

POLICY TITLE	CARDIAC REHABILITATION IN THE OUTPATIENT SETTING
POLICY NUMBER	MP 8.005

Effective Date: 11/1/2023

<u>POLICY</u> <u>RATIONALE</u> <u>DISCLAIMER</u> POLICY HISTORY PRODUCT VARIATIONS DEFINITIONS CODING INFORMATION DESCRIPTION/BACKGROUND BENEFIT VARIATIONS REFERENCES

I. POLICY

Outpatient cardiac rehabilitation programs may be considered **medically necessary** for patients who require monitored exercise and have a recent history of one of the following conditions or procedures:

- Acute myocardial infarction (MI) (heart attack) within the preceding 12 months;
- Compensated heart failure;
- Coronary artery bypass graft (CABG) surgery;
- Heart or heart-lung transplant;
- Heart valve surgery;
- Percutaneous transluminal coronary angioplasty (PTCA) or coronary stenting; or
- Current stable angina pectoris

AND

ALL of the following components must be included in the cardiac rehabilitation program:

- Physician-prescribed exercise each day cardiac rehabilitation services are provided;
- Cardiac risk factor modification;
- Psychosocial assessment;
- Outcomes assessment; and
- Individualized treatment plan detailing how each of the above components is utilized.

Services provided after a patient has reached their maximum potential for improvement are considered maintenance therapy and **not considered medically necessary** as part of the cardiac rehabilitation program.

Repeat participation in an outpatient cardiac rehabilitation program in the absence of another qualifying cardiac event is considered **investigational** as there is insufficient evidence to support a general conclusion concerning the health outcomes or benefits associated with this procedure.

Intensive cardiac rehabilitation with the Ornish Program for Reversing Heart Disease, Pritikin Program, or Benson-Henry Institute Program is considered **investigational** as there is insufficient evidence to support a general conclusion concerning the health outcomes or benefits associated with this procedure.



POLICY TITLE	CARDIAC REHABILITATION IN THE OUTPATIENT SETTING
POLICY NUMBER	MP 8.005

Physical and/or occupational therapies are **not considered medically necessary** in conjunction with a cardiac rehabilitation program unless performed for an unrelated diagnosis.

Virtual cardiac rehabilitation may be considered **medically necessary** as an alternative for patients who are unable to participate in facility-based cardiac rehabilitation.

Policy Guidelines

Except for acute myocardial infarction, a cardiac rehabilitation program should be initiated within ninety (90) days of the cardiac event and completed within six (6) months of the cardiac event. Individual consideration will be given for initiation of cardiac rehab beyond the ninety days.

A comprehensive evaluation may be performed before the initiation of cardiac rehabilitation to evaluate the patient and determine an appropriate exercise program. In addition to a medical examination, an EKG stress test may be performed. An additional stress test may be performed at the completion of the program. A typical program consists of an exercise and training session that lasts twenty (20) to forty (40) minutes.

A reasonable duration for a cardiac rehabilitation program is twelve (12) weeks, generally three sessions per week for a total of thirty-six (36) sessions.

Cross-reference:

MP 2.380 Diagnosis and Treatment of Post-Acute Sequelae COVID (PASC)

II. PRODUCT VARIATIONS

This policy is only applicable to certain programs and products administered by Capital Blue Cross and subject to benefit variations as discussed in Section VI. Please see additional information below.

FEP PPO- Refer to FEP Medical Policy Manual MP-8.03.08 Cardiac Rehabilitation in the Outpatient Setting. The FEP Medical Policy manual can be found at: <u>https://www.fepblue.org/benefit-plans/medical-policies-and-utilization-management-guidelines/medical-policies</u>.

III. DESCRIPTION/BACKGROUND

Cardiac rehabilitation refers to comprehensive medically supervised programs in the outpatient setting that aim to improve the function of patients with heart disease and prevent future cardiac events. National organizations have specified core components to be included in cardiac rehabilitation programs.

Heart Disease

Heart disease is the leading cause of mortality in the United States, accounting for more than half of all deaths. Coronary artery disease is the most common cause of heart disease. In a 2023 update on heart disease and stroke statistics from the American Heart Association, it was estimated that 720,000 Americans have a new coronary attack (first hospitalized myocardial infarction or coronary heart disease death) and 335,000 have a recurrent attack annually. Both

Тор

Тор



POLICY TITLE	CARDIAC REHABILITATION IN THE OUTPATIENT SETTING
POLICY NUMBER	MP 8.005

coronary artery disease and various other disorders structural heart disease and other genetic, metabolic, endocrine, toxic, inflammatory, and infectious causes can lead to the clinical syndrome of heart failure, of which there are about 650,000 new cases in the U.S. annually. Given the burden of heart disease, preventing secondary cardiac events and treating the symptoms of heart disease and heart failure have received much attention from national organizations.

