIZATION;
PULMONARY ANGIOGRAPHY, AORTOGRAPHY,
AND/OR SELECTIVE CORONARY
ANGIOGRAPHY INCLUDING VENOUS BYPASS
GRAFTS AND ARTERIAL CONDUITS (WHETHER
NATIVE OR USED IN BYPASS)

ICD-9 Codes that Support Medical Necessity

017.90	TUBERCULOSIS OF OTHER SPECIFIED ORGANS UNSPECIFIED EXAMINATION
017.91	TUBERCULOSIS OF OTHER SPECIFIED ORGANS BACTERIOLOGICAL OR HISTOLOGICAL EXAMINATION NOT DONE
017.92	TUBERCULOSIS OF OTHER SPECIFIED ORGANS BACTERIOLOGICAL OR HISTOLOGICAL EXAMINATION RESULTS UNKNOWN (AT PRESENT)
017.93	TUBERCULOSIS OF OTHER SPECIFIED ORGANS TUBERCLE BACILLI FOUND (IN SPUTUM) BY MICROSCOPY
017.94	TUBERCULOSIS OF OTHER SPECIFIED ORGANS TUBERCLE BACILLI NOT FOUND (IN SPUTUM) BY MICROSCOPY BUT FOUND BY BACTERIAL CULTURE
017.95	TUBERCULOSIS OF OTHER SPECIFIED ORGANS TUBERCLE BACILLI NOT FOUND BY BACTERIOLOGICAL EXAMINATION BUT TUBERCULOSIS CONFIRMED HISTOLOGICALLY
017.96	TUBERCULOSIS OF OTHER SPECIFIED ORGANS TUBERCLE BACILLI NOT FOUND BY BACTERIOLOGICAL OR HISTOLOGICAL EXAMINATION BUT TUBERCULOSIS CONFIRMED BY OTHER METHODS (INOCULATION OF ANIMALS)
036.40	MENINGOCOCCAL CARDITIS UNSPECIFIED
036.41	MENINGOCOCCAL PERICARDITIS
036.42	MENINGOCOCCAL ENDOCARDITIS
036.43	MENINGOCOCCAL MYOCARDITIS
074.20	COXSACKIE CARDITIS UNSPECIFIED
074.21	COXSACKIE PERICARDITIS
074.22	COXSACKIE ENDOCARDITIS
074.23	COXSACKIE MYOCARDITIS
083.0	Q FEVER
093.1	SYPHILITIC AORTITIS

093.20	SYPHILITIC ENDOCARDITIS OF VALVE UNSPECIFIED
093.21	SYPHILITIC ENDOCARDITIS OF MITRAL VALVE
093.22	SYPHILITIC ENDOCARDITIS OF AORTIC VALVE
093.23	SYPHILITIC ENDOCARDITIS OF TRICUSPID VALVE
093.24	SYPHILITIC ENDOCARDITIS OF PULMONARY VALVE
093.81	SYPHILITIC PERICARDITIS
093.82	SYPHILITIC MYOCARDITIS
093.89	OTHER SPECIFIED CARDIOVASCULAR SYPHILIS
093.9	CARDIOVASCULAR SYPHILIS UNSPECIFIED
098.83	GONOCOCCAL PERICARDITIS
098.84	GONOCOCCAL ENDOCARDITIS
112.81	CANDIDAL ENDOCARDITIS
115.03	HISTOPLASMA CAPSULATUM PERICARDITIS
115.04	HISTOPLASMA CAPSULATUM ENDOCARDITIS
115.13	HISTOPLASMA DUBOISII PERICARDITIS
115.14	HISTOPLASMA DUBOISII ENDOCARDITIS
135	SARCOIDOSIS
164.1	MALIGNANT NEOPLASM OF HEART
212.7	BENIGN NEOPLASM OF HEART
265.0	BERIBERI
271.0	GLYCOGENOSIS
277.30	AMYLOIDOSIS, UNSPECIFIED
277.31	FAMILIAL MEDITERRANEAN FEVER
277.39	OTHER AMYLOIDOSIS
277.5	MUCOPOLYSACCHARIDOSIS
334.0	FRIEDREICH'S ATAXIA
359.1	HEREDITARY PROGRESSIVE MUSCULAR DYSTROPHY
391.0	ACUTE RHEUMATIC PERICARDITIS
391.1	ACUTE RHEUMATIC ENDOCARDITIS
391.2	ACUTE RHEUMATIC MYOCARDITIS
391.8	OTHER ACUTE RHEUMATIC HEART DISEASE
391.9	ACUTE RHEUMATIC HEART DISEASE UNSPECIFIED
392.0	RHEUMATIC CHOREA WITH HEART INVOLVEMENT
393	CHRONIC RHEUMATIC PERICARDITIS
394.0	MITRAL STENOSIS
394.1	RHEUMATIC MITRAL INSUFFICIENCY

