MetroPlus Health

Policy and Procedure

Title: CARDIAC REHABILITATION	**Division: Medical Management** **Department: Utilization Management**
Approval Date: 3/30/18	**LOB: Medicaid, Medicare, HIV SNP, CHP, MetroPlus Gold, Goldcare I&II, Market Plus, Essential, HARP**
Effective Date: 3/30/18	**Policy Number: UM-MP227**
Review Date: 5/28/2024	**Cross Reference Number:**
Retired Date: 5/24/2021	**Page 1 of 19**
RE-ACTIVATED: 5/30/2023	

1. POLICY:

Clinical Policy Cardiac Rehabilitation Guidelines

2. RESPONSIBLE PARTIES:

Claims Department, Integrated Care Management, Medical Management Administration, Provider Contracting, Utilization Management.

3. DEFINITIONS

METS – Metabolic Equivalent of Task - A measure of exercise intensity. This is a ratio of working metabolic rate to resting metabolic rate, and is directly related to the intensity of physical activity and the amount of oxygen consumed. The larger the MET value, the more calories used.

CARDIAC REHABILITATION- A comprehensive program consisting of medical evaluation, prescribed exercise, cardiac risk factor modification, education and counseling designed to restore certain patients with cardiovascular disease to active and productive lives. Cardiac rehabilitation, as described in the medical literature, is divided into 3 phases and consists of a series of supervised exercise sessions with continuous electrocardiographic monitoring. Clinically optimal results may be obtained if these sessions are conducted 2-3 times per week over a 12-to-18-week period.

4. PROCEDURE:

Clinical Criteria

Cardiac rehabilitation is considered medically necessary when the services are prescribed by the treating physician and initiated within 12 months of the cardiac event and should be completed with 6 months for any one or more of the following conditions:

1. Acute myocardial infarction (MI)/Acute coronary syndrome (ACS)
2. Any major open heart surgery, including but not limited to coronary artery bypass graft (CABG), heart valve repair or replacement, or heart or heart/lung transplantation
3. Class II through IV congestive heart failure (CHF) which has failed to respond to pharmacotherapy, and the condition is interfering with the ability to perform age-related activities of daily living (ADLS)

4. Coronary artery disease (CAD) with chronic stable angina pectoris which has failed to respond to pharmacotherapy and is interfering with the ability to perform age-related ADLS
5. Percutaneous coronary intervention (PTCA, angioplasty, atherectomy, stents)
6. Placement of ventricular assist device
7. Survivor of sudden cardiac death
8. Survivor of sustained ventricular tachycardia or ventricular fibrillation

A comprehensive clinical evaluation may be performed to assess the patient's status and guide the program characteristics, prior to program initiation. In addition to a medical examination, the evaluation may include an electrocardiogram stress test. Additional stress testing may also be performed at the completion of the program.

Frequency and Duration of Cardiac Rehabilitation

Cardiac Rehabilitation may be approved for a maximum of 2 one-hour sessions per day for up to 36 sessions, over about 36 weeks. Generally, programs run 2-3 sessions per week for about 12-18 weeks.

Medical Director review is required for requests of greater than the maximum number of sessions above.

Patients who have undergone previous cardiac rehabilitation may qualify for a new cardiac rehabilitation program, if a new qualifying cardiac event has occurred.

These cardiac events can include:

1. New cardiovascular surgery or angioplasty
2. New documented myocardial infarction or extension of initial infarction
3. New clinically significant coronary artery lesions found by cardiac catheterization
4. New evidence of ischemia on an exercise test, including thallium scan

Program Components

Cardiac rehabilitation program includes:

1. Each day that cardiac rehabilitation services are provided, exercise is physician-prescribed and physician-supervised

2. Education is provided regarding cardiac risk factors modification (e.g., diabetes, hypertension, hyperlipidemia, nutrition, smoking, and weight management)
3. Psychosocial assessment
4. Quantifiable Outcomes assessment
5. Treatment plan is individualized, detailing how each of the above components are utilized. The individualized treatment plan must be established, reviewed, and signed by a physician every 30 days.
6. The program's goal is to define a home program

Place of Service

The place of service for cardiac rehabilitation includes ambulatory outpatient, physician's office, or hospital outpatient setting.

