

SUBJECT: CARDIAC REHABILITATION

POLICY NUMBER: 8.01.14

CATEGORY: Therapy/ Rehabilitation

EFFECTIVE DATE: 09/16/99

REVISED DATE: 05/17/01, 06/20/02, 04/24/03, 03/18/04, 09/01/04, 09/15/05, 12/07/06, 12/13/07, 12/11/08, 12/10/09, 12/09/10, 06/24/11, 06/28/12, 06/27/13, 06/26/14

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- *If the member's subscriber contract excludes coverage for a specific service it is not covered under that contract. In such cases, medical policy criteria are not applied.*
- *Medical policies apply to commercial and Medicaid products only when a contract benefit for the specific service exists.*
- *Medical policies only apply to Medicare products when a contract benefit exists and where there are no National or Local Medicare coverage decisions for the specific service.*

POLICY STATEMENT:

- I. Based upon our criteria and the assessment of peer-reviewed literature, monitored *Phase I* and *Phase II* cardiac rehabilitation programs have been proven to be medically effective and are therefore, **medically appropriate** for patients with the following:
 - A. Acute myocardial infarction within the preceding 12 months;
 - B. Angioplasty with stenting within the preceding 12 months;
 - C. Coronary angioplasty within the preceding 12 months;
 - D. Coronary bypass surgery within the preceding 12 months;
 - E. Heart transplantation within the preceding 12 months;
 - F. Class II or higher congestive heart failure;
 - G. Stable angina pectoris; or
 - H. Valvular disease.
- II. Based upon our criteria and the assessment of peer-reviewed literature, *Phase III* maintenance programs are **not medically necessary**.

Maintenance programs are programs that consist of activities that preserve the patient's present level of function and prevent regression of that function. Maintenance begins when the therapeutic goals of a treatment plan have been achieved or when no additional functional progress is apparent or expected to occur.

POLICY GUIDELINES:

- I. Due to a strong scientific evidence base for the efficacy of cardiac rehabilitation in adult patients and the lack of a strong evidence base in pediatric patients, this policy generally applies to adult patients. Cardiac rehabilitation for pediatric patients will be reviewed based on clinical indicators including, but not limited to: the patient's diagnosis (e.g., congenital anomalies, valvular disorders), recent surgical procedures (e.g., cardiac transplant, valvular replacement or repair), and acceptance into a pediatric cardiac rehabilitation program.
- II. Monitored Phase II cardiac rehabilitation programs must be recommended by the patient's cardiologist or primary care physician and rendered by a provider whose cardiac rehabilitation program has been approved by:
 - A. the American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR) if the program is rendered at an outpatient free-standing facility or in the practitioner's office; or
 - B. the AACVPR, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), or the American Osteopathic Association (AOA) if the program is rendered at a hospital-based facility.
- III. Due to the increased risk of experiencing a cardiac event (e.g. ventricular arrhythmia, infarction) Phase II cardiac rehabilitation programs must include physician supervision and continuous electrocardiographic monitoring during exercise.
- IV. The Phase II program usually consists of 36 visits.
- V. Only one program of cardiac rehabilitation will be allowed per lifetime unless otherwise approved by a Health Plan Medical Director (e.g., another qualifying cardiac event).

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VI. Benefits for cardiac rehabilitation will be provided in accordance with the member's subscriber contract. Please contact your local Customer (Provider/Member) Service Department to determine contract coverage as not all contracts provide coverage for cardiac rehabilitation.

DESCRIPTION:

According to the US Public Health Service, the American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR), the American College of Cardiology (ACC), and the American Heart Association (AHA) "Cardiac rehabilitation (CR) services are comprehensive, long-term programs involving medical evaluation, prescribed exercise, cardiac risk factor modification, education, and counseling. These programs are designed to limit the physiologic and psychological effects of cardiac illness, reduce the risk for sudden death or re-infarction, control cardiac symptoms, stabilize or reverse the atherosclerotic process, and enhance the psychosocial and vocational status of selected patients".

A cardiac rehabilitation program should be initiated as soon as medically indicated following a cardiac event.

Examples of cardiac events are acute myocardial infarction, coronary artery bypass graft, percutaneous transluminal coronary angioplasty (PTCA), heart valve surgery, heart transplantation, stable angina pectoris or compensated heart failure.

