

## Evidence Based Guideline

### Cardiac Rehabilitation

**File Name:** cardiac\_rehabilitation  
**Guideline Number:** EBG.OTH8020  
**Origination:** 6/1996  
**Last Review:** 11/2003

**Active guideline, no longer scheduled for routine literature review.**

#### Description of Procedure or Service

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Cardiac rehabilitation is a comprehensive program involving medical evaluation, prescribed exercise, cardiac risk factor modification, education and counseling. These programs are designed to recondition the [cardiovascular](#) system and limit the physiologic and psychological effects of cardiac illness, reduce the risk for sudden death or reinfarction, control cardiac symptoms, stabilize or reverse the atherosclerotic process, and enhance the psychosocial and vocational status of selected patients. It is used to assist patients in dealing with active heart disease and must be performed in a participating facility with a cardiac rehabilitation program that is certified under the North Carolina Rehabilitation Plan.

#### Evidence Based Guideline for Cardiac Rehabilitation

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A medically necessary cardiac rehabilitation program may be appropriate when a member has a demonstrated need for it and meets the coverage criteria shown below. The program must be expected to improve cardiac function by increasing exercise tolerance without symptoms of weakness or shortness of breath. Members meeting the medical necessity criteria should also have a demonstrated functional capacity of less than 8 [METS](#) by exercise tolerance testing.

Cardiac rehabilitation may be appropriate for medically necessary, acute or chronic conditions for members/patients who meet all of the following criteria:

##### Acute cardiac rehabilitation criteria

- The program must be initiated within twenty six (26) weeks after diagnosis of:
  - acute [myocardial infarction](#)
  - following [cardiovascular surgery](#) or therapeutic procedure (e.g., stent, re-stenting)
  - [Coronary artery bypass graft](#)
  - Heart transplant due to coronary artery disease
  - [Valve replacement or repairs](#)
  - [Percutaneous Transluminal Coronary Angioplasty \(PTCA\)](#)
- Exercise functional capacity less than or equal to 8 [METS](#)
- Clinical improvement can be expected as a result of the rehabilitation program
- The patient has no contraindications to a cardiac rehabilitation program (see list below)

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### Chronic cardiac rehabilitation criteria

- Initiated within twelve (12) months after diagnosis of:
  - Stable and debilitating [angina](#) pectoris (only when treatment can modify risk factors)
  - Compensated heart failure
  - Decreased ventricular ejection fraction

### Repeat cardiac rehabilitation criteria

- A second course of treatment in the same calendar year may be appropriate when the medical necessity criteria are met and the member has a second qualifying event in the same calendar year (e.g., cardiac surgery or [myocardial infarction](#)).

## Medical Evidence regarding Cardiac Rehabilitation indicates it is not recommended in the following situations:

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Cardiac rehabilitation is not recommended for the following conditions, which are relative contraindications to cardiac rehabilitation:

- ◆ Unstable [angina](#) pectoris
- ◆ Untreated 3rd degree heart block
- ◆ Recent pulmonary [embolism](#) or thrombophlebitis
- ◆ Resting systolic [hypertension](#) greater than 200 mm. Hg.
- ◆ Resting diastolic [hypertension](#) greater than 100 mm. Hg.
- ◆ Severe aortic [stenosis](#)
- ◆ Active pericarditis or myocarditis
- ◆ Debilitating non-cardiac disease such as renal failure or [anemia](#)
- ◆ Existing bone and joint conditions that limit one's ability to exercise
- ◆ Uncontrolled diabetes mellitus
- ◆ Uncontrolled atrial or ventricular [arrhythmias](#)
- ◆ Uncontrolled [tachycardia](#) (greater than 100 heartbeats/minute)
- ◆ Asymptomatic congestive heart failure

## Benefits Application

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Please refer to certificate for availability of benefit. This guideline relates only to the services or supplies described herein. Benefits may vary according to benefit design; therefore certificate language should be reviewed before applying the terms of the policy.

Services must be provided by a participating facility with a cardiac rehabilitation program that is certified under the North Carolina Rehabilitation Plan.

A medically necessary cardiac rehabilitation program may be covered for up to 30 visits per year.

Visits beyond the 30 visits may be extended on an individual consideration basis if the member has not reached a [METS](#) capacity of 8, and the attending physician feels continued cardiac rehabilitation is medically necessary. Extended benefits are not available to address behavioral issues.

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Benefits for visits beyond the 30 visits are not available if the member does not show significant week to week gain in functional capacity.

After the member has qualified for coverage and is already enrolled in a course of treatment, the [METS](#) score may be monitored. If during the course of treatment, the member improves to achieve 8 on the [METS](#) score without development of cardiac symptoms, whether the 30 visit maximum has been reached or not, benefits for rehabilitation can be discontinued. If the member's [METS](#) score has improved to 8, the member should have acquired the skills necessary for self-monitoring and for unsupervised exercise.