394.2	MITRAL STENOSIS WITH INSUFFICIENCY
394.9	OTHER AND UNSPECIFIED MITRAL VALVE DISEASES
395.0	RHEUMATIC AORTIC STENOSIS
395.1	RHEUMATIC AORTIC INSUFFICIENCY
395.2	RHEUMATIC AORTIC STENOSIS WITH INSUFFICIENCY
395.9	OTHER AND UNSPECIFIED RHEUMATIC AORTIC DISEASES
396.0	MITRAL VALVE STENOSIS AND AORTIC VALVE STENOSIS
396.1	MITRAL VALVE STENOSIS AND AORTIC VALVE INSUFFICIENCY
396.2	MITRAL VALVE INSUFFICIENCY AND AORTIC VALVE STENOSIS
396.3	MITRAL VALVE INSUFFICIENCY AND AORTIC VALVE INSUFFICIENCY
396.8	MULTIPLE INVOLVEMENT OF MITRAL AND AORTIC VALVES
396.9	MITRAL AND AORTIC VALVE DISEASES UNSPECIFIED
397.0	DISEASES OF TRICUSPID VALVE
397.1	RHEUMATIC DISEASES OF PULMONARY VALVE
397.9	RHEUMATIC DISEASES OF ENDOCARDIUM VALVE UNSPECIFIED
398.0	RHEUMATIC MYOCARDITIS
398.90	RHEUMATIC HEART DISEASE UNSPECIFIED
398.91	RHEUMATIC HEART FAILURE (CONGESTIVE)
398.99	OTHER RHEUMATIC HEART DISEASES
402.01	MALIGNANT HYPERTENSIVE HEART DISEASE WITH HEART FAILURE
402.11	BENIGN HYPERTENSIVE HEART DISEASE WITH HEART FAILURE
402.91	UNSPECIFIED HYPERTENSIVE HEART DISEASE WITH HEART FAILURE
404.01	HYPERTENSIVE HEART AND CHRONIC KIDNEY DISEASE, MALIGNANT, WITH HEART FAILURE AND WITH CHRONIC KIDNEY DISEASE STAGE I THROUGH STAGE IV, OR UNSPECIFIED
404.03	HYPERTENSIVE HEART AND CHRONIC KIDNEY DISEASE, MALIGNANT, WITH HEART FAILURE AND WITH CHRONIC KIDNEY DISEASE STAGE V OR END STAGE RENAL DISEASE
404.11	