Cardiac Rehabilitation consists of three phases, or levels, of service:

- I. *Phase I*, or inpatient CR: a program that delivers preventive and rehabilitative services to hospitalized patients following an index cardiovascular disease (CVD) event.
- II. *Phase II*, or early outpatient CR: a physician supervised outpatient program that includes electrocardiographic monitoring during exercise and is intended to improve cardiac function and exercise tolerance. Programs are hospital or physician office/clinic based and must meet federal and state regulatory and licensing requirements; and
- III. *Phase III*, or long-term outpatient CR: a supervised or non-supervised maintenance program.

RATIONALE:

Cardiac rehabilitation program providers are subject to state and federal licensing requirements. Due to the advances in the diagnosis and treatment of cardiac disease there is a shift of cardiovascular disease from an acutely fatal event to a chronic disease. There is a growing need for medical services to aid patients in improving their quality of life, lessen symptoms, increase functional capacity and decrease disability. Formal cardiac rehabilitation programs meet this need, for select cardiac patients, and improve the net health outcome by decreasing the incidence of cardiac death.

The benefits of formal cardiac rehabilitation programs outweigh those of informal exercise programs or the lack of a rehabilitative program. Through clinical trials, supervised/formal cardiac rehabilitation programs have been proven to improve the health outcomes of select cardiac patients.

CODES: Number Description

Eligibility for reimbursement is based upon the benefits set forth in the member's subscriber contract.

CODES MAY NOT BE COVERED UNDER ALL CIRCUMSTANCES. PLEASE READ THE POLICY AND GUIDELINES STATEMENTS CAREFULLY

Codes may not be all inclusive as the AMA and CMS code updates may occur more frequently than policy updates.

CPT: 93797 Physician or other qualified health care professional services for outpatient cardiac rehabilitation; without continuous ECG monitoring (per session)

 93798 with continuous ECG monitoring (per session)

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HCPCS: S9472 Cardiac rehabilitation program, non-physician provider, per diem

ICD9: 394-396.9 Diseases of mitral and/or aortic valves (code range)

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397-397.9	Diseases of endocardial structures (code range)
410-410.9	Acute myocardial infarction (code range)
412	Old myocardial infarction
413-413.9	Angina pectoris (code range)
414-414.9	Other forms of chronic ischemic heart disease (code range)
424.0-424.3	Valve disorders (code range)
428.0	Congestive heart failure
V43.2	Organ or tissue replaced by other means, heart
V43.3	heart valve
V45.81	Other postsurgical status, aortocoronary bypass
V45.82	percutaneous transluminal coronary angioplasty
ICD10:	
A52.03	Syphilitic endocarditis
I01.1	Acute rheumatic endocarditis
I02.0	Rheumatic chorea with heart involvement
I05.0-I09.9	Rheumatic heart disease (code range)
I20.1	Angina pectoris with documented spasm
I20.8-I20.9	Other or unspecified forms of angina pectoris (code range)
I21.01-I21.3	ST elevation (STEMI) myocardial infarction (code range)
I214	Non-ST elevation (NSTEMI) myocardial infarction
I220-122.9	Subsequent ST (STEMI) or non-ST (NSTEMI) elevation myocardial infarction (code range)
I25.10-I25.9	Chronic ischemic heart disease (code range)
I34.0-I34.9	Nonrheumatic mitral valve disorders (code range)
I35.0-I35.9	Nonrheumatic aortic valve disorders (code range)
I36.0-I36.9	Nonrheumatic tricuspid valve disorders (code range)
I37.0-I37.9	Nonrheumatic pulmonary valve disorders (code range)
I50.1-I50.9	Heart failure (code range)
Q23.2	Congenital mitral stenosis
Z95.1	Presence of aortocoronary bypass graft
Z95.2	Presence of prosthetic heart valve
Z95.5	Presence of coronary angioplasty implant and graft
Z95.812	Presence of fully implantable artificial heart
Z98.61	Coronary angioplasty status
Revenue:	943 Cardiac rehabilitation

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REFERENCES:

Ades PA, et al. High-calorie-expenditure exercise: a new approach to cardiac rehabilitation for overweight coronary patients. *Circulation* 2009 May 26;119(20):2671-8.