1. All settings must have a physician immediately available and accessible for medical consultation and emergencies at all times when services are being furnished under the program.
2. All medical personnel necessary to conduct cardiac rehabilitation are trained in both basic and advanced life-support techniques.
3. The facility must have available the necessary cardiopulmonary emergency, diagnostic, and therapeutic life-saving equipment accepted by the medical community as medically necessary.

Exclusions

The Plan does not regard outpatient cardiac rehabilitation as medically necessary when any of the following are applicable:

1. Inability to exercise
2. Uncompensated heart failure
3. Uncontrolled dysrhythmias
4. Unstable angina.
5. Occupational and/or physical therapy are considered not medically necessary in conjunction with cardiac rehabilitation, unless the services are performed for an unrelated condition.

5. BACKGROUND

Cardiovascular disorders are the leading cause of mortality and morbidity in the industrialized world and account for nearly 50% of all deaths annually. The Centers for Disease Control and Prevention reports that approximately 695,000 people die from heart disease in the United States each year, which is one in every five deaths. Every year about 805,000 Americans have a heart attack. Of these heart attacks, 605,000 are first instances of heart attack, and 200,000 occur in patients with a history of heart attack.

Programs for cardiac rehabilitation were first introduced in the 1960s for patients who were recovering from an acute myocardial infarction. Concerns about the safety of unsupervised exercise after discharge led to the development of highly structured rehabilitation programs that were supervised by physicians and included electrocardiographic monitoring. Indications for outpatient cardiac rehabilitation were expanded to other cardiac patients, such as those who experience cardiac surgery, cardiomyopathy, and patients with heart failure.

In 1995, the United States Public Health Service defined cardiac rehabilitation as a comprehensive, long-term program 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.

In the HF-ACTION clinical trial, 2331 patients with heart failure classes II-IV were randomized to exercise training (36 supervised sessions) and usual care versus usual care alone. This multicenter trial's objective was to test the efficacy and safety of exercise training among patients with heart failure. The main outcome indicated that exercise training resulted in nonsignificant reduction in the primary end points of all-cause mortality or hospitalization and in key secondary clinical end points. After adjusting for highly prognostic predictors of the primary end point, exercise training was associated with modest significant reductions for both all-cause mortality or hospitalization and cardiovascular mortality or heart failure hospitalization. This trial was pivotal in the CMS decision to expand coverage of cardiac rehabilitation for Class IV heart failure. [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2916661/]

In 2012, the American College of Physicians, American College of Cardiology Foundation, American Heart Association/American Association of Thoracic Surgery, Preventive Cardiovascular Nurses Association, and Society of Thoracic Surgeons published a joint guideline on management of stable ischemic heart disease. The guideline included the following statement on cardiac rehabilitation: "Medically supervised exercise programs, i.e., cardiac rehabilitation and physician-directed home-based programs, are recommended for at-risk patients at first diagnosis of stable ischemic heart disease."

In 2013, the American College of Cardiology Foundation and the American Heart Association published updated guidelines on the management of heart failure. These guidelines include the following Class IIa recommendation related to cardiac rehabilitation (Level of Evidence: B): "Cardiac rehabilitation can be useful in clinically stable patients with heart failure to improve functional capacity, exercise duration, HRQOL [health-related quality of life], and mortality."

Pediatric Cardiac Rehabilitation

While the beneficial effects of cardiac rehabilitation programs in adults are well known, there are very few clinical trials regarding the use of cardiac rehabilitation in pediatric patients.

In the Boston Pediatric Cardiac Rehab Study in 2005, a 12-week pediatric cardiac rehab study was conducted with 16 children ages 8 to 17. All 16 children who completed the program had heart surgery or a nonsurgical procedure, and 11 of the 16 had only one functionally pumping heart chamber. At the 7 month follow up, the children who completed twice-weekly hour-long sessions had significant, sustained improvements in exercise function as well as improvement in behavior, self-esteem and emotional state. In addition, 15 of the 16 children had improved heart function, with the heart pumping more blood with each beat, delivering more oxygen.

Somarriba et al. (2008) reported on the effects of exercise rehabilitation for two children with dilated cardiomyopathy. These children underwent a structured exercise program that showed improvements in cardiovascular fitness and strength without deterioration in ventricular function. The authors recommended a careful and medically supervised approach for exercise in children with cardiomyopathy. It was noted that larger prospective studies are needed on the functional and metabolic responses for these children.