	HYPERTENSIVE HEART AND CHRONIC KIDNEY DISEASE, BENIGN, WITH HEART FAILURE AND WITH CHRONIC KIDNEY DISEASE STAGE I THROUGH STAGE IV, OR UNSPECIFIED
404.13	HYPERTENSIVE HEART AND CHRONIC KIDNEY DISEASE, BENIGN, WITH HEART FAILURE AND CHRONIC KIDNEY DISEASE STAGE V OR END STAGE RENAL DISEASE
404.91	HYPERTENSIVE HEART AND CHRONIC KIDNEY DISEASE, UNSPECIFIED, WITH HEART FAILURE AND WITH CHRONIC KIDNEY DISEASE STAGE I THROUGH STAGE IV, OR UNSPECIFIED
404.93	HYPERTENSIVE HEART AND CHRONIC KIDNEY DISEASE, UNSPECIFIED, WITH HEART FAILURE AND CHRONIC KIDNEY DISEASE STAGE V OR END STAGE RENAL DISEASE
410.00	ACUTE MYOCARDIAL INFARCTION OF ANTEROLATERAL WALL EPISODE OF CARE UNSPECIFIED
410.01	ACUTE MYOCARDIAL INFARCTION OF ANTEROLATERAL WALL INITIAL EPISODE OF CARE
410.02	ACUTE MYOCARDIAL INFARCTION OF ANTEROLATERAL WALL SUBSEQUENT EPISODE OF CARE
410.10	ACUTE MYOCARDIAL INFARCTION OF OTHER ANTERIOR WALL EPISODE OF CARE UNSPECIFIED
410.11	ACUTE MYOCARDIAL INFARCTION OF OTHER ANTERIOR WALL INITIAL EPISODE OF CARE
410.12	ACUTE MYOCARDIAL INFARCTION OF OTHER ANTERIOR WALL SUBSEQUENT EPISODE OF CARE
410.20	ACUTE MYOCARDIAL INFARCTION OF INFEROLATERAL WALL EPISODE OF CARE UNSPECIFIED
410.21	ACUTE MYOCARDIAL INFARCTION OF INFEROLATERAL WALL INITIAL EPISODE OF CARE
410.22	ACUTE MYOCARDIAL INFARCTION OF INFEROLATERAL WALL SUBSEQUENT EPISODE OF CARE
410.30	ACUTE MYOCARDIAL INFARCTION OF INFEROPOSTERIOR WALL EPISODE OF CARE UNSPECIFIED
410.31	ACUTE MYOCARDIAL INFARCTION OF INFEROPOSTERIOR WALL INITIAL EPISODE OF CARE
410.32	ACUTE MYOCARDIAL INFARCTION OF INFEROPOSTERIOR WALL SUBSEQUENT EPISODE OF CARE
410.40	ACUTE MYOCARDIAL INFARCTION OF OTHER INFERIOR WALL EPISODE OF CARE UNSPECIFIED

