

# Clinical Policy: Outpatient Cardiac Rehabilitation

Reference Number: LA.CP.MP.176

Last Review Date: 08/2020

Coding Implications  
Revision Log

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

## Description

Medical necessity guidelines for conventional and intensive outpatient cardiac rehabilitation programs.

## Policy/Criteria

- I. It is the policy of Louisiana Healthcare Connections that initiation of medically supervised phase II outpatient cardiac rehabilitation is medically necessary when meeting all of the following:
  - A. Indications, one of the following:
    1. Stable angina pectoris within last 12 months;
    2. History of unstable angina pectoris within last 12 months;
    3. Percutaneous coronary intervention within last 12 months;
    4. Myocardial infarction within last 12 months;
    5. Coronary artery bypass graft (CABG) within last 12 months;
    6. Coronary artery disease (CAD) within last 6 months;
    7. Heart failure (HF) Class II, III, or IV and on a stable medication regimen;
    8. Heart or heart-lung transplantation within last 6 months, or within 6 months of newly gained ability to participate in rehabilitation regimen;
    9. Cardiac valve surgery within last 6 months;
    10. Peripheral artery disease within last 12 months;
    11. History of sustained ventricular tachycardia or fibrillation, or survivors of sudden cardiac death;
  - B. Therapy program, all of the following:
    1. Physician-prescribed exercise during each session;
    2. Electrocardiogram monitoring;
  - C. Request is for  $\leq 36$  visits over a period of  $\leq 9$  months;
  - D. If diabetic, documentation supports that it is adequately controlled;
  - E. None of the following contraindications:
    1. Unstable angina;
    2. Uncontrolled hypertension - resting systolic blood pressure (SBP)  $>180$  mmHg and/or resting diastolic BP (DBP)  $>110$  mmHg;
    3. Orthostatic BP drop of  $>20$  mmHg with symptoms;
    4. Significant aortic stenosis (aortic valve area  $<1.0$  cm<sup>2</sup>);
    5. Uncontrolled atrial or ventricular arrhythmias;
    6. Uncontrolled sinus tachycardia ( $>120$  beats/min);
    7. Uncompensated heart failure;
    8. Third degree atrioventricular (AV) block without pacemaker;
    9. Active pericarditis or myocarditis;
    10. Recent embolism;
    11. Acute thrombophlebitis;
    12. Acute systemic illness or fever;
    13. Severe orthopedic conditions that would prohibit exercise;

14. Other metabolic conditions, such as acute thyroiditis, hypokalemia, hyperkalemia, or hypovolemia (until adequately treated).

**II.** It is the policy of Louisiana Healthcare Connections that continuation of medically supervised phase II outpatient cardiac rehabilitation is medically necessary when meeting all of the following:

- A. Progressive therapy program, all of the following:
  - 1. Physician-prescribed exercise during each session;
  - 2. Electrocardiogram monitoring;
- B. Partial progress made in meeting treatment goals, all of the following:
  - 1. Reduction in intensity and frequency of symptoms or findings;
  - 2. Improvement in function and reduction in limitations;
  - 3. Documented patient adherence to home exercise program;
- C. Request is for  $\leq$  a total of 36 visits, including those initially approved. Requests for additional visits will be reviewed by a medical director.

**III.** It is the policy of Louisiana Healthcare Connections that phase III or IV cardiac rehab programs are not medically necessary as they are primarily educational or training programs.

**IV.** It is the policy of Louisiana Healthcare Connections that intensive cardiac rehabilitation programs are considered investigational as there is not sufficient evidence that they achieve superior outcomes when compared to conventional cardiac rehabilitation programs.

### **Background**

The American Heart Association and American Association of Cardiovascular and Pulmonary Rehabilitation define cardiac rehabilitation for coronary heart disease as “coordinated, multifaceted interventions designed to optimize a cardiac patient’s physical, psychological, and social functioning, in addition to stabilizing, slowing, or even reversing the progression of the underlying atherosclerotic processes, thereby reducing morbidity and mortality.”<sup>13</sup> Cardiac rehabilitation (CR) programs should include comprehensive long-term services involving medical evaluation/baseline patient assessment, exercise training and physical activity counseling, coronary risk factor reduction/secondary prevention, including nutritional counseling and weight management, psychosocial support, and education regarding diet, medications, and exercise tolerance.<sup>3</sup>

Phase II outpatient CR programs provide electrocardiogram-monitored, supervised exercise programs tailored to the needs of the patient, usually two to three times weekly for 8 to 12 weeks or longer. Goals of CR include reducing coronary risk factors, identifying and managing psychosocial problems that affect patients with cardiac disease, and teaching safe and effective exercise prescribed by a physician or other qualified practitioner.<sup>3</sup>