Patient Symptoms – Classes of Heart Failure New York Heart Association (NYHA) Functional Classification

1. Class I [mild] – No limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, dyspnea (shortness of breath).
2. Class II [Mild] – Slight limitation of physical activity. Comfortable at rest. Ordinary physical activity results in fatigue, palpitation, dyspnea (shortness of breath).
3. Class III [Moderate] – Marked limitation of physical activity. Comfortable at rest. Less than ordinary activity causes fatigue, palpitation, or dyspnea.
4. Class IV [Severe] – Unable to carry on any physical activity without discomfort. Symptoms of heart failure at rest. If any physical activity is undertaken, discomfort increases.
   www.heart.org/HEARTORG/Conditions/HeartFailure/AboutHeartFailure/Classes-of-Heart-Failure_UCM_306328_Article.jsp#.Wo1w8UxFxMU

American Heart Association Heart Failure Stages

1. Stage A: Presence of heart failure risk factors but no heart disease and no symptoms
2. Stage B: Heart disease is present but there are no symptoms (structural changes in heart before symptoms occur)
3. Stage C: Structural heart disease is present AND symptoms have occurred
4. Stage D: Presence of advanced heart disease with continued heart failure symptoms requiring aggressive medical therapy

6. APPLICABLE PROCEDURE CODES

CPT	Description
93797	Physician or other qualified health care professional services for outpatient cardiac rehabilitation; without continuous ECG monitoring (per session)
93015	Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; with supervision, interpretation and report
93016	Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; supervision only, without interpretation and report

93017	Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; tracing only, without interpretation and report
93018	Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; interpretation and report only
93024	Ergonovine provocation test

7. APPLICABLE PROCEDURE CODES

HCPCS CODE	Description
S9449	Weight management classes, nonphysician provider, per session
S9451	Exercise classes, nonphysician provider, per session
S9452	Nutrition classes, nonphysician provider, per session
S9453	Smoking cessation classes, nonphysician provider, per session
S9454	Stress management classes, nonphysician provider, per session
S9470	Nutritional counseling, dietitian visit

8. APPLICABLE DIAGNOSIS CODES

ICD 10	DESCRIPTION
I02.0	Rheumatic chorea with heart involvement
I05.0	Rheumatic mitral stenosis
I05.1	Rheumatic mitral insufficiency
I05.2	Rheumatic mitral stenosis with insufficiency
I05.8	Other rheumatic mitral valve diseases
I05.9	Rheumatic mitral valve disease, unspecified
I06.0	Rheumatic aortic stenosis
I06.1	Rheumatic aortic insufficiency

I06.2	Rheumatic aortic stenosis with insufficiency
I06.8	Other rheumatic aortic valve diseases
I06.9	Rheumatic aortic valve disease, unspecified
I08.0	Rheumatic disorders of both mitral and aortic valves
I08.1	Rheumatic disorders of both mitral and tricuspid valves
I08.2	Rheumatic disorders of both aortic and tricuspid valves
I08.3	Combined rheumatic disorders of mitral, aortic and tricuspid valves
I08.8	Other rheumatic multiple valve diseases
I08.9	Rheumatic multiple valve disease, unspecified
I09.81	Rheumatic heart failure (congestive)
I11.0	Hypertensive heart disease with heart failure
I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4, chronic kidney disease, or unspecified chronic kidney disease
I13.2	Hypertensive heart and chronic kidney disease with heart failure and stage 5 chronic kidney disease or end stage renal disease
I20.0	unstable angina
I20.1	Angina pectoris with documented spasm
I20.8	Other forms of angina pectoris
I20.9	Angina pectoris, unspecified
I21.01	ST elevation (STEMI) myocardial infarction involving left main coronary artery
I21.02	ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery
I21.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall
I21.11	ST elevation (STEMI) myocardial infarction involving right coronary artery
I21.19	elevation (STEMI) myocardial infarction involving right coronary artery
I21.21	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery
I21.29	ST elevation (STEMI) myocardial infarction involving other sites