410.41 ACUTE MYOCARDIAL INFARCTION OF OTHER
INFERIOR WALL INITIAL EPISODE OF CARE

410.42 ACUTE MYOCARDIAL INFARCTION OF OTHER
INFERIOR WALL SUBSEQUENT EPISODE OF CARE

410.50 ACUTE MYOCARDIAL INFARCTION OF OTHER
LATERAL WALL EPISODE OF CARE UNSPECIFIED

410.51 ACUTE MYOCARDIAL INFARCTION OF OTHER
LATERAL WALL INITIAL EPISODE OF CARE

410.52 ACUTE MYOCARDIAL INFARCTION OF OTHER
LATERAL WALL SUBSEQUENT EPISODE OF CARE

410.60 TRUE POSTERIOR WALL INFARCTION EPISODE OF
CARE UNSPECIFIED

410.61 TRUE POSTERIOR WALL INFARCTION INITIAL
EPISODE OF CARE

410.62 TRUE POSTERIOR WALL INFARCTION SUBSEQUENT
EPISODE OF CARE

410.70 SUBENDOCARDIAL INFARCTION EPISODE OF CARE
UNSPECIFIED

410.71 SUBENDOCARDIAL INFARCTION INITIAL EPISODE OF
CARE

410.72 SUBENDOCARDIAL INFARCTION SUBSEQUENT
EPISODE OF CARE

410.80 ACUTE MYOCARDIAL INFARCTION OF OTHER
SPECIFIED SITES EPISODE OF CARE UNSPECIFIED

410.81 ACUTE MYOCARDIAL INFARCTION OF OTHER
SPECIFIED SITES INITIAL EPISODE OF CARE

410.82 ACUTE MYOCARDIAL INFARCTION OF OTHER
SPECIFIED SITES SUBSEQUENT EPISODE OF CARE

410.90 ACUTE MYOCARDIAL INFARCTION OF UNSPECIFIED
SITE EPISODE OF CARE UNSPECIFIED

410.91 ACUTE MYOCARDIAL INFARCTION OF UNSPECIFIED
SITE INITIAL EPISODE OF CARE

410.92 ACUTE MYOCARDIAL INFARCTION OF UNSPECIFIED
SITE SUBSEQUENT EPISODE OF CARE

411.0 POSTMYOCARDIAL INFARCTION SYNDROME

411.1 INTERMEDIATE CORONARY SYNDROME

411.81 ACUTE CORONARY OCCLUSION WITHOUT
MYOCARDIAL INFARCTION

411.89 OTHER ACUTE AND SUBACUTE FORMS OF ISCHEMIC
HEART DISEASE OTHER

412 OLD MYOCARDIAL INFARCTION

413.0 ANGINA DECUBITUS

413.1 PRINZMETAL ANGINA

413.9	OTHER AND UNSPECIFIED ANGINA PECTORIS
414.00	CORONARY ATHEROSCLEROSIS OF UNSPECIFIED TYPE OF VESSEL NATIVE OR GRAFT
414.01	CORONARY ATHEROSCLEROSIS OF NATIVE CORONARY ARTERY
414.02	CORONARY ATHEROSCLEROSIS OF AUTOLOGOUS VEIN BYPASS GRAFT
414.03	CORONARY ATHEROSCLEROSIS OF NONAUTOLOGOUS BIOLOGICAL BYPASS GRAFT
414.04	CORONARY ATHEROSCLEROSIS OF ARTERY BYPASS GRAFT
414.05	CORONARY ATHEROSCLEROSIS OF UNSPECIFIED BYPASS GRAFT
414.06	CORONARY ATHEROSCLEROSIS OF NATIVE CORONARY ARTERY OF TRANSPLANTED HEART
414.07	CORONARY ATHEROSCLEROSIS OF BYPASS GRAFT (ARTERY) (VEIN) OF TRANSPLANTED HEART
414.10	ANEURYSM OF HEART (WALL)
414.11	ANEURYSM OF CORONARY VESSELS
414.12	DISSECTION OF CORONARY ARTERY
414.19	OTHER ANEURYSM OF HEART
414.3	CORONARY ATHEROSCLEROSIS DUE TO LIPID RICH PLAQUE
414.8	OTHER SPECIFIED FORMS OF CHRONIC ISCHEMIC HEART DISEASE
415.0	ACUTE COR PULMONALE
415.11	IATROGENIC PULMONARY EMBOLISM AND INFARCTION
415.19	OTHER PULMONARY EMBOLISM AND INFARCTION
416.0	PRIMARY PULMONARY HYPERTENSION
416.1	KYPHOSCOLIOTIC HEART DISEASE
416.2	CHRONIC PULMONARY EMBOLISM
416.8	OTHER CHRONIC PULMONARY HEART DISEASES
416.9	CHRONIC PULMONARY HEART DISEASE UNSPECIFIED
417.0	ARTERIOVENOUS FISTULA OF PULMONARY VESSELS
417.1	ANEURYSM OF PULMONARY ARTERY
417.8	OTHER SPECIFIED DISEASES OF PULMONARY CIRCULATION
417.9	UNSPECIFIED DISEASE OF PULMONARY CIRCULATION
420.0	ACUTE PERICARDITIS IN DISEASES CLASSIFIED ELSEWHERE

