

MEDICAL POLICY

MEDICAL POLICY DETAILS	
Medical Policy Title	CARDIAC REHABILITATION
Policy Number	8.01.14
Category	Therapy/ Rehabilitation
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Archived Date	06/27/19
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Product Disclaimer	<ul style="list-style-type: none"> • If a product excludes coverage for a service, it is not covered, and medical policy criteria do not apply. • If a commercial product (including an Essential Plan product) or a Medicaid product covers a specific service, medical policy criteria apply to the benefit. • If a Medicare product covers a specific service, and there is no national or local Medicare coverage decision for the service, medical policy criteria apply to the benefit.

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 (MI) 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**. (Please see Guidelines section #V).
- III. Based upon our criteria and the assessment of peer-reviewed literature, intensive cardiac rehabilitation (ICR) with any of the following programs is considered **investigational** for all indications:
 - A. The Ornish Program for Reversing Heart Disease;
 - B. The Pritikin Program; or
 - C. The Benson-Henry Institute Cardiac Wellness Program.

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:

Medical Policy: CARDIAC REHABILITATION

Policy Number: 8.01.14

Page: 2 of 7

- 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. Phase III 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.
- 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).
- 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.

Intensive Cardiac Rehabilitation (ICR) refers to a physician-supervised program that furnishes cardiac rehabilitation services more frequently and often in a more rigorous manner. As required by §1861(eee)(4)(A) of the Social Security Act (the Act), an ICR program must show, in peer-reviewed published research, that it accomplished one or more of the following for its patients:

- I. positively affected the progression of coronary heart disease;
- II. reduced the need for coronary bypass surgery; or
- III. reduced the need for percutaneous coronary interventions.

The ICR program must also demonstrate through peer-reviewed published research that it accomplished a statistically significant reduction in five (5) or more of the following measures for patients from their levels before cardiac rehabilitation services to after cardiac rehabilitation services:

- I. low density lipoprotein;
- II. triglycerides;
- III. body mass index;
- IV. systolic blood pressure;
- V. diastolic blood pressure; and

Medical Policy: CARDIAC REHABILITATION

Policy Number: 8.01.14

Page: 3 of 7

VI. the need for cholesterol, blood pressure, and diabetes medications.

According to CMS, intensive cardiac rehabilitation program sessions are limited to 72 one-hour sessions, up to six sessions per day, over a period of up to 18 weeks. There is no standard definition of an intensive cardiac rehabilitation program and, thus, specific programs are reviewed individually.

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.

Sumner et al. (2017) published a systematic review of controlled observational studies evaluating cardiac rehabilitation in patients diagnosed with acute MI. Cardiac rehabilitation interventions consisted of structured multicomponent programs that included exercise and at least one of the following: education, information, health behavior change, and psychological or social support. Usual care interventions generally supervised medical interventions, were the control conditions. Ten (10) studies met reviewers' eligibility criteria. In a meta-analysis of 5 studies reporting all-cause mortality (an unadjusted outcome), there was a significantly lower risk of death in the group that received cardiac rehabilitation (odds ratio, 0.25; 95% CI, 0.16 to 0.40). Three studies that reported an adjusted analysis of all-cause mortality also found a significant benefit from cardiac rehabilitation (odds ratio, 0.47; 95% CI, 0.38 to 0.59). Similarly, a meta-analysis of three (3) studies reporting cardiac-related mortality (an unadjusted analysis) found a significant benefit from cardiac rehabilitation (odds ratio, 0.21; 95% CI, 0.12 to 0.37). Only one (1) study reported an adjusted analysis of cardiac-related mortality, so data could not be pooled.

Nilsson et al. (2018) investigated the effect of a 12-week cardiac rehabilitation program with a high-intensity interval exercise component using participant VO₂peak as a measure of improved exercise capacity. Increased exercise capacity has been shown to improve survival among persons with CHD. The objective of the study was to assess whether this addition to a cardiac rehabilitation program yielded improved long-term results. A total of 133 coronary patients participated in this prospective cohort study and were evaluated at baseline, at the end of the 12-week program, and again at a 15-month follow-up. Additional test measurements included a cardiopulmonary exercise test, body mass index, blood pressure tests, and a quality of life questionnaire. Of the 133 patients, 86 patients had complete information for the 15-month follow-up. Mean VO₂peak improved from a baseline of 31.9 mL/kg/min to 35.9 mL/kg/min (p<0.001) at the end of the 12-week program, and to 36.8 mL/kg/min (CI not reported) at 15-month follow-up. Most of the 86 patients reported maintaining an exercise routine. Study limitations included the small sample size, a relatively low-risk male population at baseline, and lack of information on the qualifying event for cardiac rehabilitation. The authors concluded that the cardiac rehabilitation program intervention potentially fostered consistent and beneficial exercise habits as demonstrated by improved VO₂peak.

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.