I21.3	ST elevation (STEMI) myocardial infarction of unspecified site
I21.A1	Myocardial infarction type 2
I21.A9	Other myocardial infarction type
I22.0	Subsequent ST elevation (STEMI) myocardial infarction of anterior wall
I22.1	Subsequent ST elevation (STEMI) myocardial infarction of inferior wall
I22.2	Subsequent non-ST elevation (NSTEMI) myocardial infarction
I22.8	I22.8 Subsequent ST elevation (STEMI) myocardial infarction of other sites
I22.9	Subsequent ST elevation (STEMI) myocardial infarction of unspecified site
I24.0	Acute coronary thrombosis not resulting in myocardial infarction
I24.1	Dressler's syndrome
I24.8	Other forms of acute ischemic heart disease
I24.9	Acute ischemic heart disease, unspecified
I25.10	Atherosclerotic heart disease of native coronary artery without angina pectoris
I25.110	Atherosclerotic heart disease of native coronary artery with unstable angina pectoris
I25.111	Atherosclerotic heart disease of native coronary artery with angina pectoris with documented spasm
I25.118	Atherosclerotic heart disease of native coronary artery with other forms of angina pectoris
I25.2	Old myocardial infarction
I25.3	Aneurysm of heart
I25.41	Coronary artery aneurysm
I25.42	Coronary artery dissection
I25.5	Ischemic cardiomyopathy
I25.6	Silent myocardial ischemia
I25.700	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unstable angina pectoris
I25.701	Atherosclerosis of coronary artery bypass graft(s), unspecified, with angina pectoris with documented spasm

I25.708	Atherosclerosis of coronary artery bypass graft(s), unspecified, with other forms of angina pectoris
I25.709	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unspecified angina pectoris
I25.710	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unstable angina pectoris
I25.718	Atherosclerosis of autologous vein coronary artery bypass graft(s) with angina pectoris with documented spasm
I25.719	Atherosclerosis of autologous vein coronary artery bypass graft(s) with angina pectoris with documented spasm
I25.720	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unstable angina pectoris
I25.721	Atherosclerosis of autologous artery coronary artery bypass graft(s) with angina pectoris with documented spasm
I25.728	Atherosclerosis of autologous artery coronary artery bypass graft(s) with other forms of angina pectoris
I25.729	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unspecified angina pectoris
I25.730	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unstable angina pectoris
I25.731	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with angina pectoris with documented spasm
I25.738	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with other forms of angina pectoris
I25.739	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unspecified angina pectoris
I25.750	Atherosclerosis of native coronary artery of transplanted heart with unstable angina
I25.751	Atherosclerosis of native coronary artery of transplanted heart with angina pectoris with documented spasm
I25.758	Atherosclerosis of native coronary artery of transplanted heart with other forms of angina pectoris

I25.759	Atherosclerosis of native coronary artery of transplanted heart with unspecified angina pectoris
I25.760	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unstable angina
I25.761	Atherosclerosis of bypass graft of coronary artery of transplanted heart with angina pectoris with documented spasm
I25.768	Atherosclerosis of bypass graft of coronary artery of transplanted heart with other forms of angina pectoris
I25.769	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unspecified angina pectoris
I25.790	Atherosclerosis of other coronary artery bypass graft(s) with unstable angina pectoris
I25.791	Atherosclerosis of other coronary artery bypass graft(s) with angina pectoris with documented spasm
I25.798	Atherosclerosis of other coronary artery bypass graft(s) with other forms of angina pectoris
I25.799	Atherosclerosis of other coronary artery bypass graft(s) with unspecified angina pectoris
I25.810	Atherosclerosis of coronary artery bypass graft(s) without angina pectoris
I25.811	Atherosclerosis of native coronary artery of transplanted heart without angina pectoris
I25.812	Atherosclerosis of bypass graft of coronary artery of transplanted heart without angina pectoris
I25.82	Chronic total occlusion of coronary artery
I25.83	Coronary atherosclerosis due to lipid rich plaque
I25.84	Coronary atherosclerosis due to calcified coronary lesion
I25.89	Other forms of chronic ischemic heart disease
I25.9	Chronic ischemic heart disease, unspecified
I34.0-I34.9, I36.0-I37.9	Nonrheumatic mitral, tricuspid and pulmonary valve disorders
I42.3-I42.7	Cardiomyopathy
I46.2-I46.9	Cardiac arrest