420.90	ACUTE PERICARDITIS UNSPECIFIED
420.91	ACUTE IDIOPATHIC PERICARDITIS
420.99	OTHER ACUTE PERICARDITIS
421.0	ACUTE AND SUBACUTE BACTERIAL ENDOCARDITIS
421.1	ACUTE AND SUBACUTE INFECTIVE ENDOCARDITIS IN DISEASES CLASSIFIED ELSEWHERE
421.9	ACUTE ENDOCARDITIS UNSPECIFIED
422.0	ACUTE MYOCARDITIS IN DISEASES CLASSIFIED ELSEWHERE
422.90	ACUTE MYOCARDITIS UNSPECIFIED
422.91	IDIOPATHIC MYOCARDITIS
422.92	SEPTIC MYOCARDITIS
422.93	TOXIC MYOCARDITIS
422.99	OTHER ACUTE MYOCARDITIS
423.0	HEMOPERICARDIUM
423.1	ADHESIVE PERICARDITIS
423.2	CONSTRUCTIVE PERICARDITIS
423.8	OTHER SPECIFIED DISEASES OF PERICARDIUM
423.9	UNSPECIFIED DISEASE OF PERICARDIUM
424.0	MITRAL VALVE DISORDERS
424.1	AORTIC VALVE DISORDERS
424.2	TRICUSPID VALVE DISORDERS SPECIFIED AS NONRHEUMATIC
424.3	PULMONARY VALVE DISORDERS
424.90	ENDOCARDITIS VALVE UNSPECIFIED UNSPECIFIED CAUSE
424.91	ENDOCARDITIS IN DISEASES CLASSIFIED ELSEWHERE
424.99	OTHER ENDOCARDITIS VALVE UNSPECIFIED
425.0	ENDOMYOCARDIAL FIBROSIS
425.1	HYPERTROPHIC OBSTRUCTIVE CARDIOMYOPATHY
425.2	OBSCURE CARDIOMYOPATHY OF AFRICA
425.3	ENDOCARDIAL FIBROELASTOSIS
425.4	OTHER PRIMARY CARDIOMYOPATHIES
425.5	ALCOHOLIC CARDIOMYOPATHY
425.7	NUTRITIONAL AND METABOLIC CARDIOMYOPATHY
425.8	CARDIOMYOPATHY IN OTHER DISEASES CLASSIFIED ELSEWHERE
425.9	SECONDARY CARDIOMYOPATHY UNSPECIFIED

427.1	PAROXYSMAL VENTRICULAR TACHYCARDIA
427.2	PAROXYSMAL TACHYCARDIA UNSPECIFIED
427.41	VENTRICULAR FIBRILLATION
427.42	VENTRICULAR FLUTTER
427.5	CARDIAC ARREST
428.0	CONGESTIVE HEART FAILURE UNSPECIFIED
428.1	LEFT HEART FAILURE
428.20	UNSPECIFIED SYSTOLIC HEART FAILURE
428.21	ACUTE SYSTOLIC HEART FAILURE
428.22	CHRONIC SYSTOLIC HEART FAILURE
428.23	ACUTE ON CHRONIC SYSTOLIC HEART FAILURE
428.30	UNSPECIFIED DIASTOLIC HEART FAILURE
428.31	ACUTE DIASTOLIC HEART FAILURE
428.32	CHRONIC DIASTOLIC HEART FAILURE
428.33	ACUTE ON CHRONIC DIASTOLIC HEART FAILURE
428.40	UNSPECIFIED COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
428.41	ACUTE COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
428.42	CHRONIC COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
428.43	ACUTE ON CHRONIC COMBINED SYSTOLIC AND DIASTOLIC HEART FAILURE
428.9	HEART FAILURE UNSPECIFIED
429.0	MYOCARDITIS UNSPECIFIED
429.1	MYOCARDIAL DEGENERATION
429.3	CARDIOMEGALY
429.4	FUNCTIONAL DISTURBANCES FOLLOWING CARDIAC SURGERY
429.5	RUPTURE OF CHORDAE TENDINEAE
429.6	RUPTURE OF PAPILLARY MUSCLE
429.71	CERTAIN SEQUELAE OF MYOCARDIAL INFARCTION NOT ELSEWHERE CLASSIFIED ACQUIRED CARDIAC SEPTAL DEFECT
429.79	CERTAIN SEQUELAE OF MYOCARDIAL INFARCTION NOT ELSEWHERE CLASSIFIED OTHER
429.81	OTHER DISORDERS OF PAPILLARY MUSCLE
429.82	HYPERKINETIC HEART DISEASE
429.89	OTHER ILL-DEFINED HEART DISEASES