*Balady GJ, et al. Core components of cardiac rehabilitation/secondary prevention programs: 2007 update: a scientific statement from the American Heart Association Exercise, Cardiac Rehabilitation, and Prevention Committee, the Council on Clinical Cardiology; the Councils on Cardiovascular Nursing, Epidemiology and Prevention, and Nutrition, Physical Activity, and Metabolism; and the American Association of Cardiovascular and Pulmonary Rehabilitation. *Circ* 2007 May 22;115(20):2675-82.

BlueCross BlueShield Association. Cardiac rehabilitation in the outpatient setting. Medical Policy Reference Manual Policy #8.03.08. 2014 Jun 12.

Cano de la Cuerda R, et al. Cardiac rehabilitation programs and health-related quality of life. State of the art. *Rev Esp Cardiol* 2012 Jan;65(1):72-9.

Davies EJ, et al. Exercise based rehabilitation for heart failure. *Cochrane Database Syst Rev* 2010 Apr 14;4:CD003331.

Fihn SD, et al. 2012 ACCF/AHA/ACP/AATS/PCNA/SCAI/STS guideline for the diagnosis and management of patients with stable ischemic heart disease: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines, and the American College of Physicians, American Association for Thoracic Surgery, Preventive Cardiovascular Nurses Association, Society for Cardiovascular Angiography and Interventions, and Society of Thoracic Surgeons. *J Am Coll Cardiol* 2012 Dec 18;60(24):2564-2603.

Fleg JL, et al; American Heart Association Committees on Older Populations and Exercise Cardiac Rehabilitation and Prevention of the Council on Clinical Cardiology, Council on Cardiovascular and Stroke Nursing, Council on Lifestyle and Cardiometabolic Health. Secondary prevention of atherosclerotic cardiovascular disease in older adults: a scientific statement from the American Heart Association. *Circulation* 2013 Nov 26;128(22):2422-46.

Fletcher GF, et al; American Heart Association Exercise, Cardiac Rehabilitation, and Prevention Committee of the Council on Clinical Cardiology, Council on Nutrition, Physical Activity and Metabolism, Council on Cardiovascular and Stroke Nursing, and Council on Epidemiology and Prevention. Exercise standards for testing and training: a scientific statement from the American Heart Association. *Circulation* 2013 Aug 20;128(8):873-934.

Goel K, et al. Impact of cardiac rehabilitation on mortality and cardiovascular events after percutaneous coronary intervention in the community. *Circulation* 2011 May 31;123(21):2344-52.

Heran BS, et al. Exercise-based cardiac rehabilitation for coronary heart disease. *Cochrane Database of Systematic Reviews* 2011, Issue 7. Art. No.: CD001800.

Isaksen K, et al. Exercise training and cardiac rehabilitation in patients with implantable cardioverter defibrillators: a review of current literature focusing on safety, effects of exercise training, and the psychological impact of programme participation. *Eur J Prev Cardiol* 2012 Aug;19(4):804-12.

Jegier A, et al. Health-related quality of life in patients with coronary heart disease after residential vs ambulatory cardiac rehabilitation. *Circ J* 2009 Mar;73(3):476-83.

Lavie CJ, et al. Exercise training and cardiac rehabilitation in primary and secondary prevention of coronary heart disease. *Mayo Clin Proc* 2009 Apr;84(4):373-83.

Lawler PR, et al. Efficacy of exercise-based cardiac rehabilitation post-myocardial infarction: a systematic review and meta-analysis of randomized controlled trials. *Am Heart J* 2011 Oct;162(4):571-584.e2.

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Mezzani A, et al; European Association for Cardiovascular Prevention and Rehabilitation; American Association of Cardiovascular and Pulmonary Rehabilitation; Canadian Association of Cardiac Rehabilitation. Aerobic exercise intensity assessment and prescription in cardiac rehabilitation: a joint position statement of the European Association for Cardiovascular Prevention and Rehabilitation, the American Association of Cardiovascular and Pulmonary Rehabilitation, and the Canadian Association of Cardiac Rehabilitation. J Cardiopulm Rehabil Prev 2012 Nov-Dec;32(6):327-50.