I47.9	Paroxysmal tachycardia, unspecified
I49.01	Ventricular fibrillation
I49.02	Ventricular flutter
I50.1	Left ventricular failure, unspecified
I50.20	Unspecified systolic (congestive) heart failure
I50.21	Acute systolic (congestive) heart failure
I50.22	Chronic systolic (congestive) heart failure
I50.30	Unspecified diastolic (congestive) heart failure
I50.31	Acute diastolic (congestive) heart failure
I50.32	Chronic diastolic (congestive) heart failure
I50.33	Acute on chronic diastolic (congestive) heart failure
I50.40	Unspecified combined systolic (congestive) and diastolic (congestive) heart failure
I50.41	Acute combined systolic (congestive) and diastolic (congestive) heart failure
I50.42	Acute combined systolic (congestive) and diastolic (congestive) heart failure
I50.43	Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure
I80.810	Right heart failure, unspecified
I50.811	Acute right heart failure
I50.812	Chronic right heart failure
I50.813	Acute on chronic right heart failure
I50.814	Right heart failure due to left heart failure
I50.82	Biventricular heart failure
I50.83	High output heart failure
I50.84	End stage heart failure
I50.89	Other heart failure
I50.9	heart failure, unspecified
I97.0	Postcardiotomy syndrome

I97.110	Postprocedural cardiac insufficiency following cardiac surgery
I97.111	Postprocedural cardiac insufficiency following other surgery
I97.120	Postprocedural cardiac arrest following cardiac surgery
I97.121	Postprocedural cardiac arrest following other surgery
I97.13.0	Postprocedural heart failure following cardiac surgery
I97.190	Postprocedural cardiac functional disturbances
Z51.89	Encounter for other specified aftercare
Z94.1	Heart transplant status
Z94.2	Lung transplant status
Z95.1	Presence of aortocoronary bypass graft
Z95.2	Presence of prosthetic heart valve
Z95.3	Presence of xenogenic heart valve
Z95.4	Presence of other heart-valve replacement
Z95.5	Presence of coronary angioplasty implant and graft
Z95.811	Presence of heart assist device
Z95.812	Presence of fully implantable artificial heart
Z95.61	Coronary angioplasty status
Z98.89	Other specified postprocedural status [surgery to heart and great vessels]

9. REFERENCES:

American Heart Association. Accessed on May 23, 2023 and available at: http://www.heart.org/HEARTORG/

Anderson L, Oldridge N, Thompson DR, et al. Exercise-based cardiac rehabilitation for coronary heart disease: Cochrane systematic review and meta-analysis. J Am Coll Cardiol. 2016; 67(1): 1-12. Accessed on April 30, 2024 and available at: http://www.onlinejacc.org/content/67/1/1?_ga=2.26010621.130426684.1493810512155438230 6.1493810098

Braun LT, Wenger NK, Rosenson RS. Cardiac rehabilitation programs. UpToDate. Feb 22, 2023. Accessed on April 30, 2024 and available at: https://www.uptodate.com/contents/cardiac-

rehabilitation-programs?search=cardiac%20rehabilitation&source=search_result&selectedTitle=1~65&usage_type=default&display_rank=1

Centers for Disease Control and Prevention: CDC 24/7: Saving Lives, Protecting People. Heart Disease Facts. Accessed on April 30, 2024 and available at: https://www.cdc.gov/heartdisease/facts.htm

Centers for Medicare and Medicaid Services: Medicare National Coverage Determination for Intensive Cardiac Rehabilitation Programs (NCD 20.31). Publication No. 100-3, Version 1. Effective Date 8/12/2010. Accessed on April 30, 2024 and available at: https://www.cms.gov/medicare-coverage-database/view/ncd.aspx?NCDId=339&ncdver=1&fromdb=true

Centers for Medicare and Medicaid Services: Medicare National Coverage Determination for Chronic Heart Failure (NCD 20.10.1). Publication No. 100-3, Version 1. Effective Date 2/18/2014. Accessed on April 30, 2024 and available at: https://www.cms.gov/medicare-coverage-database/view/ncd.aspx?ncdid=359&ncdver=1&bc=0

Centers for Medicare and Medicaid Services: Decision memo for intensive cardiac rehabilitation (ICR) program-Dr. Ornish's program for reversing heart disease (CAG-00419N). August 12, 2010. Accessed on April 30, 2024 and available at: https://www.cms.gov/medicare-coverage-database/view/ncacal-decision-memo.aspx?proposed=N&NCAId=240&NcaName=Intensive+Cardiac+Rehabilitation+%28ICR%29+Program+-+Dr.+Ornish

Centers for Medicare and Medicaid Services: Decision memo for Coverage of Cardiac Rehabilitation (CR) Programs - Chronic Heart Failure (HF). February 18, 2014. Centers for Medicare and Medicaid Services. Accessed on April 30, 2024 and available at: https://www.cms.gov/medicare-coverage-database/view/ncacal-decision-memo.aspx?proposed=N&NCAId=270