518.4	ACUTE EDEMA OF LUNG UNSPECIFIED
518.5	PULMONARY INSUFFICIENCY FOLLOWING TRAUMA AND SURGERY
518.7	TRANSFUSION RELATED ACUTE LUNG INJURY (TRALI)
518.81	ACUTE RESPIRATORY FAILURE
518.82	OTHER PULMONARY INSUFFICIENCY NOT ELSEWHERE CLASSIFIED
518.84	ACUTE AND CHRONIC RESPIRATORY FAILURE
710.0	SYSTEMIC LUPUS ERYTHEMATOSUS
714.2	OTHER RHEUMATOID ARTHRITIS WITH VISCERAL OR SYSTEMIC INVOLVEMENT
745.0	COMMON TRUNCUS
745.10	COMPLETE TRANSPOSITION OF GREAT VESSELS
745.11	DOUBLE OUTLET RIGHT VENTRICLE
745.12	CORRECTED TRANSPOSITION OF GREAT VESSELS
745.19	OTHER TRANSPOSITION OF GREAT VESSELS
745.2	TETRALOGY OF FALLOT
745.3	COMMON VENTRICLE
745.4	VENTRICULAR SEPTAL DEFECT
745.5	OSTIUM SECUNDUM TYPE ATRIAL SEPTAL DEFECT
745.60	ENDOCARDIAL CUSHION DEFECT UNSPECIFIED TYPE
745.61	OSTIUM PRIMUM DEFECT
745.69	OTHER ENDOCARDIAL CUSHION DEFECTS
745.7	COR BILOCULARE
745.8	OTHER BULBUS CORDIS ANOMALIES AND ANOMALIES OF CARDIAC SEPTAL CLOSURE
745.9	UNSPECIFIED DEFECT OF SEPTAL CLOSURE
746.00	CONGENITAL PULMONARY VALVE ANOMALY UNSPECIFIED
746.01	ATRESIA OF PULMONARY VALVE CONGENITAL
746.02	STENOSIS OF PULMONARY VALVE CONGENITAL
746.09	OTHER CONGENITAL ANOMALIES OF PULMONARY VALVE
746.1	TRICUSPID ATRESIA AND STENOSIS CONGENITAL
746.2	EBSTEIN'S ANOMALY
746.3	CONGENITAL STENOSIS OF AORTIC VALVE
746.4	CONGENITAL INSUFFICIENCY OF AORTIC VALVE
746.5	CONGENITAL MITRAL STENOSIS

746.6	CONGENITAL MITRAL INSUFFICIENCY
746.7	HYPOPLASTIC LEFT HEART SYNDROME
746.81	SUBAORTIC STENOSIS CONGENITAL
746.82	COR TRIATRIATUM
746.83	INFUNDIBULAR PULMONIC STENOSIS CONGENITAL
746.84	CONGENITAL OBSTRUCTIVE ANOMALIES OF HEART NOT ELSEWHERE CLASSIFIED
746.85	CORONARY ARTERY ANOMALY CONGENITAL
746.89	OTHER SPECIFIED CONGENITAL ANOMALIES OF HEART
746.9	UNSPECIFIED CONGENITAL ANOMALY OF HEART
747.0	PATENT DUCTUS ARTERIOSUS
747.10	COARCTATION OF AORTA (PREDUCTAL) (POSTDUCTAL)
747.11	INTERRUPTION OF AORTIC ARCH
747.20	CONGENITAL ANOMALY OF AORTA UNSPECIFIED
747.21	CONGENITAL ANOMALIES OF AORTIC ARCH
747.22	CONGENITAL ATRESIA AND STENOSIS OF AORTA
747.29	OTHER CONGENITAL ANOMALIES OF AORTA
747.3	CONGENITAL ANOMALIES OF PULMONARY ARTERY
785.2	UNDIAGNOSED CARDIAC MURMURS
785.51	CARDIOGENIC SHOCK
785.52	SEPTIC SHOCK
785.59	OTHER SHOCK WITHOUT TRAUMA
786.05	SHORTNESS OF BREATH
793.2	NONSPECIFIC (ABNORMAL) FINDINGS ON RADIOLOGICAL AND OTHER EXAMINATION OF OTHER INTRATHORACIC ORGANS
794.30	UNSPECIFIED ABNORMAL FUNCTION STUDY OF CARDIOVASCULAR SYSTEM
794.31	NONSPECIFIC ABNORMAL ELECTROCARDIOGRAM (ECG) (EKG)
794.39	OTHER NONSPECIFIC ABNORMAL FUNCTION STUDY OF CARDIOVASCULAR SYSTEM
799.1	RESPIRATORY ARREST
958.4	TRAUMATIC SHOCK
958.5	TRAUMATIC ANURIA
996.02	MECHANICAL COMPLICATION DUE TO HEART VALVE PROSTHESIS
996.03	