### *Intensive cardiac rehabilitation*

According to the Centers for Medicare and Medicaid Services, “intensive cardiac rehabilitation (ICR) refers to a physician-supervised program that furnishes cardiac rehabilitation services more frequently and often in a more rigorous manner” than conventional programs. In order to qualify, ICR programs must demonstrate in peer-reviewed literature that they achieved at least

one of the following outcomes: (1) positively affected the progression of coronary heart disease; (2) reduced the need for coronary bypass surgery; and, (3) reduced the need for percutaneous coronary interventions.<sup>5</sup>

Only one randomized controlled trial has compared ICR (the Ornish program) with conventional CR and did not report any significant differences in outcomes of interest, such as incidence of angina, mean total cholesterol, mean body mass index (BMI), mean systolic blood pressure, mean diastolic blood pressure, or mean carotid intima-media thickness.<sup>1,10</sup> A Hayes comparative effectiveness review of ICR programs notes that the evidence comparing ICR to usual care and conventional CR, as well as individual ICR programs to each other, is of very low quality, given small sample sizes and few published studies.<sup>10</sup>

**Coding Implications**

This clinical policy references Current Procedural Terminology (CPT®). CPT® is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted 2020, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

Codes that support coverage criteria

CPT® Codes	Description
93798	Physician or other qualified health care professional services for outpatient cardiac rehabilitation; with continuous ECG monitoring (per session)

Codes that do not support coverage criteria

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

Codes that do not support coverage criteria

HCPCS Codes	Description
G0422	Intensive cardiac rehabilitation; with or without continuous ECG monitoring with exercise, per session
G0423	Intensive cardiac rehabilitation; with or without continuous ECG monitoring; without exercise, per session
S9472	Cardiac rehabilitation program, non-physician provider, per diem

ICD-10-CM Diagnosis Codes that Support Coverage Criteria

+ Indicates a code requiring an additional character

ICD-10- CM Code	Description
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	STEMI myocardial infarction involving left anterior descending coronary artery
I21.09	STEMI myocardial infarction involving other coronary artery of anterior wall
I21.11	STEMI myocardial infarction involving right coronary artery
I21.19	STEMI myocardial infarction involving other coronary artery of inferior wall
I21.21	STEMI myocardial infarction involving left circumflex coronary artery
I21.29	STEMI myocardial infarction involving other sites
I21.3	STEMI myocardial infarction of unspecified site
I21.4	Non-ST elevation (NSTEMI) myocardial infarction
I21.9	Acute myocardial infarction, unspecified
I21.A1	Myocardial infarction type 2
I21.A9	Other myocardial infarction type
I22.0	Subsequent STEMI myocardial infarction of anterior wall
I22.1	Subsequent STEMI myocardial infarction of inferior wall
I22.2	Subsequent NSTEMI myocardial infarction
I22.8	Subsequent STEMI myocardial infarction of other sites
I22.9	Subsequent STEMI myocardial infarction of unspecified site
I25.10	Atherosclerotic heart disease of native coronary artery without 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
I25.119	Atherosclerotic heart disease of native coronary artery with unspecified angina pectoris
I25.2	Old myocardial infarction
I25.5	Ischemic cardiomyopathy
I25.6	Silent myocardial ischemia
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
I25.711	Atherosclerosis of autologous vein coronary artery bypass graft(s) with angina pectoris with documented spasm
I25.718	Atherosclerosis of autologous vein coronary artery bypass graft(s) with other forms of angina pectoris
I25.719	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unspecified angina pectoris

ICD-10-CM Code	Description
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
I25.731	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
I25.751	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
I25.761	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
I25.791	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
I25.89	Other forms of chronic ischemic heart disease
I25.9	Chronic ischemic heart disease, unspecified
I49.01	Ventricular fibrillation
I49.02	Ventricular flutter
I50.22	Chronic systolic (congestive) heart failure
I50.32	Chronic diastolic (congestive) heart failure
I50.42	Chronic combined systolic (congestive) and diastolic (congestive) heart failure
I50.812	Chronic right heart failure

ICD-10- CM Code	Description
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
I73.9	Peripheral vascular disease, unspecified
Z48.21	Encounter for aftercare following heart transplant
Z48.280	Encounter for aftercare following heart-lung transplant
Z86.74	Personal history of sudden cardiac arrest
Z94.1	Heart transplant status
Z94.3	Heart and lungs 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
Z98.61	Coronary angioplasty status