Cardiac Rehabilitation

In 1995, the U.S. Public Health Service defined cardiac rehabilitation services as, in part, "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 reinfarction, control cardiac symptoms, stabilize or reverse the atherosclerotic process, and enhance the psychosocial and vocational status of selected patients." The U.S. Public Health Service recommended cardiac rehabilitation services for patients with coronary heart disease and with heart failure, including those awaiting or following cardiac transplantation. A 2010 definition of cardiac rehabilitation from the European Association of Cardiovascular Prevention and Rehabilitation stated: "Cardiac rehabilitation can be viewed as the clinical application of preventive care by means of a professional multi-disciplinary integrated approach for comprehensive risk reduction and global long-term care of cardiac patients." Since the release of the U.S. Public Health Service guidelines, other societies, including the American Heart Association (2005) and the Heart Failure Society of America (2010) have developed guidelines on the role of cardiac rehabilitation in patient care.

Regulatory Status

Not applicable.

IV. RATIONALE

Summary of Evidence

For individuals who have been diagnosed with heart disease and receive outpatient cardiac rehabilitation, the evidence includes multiple RCTs and systematic reviews of these trials. Relevant outcomes are overall survival, disease-specific survival, symptoms, and morbid events. Meta-analyses of the available trials have found that cardiac rehabilitation improves health outcomes for select patients, particularly those with coronary heart disease, heart failure, and who have had cardiac surgical interventions. The available evidence has limitations, including lack of blinded outcome assessment, but, for the survival-related outcomes of interest, this limitation is less critical. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

For individuals who have diagnosed heart disease without a second event who receive repeat outpatient cardiac rehabilitation, the evidence includes no trials. Relevant outcomes are overall survival, disease-specific survival, symptoms, and morbid events. No studies were identified evaluating the effectiveness of repeat participation in a cardiac rehabilitation program. The evidence is insufficient to determine the effects of the technology on health outcomes.

TOP



POLICY TITLE	CARDIAC REHABILITATION IN THE OUTPATIENT SETTING
POLICY NUMBER	MP 8.005

For individuals who have diagnosed heart disease who receive intensive cardiac rehabilitation with the Ornish Program for Reversing Heart Disease, the evidence includes an RCT and uncontrolled studies. Relevant outcomes are overall survival, disease-specific survival, symptoms, and morbid events. No RCTs have compared the Ornish Program with a "standard" cardiac rehabilitation program; an RCT compared it with usual care. The trial included patients with coronary artery disease and no recent cardiac events and had mixed findings at 1 and 5 years. 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. The Ornish Program is considered by the Centers for Medicare & Medicaid Services as an intensive cardiac rehabilitation program, but the program described in the RCT could meet criteria for standard cardiac rehabilitation. No studies were identified comparing the Ornish Program with any other cardiac rehabilitation program. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have diagnosed heart disease who receive intensive cardiac rehabilitation with the Pritikin Program, the evidence includes a case series. Relevant outcomes are overall survival, disease-specific survival, symptoms, and morbid events. Studies are needed that compare the impact of intensive cardiac rehabilitation using the Pritikin Program with standard outpatient cardiac rehabilitation programs. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have diagnosed heart disease who receive intensive cardiac rehabilitation with the Benson-Henry Institute Program, the evidence includes a case-control study and case series. Relevant outcomes are OS, disease-specific survival, symptoms, and morbid events. Studies are needed that compare the impact of intensive cardiac rehabilitation using the Benson-Henry Institute Program with standard outpatient cardiac rehabilitation programs. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have been diagnosed with heart disease and receive virtual cardiac rehabilitation, the evidence includes systematic reviews/meta-analyses, RCTs, and retrospective studies. Relevant outcomes are overall survival, disease-specific survival, symptoms, and morbid events. Meta-analyses have found beneficial effects of virtual cardiac rehabilitation on physical activity and quality of life, but not on cardiovascular hospitalization or mortality. The few available prospective randomized studies have conflicting findings on the effect of virtual cardiac rehabilitation compared to traditional outpatient cardiac rehabilitation for hospital readmission. The evidence is insufficient to determine that the technology results in a general improvement in the net health outcome.

V. **DEFINITIONS**

TOP

ANGINA PECTORIS is an oppressive pain or pressure in the chest caused by inadequate blood flow and oxygenation to heart muscle.