	MECHANICAL COMPLICATION DUE TO CORONARY BYPASS GRAFT
996.83	COMPLICATIONS OF TRANSPLANTED HEART
997.1	CARDIAC COMPLICATIONS NOT ELSEWHERE CLASSIFIED
998.0	POSTOPERATIVE SHOCK NOT ELSEWHERE CLASSIFIED
V15.1	PERSONAL HISTORY OF SURGERY TO HEART AND GREAT VESSELS PRESENTING HAZARDS TO HEALTH
V42.1	HEART REPLACED BY TRANSPLANT
V42.2	HEART VALVE REPLACED BY TRANSPLANT
V42.6	LUNG REPLACED BY TRANSPLANT
V43.21	HEART REPLACED BY HEART ASSIST DEVICE
V43.22	HEART REPLACED BY FULLY IMPLANTABLE ARTIFICIAL HEART
V43.3	HEART VALVE REPLACED BY OTHER MEANS

Diagnoses that Support Medical Necessity

ICD-9 Codes that DO NOT Support Medical Necessity

*For Right Heart Catheterization (CPT/HCPCS code 93501)

410.10	ACUTE MYOCARDIAL INFARCTION OF OTHER ANTERIOR WALL EPISODE OF CARE UNSPECIFIED
411.1	INTERMEDIATE CORONARY SYNDROME
413.9	OTHER AND UNSPECIFIED ANGINA PECTORIS
414.00	CORONARY ATHEROSCLEROSIS OF UNSPECIFIED TYPE OF VESSEL NATIVE OR GRAFT
414.01	CORONARY ATHEROSCLEROSIS OF NATIVE CORONARY ARTERY
414.02	CORONARY ATHEROSCLEROSIS OF AUTOLOGOUS VEIN BYPASS GRAFT
786.05	SHORTNESS OF BREATH
786.50	UNSPECIFIED CHEST PAIN
786.59	OTHER CHEST PAIN

ICD-9 Codes that DO NOT Support Medical Necessity Asterisk Explanation

Diagnoses that DO NOT Support Medical Necessity

General Information

Documentation Requirements

The patient's medical record must contain documentation that fully supports the medical necessity for the cardiac catheterization procedure(s), coronary angiography, and injection procedure(s) that have been performed as well as all records pertaining to the conduct of the testing.

Documentation including the complete outpatient record including physician's orders/progress notes, history and physical, procedure report(s), and itemized breakdown of charges must be available to Medicare upon request.

Hospital or outpatient (or freestanding cardiac catheterization units, if approved) should clearly document the reason for the procedure, what was done and the results in a procedure report and also in progress notes and the discharge summary. An appropriate history and physical examination should also be available for review.

Documentation of the ICD-9-CM codes that support medical necessity and/or those criteria listed in "Indications and Limitations of Coverage and/or Medical Necessity" must be in the patient's medical record.

All right heart catheterizations should have a formal procedural and interpretation report.

Appendices

Utilization Guidelines

In the American College of Cardiology/Society for Cardiac Angiography and Interventions expert consensus document, the following is stated. The routine use of right-heart catheterization, in a patient whose symptoms and objective studies suggest coronary artery disease without associated mitral regurgitation or congestive failure, is discouraged. The additional information gained from a right-heart catheterization in patients with chest pain and suspected coronary artery disease is minimal.

Sources of Information and Basis for Decision

This LCD is a compilation of language from the existing LCDs on the topic from the preceding Medicare Fiscal Intermediaries. Quoted below are the related bibliographies listed by prior contractor.