Ornish et al (1990) conducted an RCT, called the Lifestyle Heart Trial, comparing a version of the Ornish Program for Reversing Heart Disease with usual care. Initial results were reported in 1990, and 5-year results in 1998. Twenty (71%) of 28 patients in the intervention group and 15 (75%) of 20 in the control group completed the 5-year followup. The intervention and control groups did not differ significantly in the number of MI events (2 vs 4), CABGs (2 vs 5), or deaths (2 vs 1). However, compared with the control group, the intervention group had significantly fewer percutaneous transluminal coronary angioplasties (8 vs 14, p<0.050) and cardiac hospitalizations (23 vs 44, p<0.001). The trial had a small sample size for a cardiac trial (N=48), and only 35 patients were available for the 5-year follow-up.

No RCTs have evaluated the Pritikin Program, nor the Benson-Henry Institute Cardiac Wellness Program, to usual care or to standard cardiac rehabilitation, therefore conclusions cannot be drawn for these programs regarding their impact on health outcomes.

Medical Policy: CARDIAC REHABILITATION**Policy Number: 8.01.14****Page: 4 of 7****CODES**

- 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 Codes

Code	Description
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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Code	Description
S9472	Cardiac rehabilitation program, non-physician provider, per diem
G0422 (E/I)	Intensive cardiac rehabilitation; with or without continuous ECG monitoring with exercise, per session
G0423 (E/I)	Intensive cardiac rehabilitation; with or without continuous ECG monitoring; without exercise, per session

ICD10 Codes

Code	Description
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)
I21.4	Non-ST elevation (NSTEMI) myocardial infarction
I21.9	Acute myocardial infarction, unspecified
I21.A1-I21.A9	Other type of myocardial infarction (code range)
I22.0-I22.9	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
Z94.1	Heart transplant status
Z94.3	Heart and lungs transplant status
Z95.1	Presence of aortocoronary bypass graft

Medical Policy: CARDIAC REHABILITATION

Policy Number: 8.01.14

Page: 5 of 7

Code	Description
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 Codes

Code	Description
943	Cardiac rehabilitation

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Medical Policy: CARDIAC REHABILITATION

Policy Number: 8.01.14

Page: 6 of 7

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*Key Article

KEY WORDS

Cardiac rehabilitation, Cardiac therapy, Heart therapy.

Medical Policy: **CARDIAC REHABILITATION**

Policy Number: 8.01.14

Page: 7 of 7

CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS

There is currently a National Coverage Determination (NCD) for Cardiac Rehabilitation Programs (20.10). 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&>.

In February 2014, CMS issued a decision memo regarding Cardiac Rehab programs for Chronic Heart Failure. Subsequently, a National Coverage Determination (20.10.1) 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=gAAAABAAAAAA%3d%3d&>.

There is currently a National Coverage Determination (NCD) for Intensive Cardiac Rehabilitation (ICR) Programs (20.31). Please refer to the following NCD website for Medicare Members: <https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=339&ncdver=1&SearchType=Advanced&CoverageSelection=Both&NCSelection=NCA%7cCAL%7cNCD%7cMEDCAC%7cTA%7cMCD&ArticleType=SAD%7cEd&PolicyType=Both&s=41&KeyWord=cardiac+rehabilitation&KeyWordLookup=Doc&KeyWordSearchType=Exact&kq=true&bc=IAAAACAAAAAA&>

There is currently a National Coverage Determination (NCD) for Benson-Henry Institute Cardiac Wellness Program (20.31.3). Please refer to the following NCD website for Medicare Members: <https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=362&ncdver=1&SearchType=Advanced&CoverageSelection=Both&NCSelection=NCA%7cCAL%7cNCD%7cMEDCAC%7cTA%7cMCD&ArticleType=SAD%7cEd&PolicyType=Both&s=41&KeyWord=cardiac+rehabilitation&KeyWordLookup=Doc&KeyWordSearchType=Exact&kq=true&bc=IAAAACAAAAAA&>

There is currently a National Coverage Determination (NCD) for Ornish Program for Reversing Heart Disease (20.31.2). Please refer to the following NCD website for Medicare Members: <https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=341&ncdver=1&SearchType=Advanced&CoverageSelection=Both&NCSelection=NCA%7cCAL%7cNCD%7cMEDCAC%7cTA%7cMCD&ArticleType=SAD%7cEd&PolicyType=Both&s=41&KeyWord=cardiac+rehabilitation&KeyWordLookup=Doc&KeyWordSearchType=Exact&kq=true&bc=IAAAACAAAAAA&>

There is currently a National Coverage Determination (NCD) for The Pritikin Program (20.31.1). Please refer to the following NCD website for Medicare Members: <https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=340&ncdver=1&SearchType=Advanced&CoverageSelection=Both&NCSelection=NCA%7cCAL%7cNCD%7cMEDCAC%7cTA%7cMCD&ArticleType=SAD%7cEd&PolicyType=Both&s=41&KeyWord=cardiac+rehabilitation&KeyWordLookup=Doc&KeyWordSearchType=Exact&kq=true&bc=IAAAACAAAAAA&>

Additional information, regarding Cardiac and Intensive Cardiac Rehabilitation Programs, can be found in the Medicare Claims Processing Manual, Section 140, and can be accessed at: <https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Downloads/clm104c32.pdf>.