Mittag O, et al. Medium-term effects of cardiac rehabilitation in Germany: systematic review and meta-analysis of results from national and international trials. Eur J Cardiovasc Prev Rehabil 2011 Aug;18(4):587-93.

Oldridge N. Exercise-based cardiac rehabilitation in patients with coronary heart disease: meta-analysis outcomes revisited. Future Cardiol 2012 Sep;8(5):729-51.

Pavy B, et al; Exercise, Rehabilitation Sport Group (GERS); French Society of Cardiology. French Society of Cardiology guidelines for cardiac rehabilitation in adults. Arch Cardiovasc Dis 2012 May;105(5):309-28.

Pérez IP, et al. Cardiac rehabilitation programs improve metabolic parameters in patients with the metabolic syndrome and coronary heart disease. J Clin Hypertens (Greenwich) 2010 May;12(5):374-9.

Piepoli MF, et al. Secondary prevention through cardiac rehabilitation: from knowledge to implementation. A position paper from the Cardiac Rehabilitation Section of the European Association of Cardiovascular Prevention and Rehabilitation. Eur J Cardiovasc Prev Rehabil 2010 Feb;17(1):1-17.

*Rhodes J, et al. Sustained effects of cardiac rehabilitation in children with serious congenital heart disease. Pediatrics 2006 Sep;118(3):e586-93.

Sandercock GR, et al. Cardiorespiratory fitness changes in patients receiving comprehensive outpatient cardiac rehabilitation in the UK: a multicentre study. Heart 2013 Jun;99(11):785-90.

Sandercock G, et al. Changes in cardiorespiratory fitness in cardiac rehabilitation patients: a meta-analysis. Int J Cardiol 2013 Aug 10;167(3):894-902.

Silberman A, et al. The effectiveness and efficacy of an intensive cardiac rehabilitation program in 24 sites. Am J Health Promot 2010 Mar-Apr;24(4):260-6.

*Smith SC, et al. AHA/ACC scientific statement: AHA/ACC guidelines for preventing heart attack and death in patients with atherosclerotic cardiovascular disease: 2001 update: a statement for healthcare professionals from the American Heart Association and the American College of Cardiology. Circ 2001 Sep 25;104(13):1577-9.

Thomas RJ, et al. AACVPR/ACC/AHA 2010 update: performance measures on cardiac rehabilitation for referral to cardiac rehabilitation/secondary prevention services. J Cardiopulmon Rehabil Prev 2010;30:279-88.

Tikkanen AU, et al. Paediatric cardiac rehabilitation in congenital heart disease: a systematic review. Cardiol Young 2012 Jun;22(3):241-50.

Vona M, et al. Effects of different types of exercise training followed by detraining on endothelium-dependent dilation in patients with recent myocardial infarction. Circulation 2009 Mar 31;119(12):1601-8.

*Williams MA, et al. Secondary prevention of coronary heart disease in the elderly (with emphasis on patients > or = 75 years of age): an American Heart Association scientific statement from the Council on Clinical Cardiology Subcommittee on Exercise, Cardiac Rehabilitation, and Prevention. Circ 2002 Apr 9;105(14):1735-43.

*key article

KEY WORDS:

Cardiac rehabilitation, Cardiac therapy, Heart therapy.

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CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS

There is currently a National Coverage Determination (NCD) for Cardiac Rehabilitation Programs. Please refer to the following website for Medicare Members: <http://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=36&ncdver=3&DocID=20.10&bc=gAAAAAgAAAAAA%3d%3d&>.

There is also a Local article for Cardiac and Intensive Cardiac Rehabilitation. Please refer to the following website for Medicare Members: http://apps.ngsmedicare.com/sia/ARTICLE_A45888.htm.

In February 2014, CMS issued a decision memo regarding Cardiac Rehab programs for Chronic Heart Failure. Subsequently, a National Coverage Determination was issued. Please refer to the following website for the National Coverage Determination for Medicare Members: <http://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=359&ncdver=1&CoverageSelection=Both&ArticleType=All&PolicyType=Final&s=New+York++Entire+State&KeyWord=cardiac+rehab&KeyWordLookUp=Title&KeyWordSearchType=And&bc=gAAAABAAAAAAA%3d%3d&>.