Dedieu N, Fernandez L, Garrido-Lestache E, et al. Effects of a cardiac rehabilitation program in patients with congenital heart disease. Open J Inter Med. 2014. Accessed on April 30, 2024 and abstract available at: https://www.scirp.org/journal/paperinformation.aspx?paperid=44167

Forman D.E., LaFond K., Panch T., et al. Utility and efficacy of a smartphone application to enhance the learning and behavior goals of traditional cardiac rehabilitation: a feasibility study. J Cardiopulm Rehabil Prev 2014; 34: 327–334. Accessed on April 30, 2024 and abstract available at: https://www.ncbi.nlm.nih.gov/pubmed/24866355?access_num=24866355&link_type=MED&dopt=Abstract

Forman DE, Sanderson BK, Josephson RA, et al. Heart failure as a newly approved diagnosis for cardiac rehabilitation. J Am Coll Cardiol. 2015; 65(24) 2652-2659: Accessed on April 30, 2024 and available at: http://www.onlinejacc.org/content/65/24/2652?_ga=2.34614113.130426684.1493810512155438230 6.1493810098

Koifman E., Grossman E., Elis A., et al. Multidisciplinary rehabilitation program in recently hospitalized patients with heart failure and preserved ejection fraction: rationale and design of a randomized controlled trial. Am Heart J 2014; 168:830–837.epub. Accessed on April 30, 2024 and abstract available at: https://www.ncbi.nlm.nih.gov/pubmed/25458645?access_num=25458645&link_type=MED&dop%20t=Abstract

Leon AS, Franklin BA, Costa F, et al. Cardiac rehabilitation and secondary prevention of coronary heart disease: an American Heart Association Scientific Statement from the Council on Clinical Cardiology (Subcommittee on Exercise, Cardiac Rehabilitation, and Prevention) and the Council on Nutrition, Physical Activity, and Metabolism (Subcommittee on Physical Activity), in collaboration with the American Association of Cardiovascular and Pulmonary Rehabilitation [published correction appears in Circulation. 2005; 111(13): 1717]. Circulation. 2005; 111(3): 369-376.

O'Connor CM, Whellan DJ, Wojdyla D, et al. Factors related to morbidity and mortality in patients with chronic heart failure with systolic dysfunction: The HF-ACTION predictive risk score model. Circulation: Heart Failure. 2012; 5:63-71. Accessed on April 30, 2024 and available at: http://circheartfailure.ahajournals.org/content/5/1/63

Pashkow FJ. Issues in contemporary cardiac rehabilitation: a historical perspective. J Am Coll Cardiol. 1993; 21:822-34. Accessed on May 22, 2024 and available at: https://pubmed.ncbi.nlm.nih.gov/8436764/

Price KJ, Gordon BA, Bird SR, Benson AC. A review of guidelines for cardiac rehabilitation exercise programmes: Is there an international consensus? Eur J Prev Cardiol 2016;23: 1715-1733.

Rhodes J, Curran TJ, Camil L, et al., Impact of cardiac rehabilitation on the exercise function of children with serious congenital heart disease. Pediatrics. 2006; 118(3): 586-593. Accessed on May 10, 2024 and available at: https://pubmed.ncbi.nlm.nih.gov/16322156/

Scherrenberg M, Jansen J, Lauwers A, et al. Is there an optimal dose of cardiac rehabilitation in coronary artery disease patients? Int J Cardiol 2021;330:7-11.

Somarriba G, et al. Exercise rehabilitation in pediatric cardiomyopathy. Prog Pediatric Cardiol. 2008; 25(1): 91-102. Accessed on May 10, 2024 and available at: https://www.childrenscardiomyopathy.org/downloadable_files/Exercise_Rehabilation_Miller.pdf

Taylor RS, Dalal HM, Zwisler AD, Cardiac rehabilitation for heart failure: 'Cinderella' or evidence-based pillar of care? European Heart Journal 2023; 44:1511–1518

Thomas RJ. Cardiac rehabilitation – Challenges, advances, and the road ahead. NEJM 2024;390:830-841.