ANGIOPLASTY is an endovascular procedure that reopens narrowed blood vessels and restores forward blood flow.



POLICY TITLE	CARDIAC REHABILITATION IN THE OUTPATIENT SETTING
POLICY NUMBER	MP 8.005

CORONARY ARTERY BYPASS SURGERY is surgical establishment of a shunt that permits blood to travel from the aorta or internal mammary artery to a branch of the coronary artery at a point past an obstruction.

HEART FAILURE is the inability of the heart to circulate blood effectively enough to meet the body's metabolic needs.

MYOCARDIAL INFARCTION is the death of previously living heart muscle as a result of coronary artery occlusion

VI. BENEFIT VARIATIONS

The existence of this medical policy does not mean that this service is a covered benefit under the member's health benefit plan. Benefit determinations should be based in all cases on the applicable health benefit plan language. Medical policies do not constitute a description of benefits. A member's health benefit plan governs which services are covered, which are excluded, which are subject to benefit limits and which require preauthorization. There are different benefit plan designs in each product administered by Capital Blue Cross. Members and providers should consult the member's health benefit plan for information or contact Capital Blue Cross for benefit information.

VII. DISCLAIMER

Capital Blue Cross's medical policies are developed to assist in administering a member's benefits, do not constitute medical advice, and, are subject to change. Treating providers are solely responsible for medical advice and treatment of members. Members should discuss any medical policy related to their coverage or condition with their provider and consult their benefit information to determine if the service is covered. If there is a discrepancy between this medical policy and a member's benefit information, the benefit information will govern. If a provider or a member has a question concerning the application of this medical policy to a specific member's plan of benefits, please contact Capital Blue Cross' Provider Services or Member Services. Capital Blue Cross considers the information contained in this medical policy to be proprietary and it may only be disseminated as permitted by law.

VIII. CODING INFORMATION

Note: This list of codes may not be all-inclusive, and codes are subject to change at any time. The identification of a code in this section does not denote coverage as coverage is determined by the terms of member benefit information. In addition, not all covered services are eligible for separate reimbursement.

Intensive cardiac rehabilitation is considered investigational; therefore not covered:

Procedur	e Codes				
G0422	G0423				

Covered when medically necessary:

Procedur	e Codes							
S0340	S0341	S0342	S9472	93015	93016	93017	93018	93797
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TOP

Тор

Тор



POLICY TITLE	CARDIAC REHABILITATION IN THE OUTPATIENT SETTING
POLICY NUMBER	MP 8.005

ICD-10-CM Diagnosis	Description
Code	
120.1	Angina pectoris with documented spasm
120.2	Refractory angina pectoris
120.8	Other forms of angina pectoris
120.81	Angina pectoris with coronary microvascular dysfunction
120.89	Other forms of angina pectoris
120.9	Angina pectoris, unspecified
121.01	ST elevation (STEMI) myocardial infarction involving left main coronary artery
121.02	ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery
121.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall
I21.A1	Myocardial infarction type 2
I21.A9	Other myocardial infarction type
I21.B	Myocardial infarction with coronary microvascular dysfunction
121.11	ST elevation (STEMI) myocardial infarction involving right coronary artery
121.19	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall
121.21	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery
121.29	ST elevation (STEMI) myocardial infarction involving other sites
121.3	ST elevation (STEMI) myocardial infarction of unspecified site
121.4	Non-ST elevation (NSTEMI) myocardial infarction
122.0	Subsequent ST elevation (STEMI) myocardial infarction of anterior wall
122.1	Subsequent ST elevation (STEMI) myocardial infarction of inferior wall
122.2	Subsequent non-ST elevation (NSTEMI) myocardial infarction
122.8	Subsequent ST elevation (STEMI) myocardial infarction of other sites
122.9	Subsequent ST elevation (STEMI) myocardial infarction of unspecified site
125.111	Atherosclerotic heart disease of native coronary artery with angina pectoris with documented spasm
125.112	Atherosclerosic heart disease of native coronary artery with refractory angina pectoris
125.118	Atherosclerotic heart disease of native coronary artery with other forms of angina pectoris
125.119	Atherosclerotic heart disease of native coronary artery with unspecified angina pectoris
125.2	Old myocardial infarction
125.701	Atherosclerosis of coronary artery bypass graft(s), unspecified, with angina pectoris with documented spasm