## Billing/Coding/Physician Documentation Information

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This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at [www.bcbsnc.com](http://www.bcbsnc.com). They are listed in the Category Search on the Medical Policy search page.

*Applicable codes: 93797, 93798*

## Medical Term Definitions

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### **Anemia**

too few red blood cells in the bloodstream resulting in insufficient oxygen to the tissues and organs.

### **Angina**

a spasmodic, choking, or suffocating pain, used almost exclusively to denote angina pectoris or chest pain.

### **Arrhythmia**

abnormal rhythm of the heart; any variation from the normal rhythm of the heart beat.

### **Cardiovascular**

pertains to the heart, blood vessels, and circulatory system.

### **Cardiovascular surgery**

Any surgery pertaining to the heart and blood vessels surrounding it. Examples include coronary artery bypass, heart transplant, and valve replacement or repairs.

### **Coronary artery bypass graft**

a procedure that takes a healthy blood vessel from another part of the body and grafts it into the coronary artery area of the heart to overcome the diseased and/or blocked old artery. The blood is then expected to flow through the new artery (the graft) and bypass the blockage, supplying the heart with adequate blood and oxygen.

### **Embolism**

sudden blockage of an artery by a clot or foreign material which has been brought to the site by the blood stream.

### **Hypertension**

elevated arterial blood pressure.

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### **METS**

metabolic equivalence test, an exercise tolerance test used to measure cardiac stamina and tolerance to exercise.

### **Myocardial infarction**

heart attack.

### **Percutaneous Transluminal Coronary Angioplasty (PTCA)**

a procedure used to dilate a coronary artery. A catheter is inserted through the skin and threaded through a major blood vessel into the blocked area of the coronary artery. The inserted catheter is surrounded by a deflated balloon. Once the catheter and balloon is inside the middle of the pulmonary artery, the balloon is inflated. This flattens the blockage (generally fatty deposits) against the artery wall and enlarges the inside of the vessel.

### **Stenosis**

narrowing, hardening or constriction of a vessel.

### **Tachycardia**

rapid heart beat, usually over 100 beats per minute in an adult.

### **Valve replacement or repairs**

Replacement of one of the heart valves (mitral or bicuspid, aortic, and tricuspid). The valves control the flow of blood through and from the heart. Diseased valves may be replaced with valves from a pig or they may be artificial cardiac valves.

## **Scientific Background and Reference Sources**

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11/27/95 TEC Bulletin

10/95 AHCPR (Agency for Health Care Policy and Research) manual 60-1A

5/97 BCBSA Medical Policy Reference Manual

Specialty Matched Consultant Advisory Panel 11/1999

Medical Policy Advisory Group 12/2/1999

Specialty Matched Consultant Advisory Group - 12/2001

BCBSA Medical Policy Reference Manual. 8.03.08, 7/12/02

Specialty Matched Consultant Advisory Panel - 11/2003

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.03.08, 10/9/03

## **Policy Implementation/Update Information**

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6/96 Original policy issued.

8/96 Revised: updated list of covered indications by adding PTCA and by removing hypertension and arrhythmias. Guidelines from AHCPR.

10/96 Revised: Updated policy to state that if services extend beyond the initial 30 days, a review for medical necessity is requested.

## Policy: Cardiac Rehabilitation

- 4/99 Revised with criterion added including demonstrated functional capacity of 8 METS by exercise tolerance testing, timeframes established for acute and chronic eligibility, guidelines for non-coverage based on hypertension and tachycardia levels. Diagnoses for exclusion as follows added to policy: unstable angina pectoris, untreated 3rd degree heart block, recent pulmonary embolism or thrombophlebitis, functional capacity of 8 METS or more on exercise tolerance testing, resting systolic hypertension greater than 200 mm Hg., resting diastolic hypertension greater than 100 mm. Hg., severe aortic stenosis, active pericarditis or myocarditis, debilitating non-cardiac disease such as renal failure or anemia, orthopedic impediments to exercise, uncontrolled diabetes mellitus, uncontrolled atrial or ventricular arrhythmias, uncontrolled tachycardia (greater than 100 beats/min), asymptomatic congestive heart failure. Policy reformatted.
- 12/99 Reaffirmed, Medical Policy Advisory Group
- 10/00 System coding changes.
- 12/01 Specialty Matched Consultant Advisory Group review. No changes to criteria of the policy. Coding format change.
- 11/03 Biannual policy review. Specialty Matched Consultant Advisory Panel review. No changes to criteria of the policy. Format changes for consistency. Policy status change to "Active policy, no longer scheduled for routine literature review."
- 3/3/05 Added statement, "... or therapeutic procedure (e.g., stent, re-stenting)" to first criterion in When Cardiac rehabilitation is covered section.
- 10/2/06 Medical Policy reformatted and changed to Evidence Based Guideline.

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Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.