1. Existing LCDs from other contractors
2. American College of Cardiology/American Heart Association Task Force. Guidelines for Coronary Angiography. J Am Coll Cardiol 1987; 10:935-950.
3. American College of Cardiology/American Heart Association Task Force. Guidelines for Cardiac Catheterization and Cardiac Catheterization Laboratories. J Am Coll Cardiol 1991; 18:1149-1182.

4. American College of Cardiology/American Heart Association Task Force. Guidelines for the Evaluation and Management of Heart Failure. J Am Coll Cardiol 1995; 26:1376-1398.
5. American College of Cardiology Position Statement on Right Heart Catheterization. Adopted by the American College of Cardiology Executive Committee on March 9, 1985; reapproved in 1990.
6. Bashore Et Al., American College of Cardiology/Society for Cardiac Angiography and Interventions Clinical Expert Consensus Document on Cardiac Catheterization Laboratory Standards: A Report of The American College of Cardiology Task Force on Clinical Expert Consensus Documents. J Am Coll Cardiol, Vol. 37, No. 8, June 2001:2170-214. www.acc.org/clinical/consensus/angiography/cath_PDF.pdf.
7. Bing ML, Abel RL, Lee LJ, McCauley C, Medical Necessity for Right Heart Catheterization, Tex Heart Inst J 1997; 24: 109-13
8. Dalen JE, The Pulmonary Artery Catheter – Friend, Foe, or Accomplice? JAMA 2001; 286: 348-350
9. Laine C, Venditti L, Localio R, Wickenheiser L, Morris DL, Combined Cardiac Catheterization for Uncomplicated Ischemic Heart Disease in a Medicare Population, Am J Med 1998; 105: 373-79
10. Malone ML, Bajwa TK, Battiola RJ, Fortsas M, Aman S, Soloman DJ, Goodwin JS, Variation Among Cardiologist in the Utilization of Right Heart Catheterization at Time of Coronary Angiography, Cathet Cardiovasc Diagn 1996; 37: 125-30
11. Polanczyk CA, Rohde LE, Goldman L, Cook EF, Thomas EJ, Marcantonio ER, Mangione CM, Lee TH, Right Heart Catheterization and Cardiac Complications in Patients Undergoing Noncardiac Surgery, JAMA 2001; 286: 309-14

Advisory Committee Meeting Notes

This policy does not reflect the sole opinion of the contractor or contractor medical director. Although the final decision rests with the contractor, this policy was developed in consideration of the active LCDs maintained by the preceding Medicare contractors for Jurisdiction 5.

Start Date of Comment Period

End Date of Comment Period

Start Date of Notice Period

11/01/2008

Revision History Number

3

Revision History Explanation

*article 7/1/09 Effective date 07/01/2009 Removed references to percutaneous coronary interventions and added table for the non covered ICD-9 codes for Right Heart Cath.

This LCD was reformatted to address Cardiac Catheterization procedures only. For information on Percutaneous Coronary Interventions please see WPS Medicare LCD L28478, entitled Percutaneous Coronary Interventions

Effective date 10/01/2008-2009 ICD-9 code update to include 414.3

An asterisk (*) indicates a revision to that section of the policy.

08/08/2009 - This policy was updated by the ICD-9 2009-2010 Annual Update.

#3. ICD-9 2010 annual update effective 10/01/2009, added code 416.2, code 793.2 description changed.#

11/15/2009 - The description for CPT/HCPCS code 93540 was changed in group 1

Reason for Change

Last Reviewed On Date

07/01/2009

Related Documents

This LCD has no Related Documents.

LCD Attachments

There are no attachments for this LCD.

All Versions

Updated on 11/15/2009 with effective dates 10/01/2009 - N/A

Updated on 09/25/2009 with effective dates 10/01/2009 - N/A

Updated on 08/08/2009 with effective dates 07/01/2009 - 09/30/2009

Updated on 06/19/2009 with effective dates 07/01/2009 - N/A

Updated on 01/20/2009 with effective dates 10/01/2008 - 06/30/2009

Updated on 04/25/2008 with effective dates 03/01/2008 - 09/30/2008