Reviews, Revisions, and Approvals	Date	Approval Date
Converted corporate to local policy.	08/15/2020	

**References**

1. Aldana SG, Greenlaw R, Salberg A, Merrill RM, Hager R, Jorgensen RB. The effects of an intensive lifestyle modification program on carotid artery intima-media thickness: a randomized trial. *Am J Health Promot.* 2007;21(6):510-516.
2. Anderson L, Thompson DR, Oldridge N, Zwisler AD, Rees K, Martin N, Taylor RS. Exercise-based cardiac rehabilitation for coronary heart disease. *Cochrane Database of Systematic Reviews* 2016, Issue 1. Art. No.: CD001800.
3. Braun LT, Wenger NK, Rosenson RS. Cardiac rehabilitation programs. *UpToDate.* Gersh BJ (Ed.) Jul 10, 2019. Accessed April 17, 2020.
4. Centers for Medicare and Medicaid Services. CMS Manual System: Pub 100-04 Medicare Claims Processing Transmittal 3848. Effective Sept. 26, 2017. <https://www.cms.gov/Regulations-and-Guidance/Guidance/Transmittals/2017Downloads/R3848CP.pdf>
5. Centers for Medicare and Medicaid Services. National coverage determination (NCD) for Intensive Cardiac Rehabilitation (ICR) Programs (20.3). Effective Aug. 12, 2010.
6. Coven, DL. Acute Coronary Syndrome. *Medscape.* Dec 09,2019. Accessed April 17, 2020. <https://emedicine.medscape.com/article/1910735-overview>
7. Downing J, Balady GJ. The role of exercise training in heart failure. *J Am Coll Cardiol.* 2011; 58:561–569.

8. Fletcher GF, Balady GJ, Amsterdam EA, et al. Exercise standards for testing and training: a statement for healthcare professionals from the American Heart Association. *Circulation* 2001; 104:1694.
9. Hillis LD, Smith PK, Anderson JL, et al. 2011 ACCF/AHA Guideline for Coronary Artery Bypass Graft Surgery. A report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. Developed in collaboration with the American Association for Thoracic Surgery, Society of Cardiovascular Anesthesiologists, and Society of Thoracic Surgeons. *J Am Coll Cardiol*. 2011 Dec 6;58(24):e123-210.
10. Hayes. Medical Technology Directory Comparative Effectiveness Review: Intensive cardiac rehabilitation programs for coronary artery disease. Mar 22, 2019. Accessed April 17, 2020 .
11. Jessup M, Abraham WT, Casey DE, et al. 2009 focused update: ACCF/AHA guidelines for the diagnosis and management of heart failure in adults: a report of the American College of Cardiology Foundation/American Heart Association task force on practice guidelines: developed in collaboration with the international society for heart and lung transplantation. *Circulation*. 2009; 119:1977–2016.
12. Karapolat, Hale, et al. "Efficacy of the cardiac rehabilitation program in patients with end-stage heart failure, heart transplant patients, and left ventricular assist device recipients." *Transplantation proceedings*. Vol. 45. No. 9. Elsevier, 2013.
13. Kwan G, Balady GJ. Cardiac rehabilitation 2012: advancing the field through emerging science. *Circulation*. 2012 Feb;125(7):e369-73.
14. 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). *Circulation*. 2005; 111:369–76. Erratum in: *Circulation*. 2005;111:1717
15. Long L, Mordi IR, Bridges C, Sagar VA, Davies EJ, Coats AJS, Dalal H, Rees K, Singh SJ, Taylor RS. Exercise-based cardiac rehabilitation for adults with heart failure. *Cochrane Database of Systematic Reviews* 2019, Issue 1. Art. No.: CD003331.
16. Levine GN, Bates ER, Bittl JA, et al. 2016 ACC/AHA Guideline Focused Update on Duration of Dual Antiplatelet Therapy in Patients With Coronary Artery Disease: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines: An Update of the 2011 ACCF/AHA/SCAI Guideline for Percutaneous Coronary Intervention, 2011 ACCF/AHA Guideline for Coronary Artery Bypass Graft Surgery, 2012 ACC/AHA/ACP/AATS/PCNA/SCAI/STS Guideline for the Diagnosis and Management of Patients With Stable Ischemic Heart Disease, 2013 ACCF/AHA Guideline for the Management of ST-Elevation Myocardial Infarction, 2014 AHA/ACC Guideline for the Management of Patients With Non-ST-Elevation Acute Coronary Syndromes, and 2014 ACC/AHA Guideline on Perioperative Cardiovascular Evaluation and Management of Patients Undergoing Noncardiac Surgery. *Circulation*. 2016 Sep 6;134(10):e123-55.
17. Mezzani A, Hamm LF, Jones AM, et al. 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. *Journal of Cardiopulmonary Rehabilitation and Prevention*: November/December 2012. 32(6); p 327–350.