POLICY TITLE	CARDIAC REHABILITATION IN THE OUTPATIENT SETTING
POLICY NUMBER	MP 8.005

ICD-10-CM Diagnosis Code	Description
125.702	Atherosclerosis of coronary artery bypass graft(s), unspecified, with refractory angina pectoris
125.708	Atherosclerosis of coronary artery bypass graft(s), unspecified, with other forms of angina pectoris
125.709	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
l25.712	Atherosclerosis of autologous vein coronary artery bypass graft(s) with refractory angina pectoris
125.718	Atherosclerosis of autologous vein coronary artery bypass graft(s) with other forms of angina pectoris
l25.719	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unspecified angina pectoris
125.721	Atherosclerosis of autologous artery coronary artery bypass graft(s) with angina pectoris with documented spasm
125.722	Atherosclerosis of autologous artery coronary artery bypass graft(s) with refractory angina pectoris
125.728	Atherosclerosis of autologous artery coronary artery bypass graft(s) with other forms of angina pectoris
125.729	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unspecified angina pectoris
125.731	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with angina pectoris with documented spasm
125.732	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with refractory angina pectoris
125.738	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with other forms of angina pectoris
125.739	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unspecified angina pectoris
125.751	Atherosclerosis of native coronary artery of transplanted heart with angina pectoris with documented spasm
125.752	Atherosclerosis of native coronary artery of transplanted heart with refractory angina pectoris
125.758	Atherosclerosis of native coronary artery of transplanted heart with other forms of angina pectoris
125.759	Atherosclerosis of native coronary artery of transplanted heart with unspecified angina pectoris
125.761	Atherosclerosis of bypass graft of coronary artery of transplanted heart with angina pectoris with documented spasm



POLICY TITLE	CARDIAC REHABILITATION IN THE OUTPATIENT SETTING
POLICY NUMBER	MP 8.005

ICD-10-CM Diagnosis Code	Description
125.762	Atherosclerosis of bypass graft of coronary artery of transplanted heart with refractory angina pectoris
125.768	Atherosclerosis of bypass graft of coronary artery of transplanted heart with other forms of angina pectoris
125.769	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unspecified angina pectoris
125.791	Atherosclerosis of other coronary artery bypass graft(s) with angina pectoris with documented spasm
125.798	Atherosclerosis of other coronary artery bypass graft(s) with other forms of angina pectoris
125.799	Atherosclerosis of other coronary artery bypass graft(s) with unspecified angina pectoris
125.810	Atherosclerosis of coronary artery bypass graft(s) without angina pectoris
125.811	Atherosclerosis of native coronary artery of transplanted heart without angina pectoris
125.812	Atherosclerosis of bypass graft of coronary artery of transplanted heart without angina pectoris
150.1	Left ventricular failure
150.21	Acute systolic (congestive) heart failure
150.22	Chronic systolic (congestive) heart failure
150.23	Acute on chronic systolic (congestive) heart failure
150.31	Acute diastolic (congestive) heart failure
150.32	Chronic diastolic (congestive) heart failure
150.33	Acute on chronic diastolic (congestive) heart failure
150.41	Acute combined systolic (congestive) and diastolic (congestive) heart failure
150.42	Chronic combined systolic (congestive) and diastolic (congestive) heart failure
150.43	Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure
150.811	Acute right heart failure
150.812	Chronic right heart failure
150.813	Acute on chronic right heart failure
150.814	Right heart failure due to left heart failure
150.82	Biventricular heart failure
150.83	High output heart failure
150.84	End stage heart failure
150.89	Other heart failure
Z94.1	Heart transplant status
Z94.3	Heart and lungs transplant status



POLICY TITLE	CARDIAC REHABILITATION IN THE OUTPATIENT SETTING
POLICY NUMBER	MP 8.005

ICD-10-CM Diagnosis Code	Description
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

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POLICY TITLE	CARDIAC REHABILITATION IN THE OUTPATIENT SETTING
POLICY NUMBER	MP 8.005

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POLICY TITLE	CARDIAC REHABILITATION IN THE OUTPATIENT SETTING
POLICY NUMBER	MP 8.005

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POLICY TITLE	CARDIAC REHABILITATION IN THE OUTPATIENT SETTING
POLICY NUMBER	MP 8.005

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POLICY TITLE	CARDIAC REHABILITATION IN THE OUTPATIENT SETTING
POLICY NUMBER	MP 8.005