Wenger NK. Cardiac rehabilitation. Clinical practice guideline, No.17. Rockville, MD.: U.S. Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research; 1995. Abstract accessed on May 10, 2024 and available at: https://pubmed.ncbi.nlm.nih.gov/8595435/

Wenger NK, Rosenson RS, Braun LT. Cardiac rehabilitation: indications, efficacy, and safety in patients with coronary heart disease. UpToDate, Last update Dec 5, 2023. Accessed on May 10, 2024 and available at: https://www.uptodate.com/contents/cardiac-rehabilitation-indications-efficacy-and-safety-in-patients-with-coronary-heart-

disease?search=cardiac%20rehabilitation&source=search_result&selectedTitle=2~65&usage_type=default&display_rank=2

Wilson SR, Givertz MM, Stewart GC, Mudge GH. Ventricular assist devices: the challenges of outpatient management. J Am Coll Cardiol. 2009; 54(18): 1647-59. Accessed on May 22, 2024 and abstract available at: https://www.ncbi.nlm.nih.gov/pubmed/19850205?access_num=19850205&link_type=MED&dopt=%20Abstract

Yancy CW, Jessup M, Bozkurt B, et al. 2013 ACCF/AHA guideline for the management of heart failure: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. Circulation. 2013; 128:e240-e327. Accessed on May 10, 2024 and available at: https://pubmed.ncbi.nlm.nih.gov/23741057/

10. ATTACHMENTS:

	Title	Attachment
1		
2		
3		

Title: CARDIAC REHABILITATION	**Division: Medical Management** **Department: Utilization Management**
Approval Date: 3/30/18	**LOB: Medicaid, Medicare, HIV SNP, CHP, MetroPlus Gold, Goldcare I&II, Market Plus, Essential, HARP**
Effective Date: 3/30/18	**Policy Number: UM-MP227**
Review Date: 5/28/2024	**Cross Reference Number:**
Retired Date: 5/24/2021	**Page 18 of 19**
RE-ACTIVATED: 5/30/2023	

11. REVISION LOG:

REVISIONS	DATE
Creation Date	3/30/18
Annual Review	3/15/19
Annual Review	6/8/2020
Annual Review	5/12/21
Retired	5/24/2021
Re-Activated	5/30/2023
Annual Review	5/28/2024

Approved: **Date:**

Sanjiv Shah MD

Digitally signed by Sanjiv Shah MD
Date: 2024.05.29 12:01:34 -04'00'

Sanjiv Shah MD
Chief Medical Officer

MetroPlus Health

Policy and Procedure

Title: CARDIAC REHABILITATION	**Division: Medical Management** **Department: Utilization Management**
Approval Date: 3/30/18	**LOB: Medicaid, Medicare, HIV SNP, CHP, MetroPlus Gold, Goldcare I&II, Market Plus, Essential, HARP**
Effective Date: 3/30/18	**Policy Number: UM-MP227**
Review Date: 5/28/2024	**Cross Reference Number:**
Retired Date: 5/24/2021	**Page 19 of 19**
RE-ACTIVATED: 5/30/2023	

Medical Guideline Disclaimer:

 The treating physician or primary care provider must submit MetroPlus Health Plan clinical evidence that the patient meets the criteria for the treatment or surgical procedure. Without this documentation and information, MetroPlus Health Plan will not be able to properly review the request for prior authorization. The clinical review criteria expressed in this policy reflects how MetroPlus Health Plan determines whether certain services or supplies are medically necessary. MetroPlus Health Plan established the clinical review criteria based upon a review of currently available clinical information(including clinical outcome studies in the peer-reviewed published medical literature, regulatory status of the technology, evidence-based guidelines of public health and health research agencies, evidence-based guidelines and positions of leading national health professional organizations, views of physicians practicing in relevant clinical areas, and other relevant factors). MetroPlus Health Plan expressly reserves the right to revise these conclusions as clinical information changes, and welcomes further relevant information. Each benefit program defines which services are covered. The conclusion that a particular service or supply is medically necessary does not constitute a representation or warranty that this service or supply is covered and/or paid for by MetroPlus Health Plan, as some programs exclude coverage for services or supplies that MetroPlus Health Plan considers medically necessary. If there is a discrepancy between this guidelines and a member's benefits program, the benefits program will govern. In addition, coverage may be mandated by applicable legal requirements of a state, the Federal Government or the Centers for Medicare & Medicaid Services (CMS) for Medicare and Medicaid members.

All coding and website links are accurate at time of publication.

MetroPlus Health Plan has adopted the herein policy in providing management, administrative and other services to our members, related to health benefit plans offered by our organization.