18. Morgan JP. Clinical manifestations, diagnosis, and management of the cardiovascular complications of cocaine abuse. UpToDate. McKenna WJ, Traub SJ (Eds.). Mar 26,2020. Accessed April 17,2020.
19. Nielsen KM, Zwisler AD, Taylor RS, Svendsen JH, Lindschou J, Anderson L, Jakobsen JC, Berg SK. Exercise-based cardiac rehabilitation for adult patients with an implantable cardioverter defibrillator. Cochrane Database of Systematic Reviews 2019, Issue 2. Art. No.: CD011828.
20. O’Gara PT, Kushner FG, Ascheim DD, et al. 2013 ACCF/AHA guideline for the management of ST-elevation myocardial infarction: executive summary: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines: developed in collaboration with the American College of Emergency Physicians and Society for Cardiovascular Angiography and Interventions. *J Am Coll Cardiol.* 2013 Jan 29;61(4):e78-e140.
21. Paulus M. Methamphetamine use disorder: Epidemiology, clinical manifestations, course, assessment, and diagnosis. UpToDate. Saxon AJ (Ed.) Aug 21, 2019. Accessed April, 17, 2020..
22. Palermo P, Corrà U. Exercise Prescriptions for Training and Rehabilitation in Patients with Heart and Lung Disease. *Ann Am Thorac Soc.* 2017 Jul;14(Supplement\_1):S59-S66.
23. Risom SS, Zwisler AD, Johansen PP, et al. Exercise-based cardiac rehabilitation for adults with atrial fibrillation. *Cochrane Database Syst Rev.* 2017;2:CD011197.
24. Squires R, Kaminsky LA, Porcari JP, et al. Progression of Exercise Training in Early Outpatient Cardiac Rehabilitation: An Official Statement from the American Association of Cardiovascular And Pulmonary Rehabilitation. *Journal of Cardiopulmonary Rehabilitation and Prevention:* May 2018. 38(3) p 139–146.
25. Smith SC Jr, Benjamin EJ, Bonow RO, et al. AHA/ACCF Secondary Prevention and Risk Reduction Therapy for Patients with Coronary and other Atherosclerotic Vascular Disease: 2011 update: a guideline from the American Heart Association and American College of Cardiology Foundation. *Circulation.* 2011 Nov;124(22):2458-73. Epub 2011 Nov 3.
26. Task force members, Montalescot G, Sechtem U, Achenback S, et al. 2013 ESC guidelines on the management of stable coronary artery disease: the Task Force on the management of stable coronary artery disease of the European Society of Cardiology. *Eur Heart J.* 2013 Oct;34(38):2949-3003.
27. Wenger NK, Rosenson RS, Braun LT, et al. Cardiac rehabilitation: Indications, efficacy, and safety in patients with coronary heart disease. UpToDate. Gersh BJ, (Ed.) Apr. 3, 2019. Accessed April 17, 2020.
28. Yamamoto S, Hotta K, Ota E, Matsunaga A, Mori R. Exercise-based cardiac rehabilitation for people with implantable ventricular assist devices. *Cochrane Database of Systematic Reviews* 2018, Issue 9. Art. No.: CD012222. DOI: 10.1002/14651858.

### **Important Reminder**

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. LHCC makes no representations and accepts no



liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable LHCC administrative policies and procedures.

This clinical policy is effective as of the date determined by LHCC. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. LHCC retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom LHCC has no control or right of control. Providers are not agents or employees of LHCC.

This clinical policy is the property of LHCC. Unauthorized copying, use, and distribution of this clinical policy or any information contained herein are strictly prohibited. Providers, members and their representatives are bound to the terms and conditions expressed herein through the terms of their contracts. Where no such contract exists, providers, members and their representatives agree to be bound by such terms and conditions by providing services to members and/or submitting claims for payment for such services.

©2020 Louisiana Healthcare Connections. All rights reserved. All materials are exclusively owned by Louisiana Healthcare Connections and are protected by United States copyright law and international copyright law. No part of this publication may be reproduced, copied, modified, distributed, displayed, stored in a retrieval system, transmitted in any form or by any means, or otherwise published without the prior written permission of Louisiana Healthcare Connections. You may not alter or remove any trademark, copyright or other notice contained herein. Louisiana Healthcare Connections is a registered trademark exclusively owned by Louisiana Healthcare Connections.