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- 52. Thomas RJ, Beatty AL, Beckie TM, et al. Home-Based Cardiac Rehabilitation: A Scientific Statement From the American Association of Cardiovascular and Pulmonary Rehabilitation, the American Heart Association, and the American College of Cardiology. J Am Coll Cardiol. Jul 09 2019; 74(1): 133-153. PMID 31097258
- 53. Wenger NK, Rosenson RS, Braun LT. Cardiac rehabilitation: Indications, efficacy, and safety in patients with coronary heart disease. In: UpToDate Online Journal [serial online]. Waltham, MA: UpToDate; Updated Feb 15, 2022, Literature current through May 2023
- 54. Schopfer DW, Whooley MA, Allsup K et al. Effects of Home-Based Cardiac Rehabilitation on Time to Enrollment and Functional Status in Patients With Ischemic Heart Disease. J Am Heart Assoc Sept 2020. PMID: 32954885
- 55. Moulson N, Bewick D, Selway T et al. Cardiac Rehabilitation During the COVID-19 Era: Guidance on Implementing Virtual Care. Can J Cardiol 2020 Aug. PMID: 32553606
- 56. Blue Cross Blue Shield Association Medical Policy Reference Manual. 8.03.08, Cardiac Rehabilitation in the Outpatient Setting. April 2023

X. POLICY HISTORY

<u>Тор</u>

MP 8.005	CAC 04/27/2004
	CAC 09/28/2004
	CAC 09/13/2005
	CAC 07/25/2006
	CAC 06/26/2007
	CAC 05/27/2008
	CAC 03/31/2009 Consensus
	CAC 03/30/2010 Consensus
	CAC 11/30/2010 Adopted BCBSA medically necessary criteria. Added additional medical necessity indication for heart-lung transplant. Added investigational statement for repeat cardiac rehabilitation. Revised Medicare variation due to new NCD and LCD.
	CAC 04/24/2012 Consensus review; no changes, references updated.



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POLICY NUMBER	MP 8.005

CAC 03/26/2013 Consensus, no change to policy statement, references updated. Background Description updated. FEP variation added to reference to the manual MP-8.03.08 Cardiac Rehabilitation in the Outpatient Setting.
Admin update 01/2014 removed Novitas Solutions Local Coverage Determination (LCD) L31481, Cardiac Rehabilitation Program Services retired
CAC 01/28/2014 Consensus No change to policy statements References
updated. Added rationale section. Added reference to Medicare benefit manual 100-04 Chapter 32.
Administrative change 07/28/2014 Added the following references to the Medicare variation:
 Medicare National Coverage Determinations (NCD) Manual Publication 100-03 Chapter 1, part 1 Section 20.10,
 Medicare Program Integrity Manual Publication 100-08 Chapter 15 Section 4.2.8
 Medicare Benefit Policy Manual Publication 100-02 Chapter 15 Section 232
CAC 01/27/2015 Consensus review. References and rationale updated. No changes to the policy statements.
CAC 01/26/2016 Consensus review. References and rationale updated. No changes to the policy statements. Coding reviewed.
Admin undate 01/01/2017: Product variation section reformatted
Admin update of 10 1/2017. Froduct valiation section reformatied
CAC 03/28/2017 Minor review. I imetrame for initiation of cardiac rehab and
duration of treatment moved to policy guidelines. Added exception - patients
with acute myocardial infarction within past 12 months are not required to
begin therapy within 90 days of event and have it completed within six (6)
months of the cardiac event. Coding Reviewed
Admin update 10/01/2017: Added new ICD 10 codes effective from 10/1/17
01/01/2018 Admin Update: Medicare variations removed from Commercial Policies.
01/17/2018 Minor revision. The statement regarding the Ornish Program was revised to "Intensive cardiac rehabilitation with the Ornish Program for Reversing Heart Disease or Pritikin Program is considered investigational." Previously the statement only addressed the Ornish program and was
considered not medically necessary. The policy title was revised to "Cardiac Rehabilitation in the Outpatient Setting". Rationale and references updated. Coding Reviewed.
01/29/2019 Consensus review. No change to the policy statements. Background and references updated. Rationale reviewed.



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POLICY NUMBER	MP 8.005

02/11/2020 Consensus review. Policy statement unchanged. References updated.
05/24/2021 Minor review. Deleted "recommended by a cardiologist" in first paragraph in policy statement. Added Benson-Henry Institute Program as investigational. Rationale updated. References updated.
04/28/2022 Consensus review. No change to policy statement. References reviewed and updated. Coding table format updated. Cross-reference added.
10/01/2022 Admin update: New ICD 10 codes added to policy.
6/12/2023 Minor review. Medically necessary statement for virtual cardiac rehabilitation added to policy statement. Policy guidelines updated. Rationale updated. References updated. Coding and table updated: G0422, G0423 moved to INV to align with policy statement.
8/31/2023 Administrative review. ICD-10-CM codes added: I20.81, I20.89, I21.B as part of new code update. Effective date 10/1/2023.

<u>Top</u>

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