MEDICAL POLICY

POLICY TITLE	CARDIAC INTERVENTION THERAPY FOR THE TREATMENT OF HEART FAILURE
POLICY NUMBER	MP 2.007

Effective Date:	1/1/2024

I. POLICY

Biventricular pacemakers with or without an accompanying implantable cardiac defibrillator (i.e., a combined biventricular pacemaker plus an implantable cardiac defibrillator) may be considered **medically necessary** as a treatment of heart failure in patients who meet **all of the following criteria**:

For New York Heart Association Class III or IV

- Left ventricular ejection fraction ≤ 35%; **and**
- Sinus rhythm; **and**
- Patients treated with guideline-directed medical therapy (see Policy Guidelines section);

AND

- Either left bundle branch block or QRS duration ≥120 ms

For New York Heart Association class II

- Left ventricular ejection fraction ≤30%; **and**
- Sinus rhythm; **and**
- Patients treated with a guideline-directed medical therapy (see Policy Guidelines section);

AND

- Either left bundle branch block or QRS duration ≥150 ms.

For patients who do not meet the criteria outlined above, but have an indication for a ventricular pacemaker or biventricular pacemakers with or without an accompanying implantable cardiac defibrillator (i.e., a combined biventricular pacemaker plus implantable cardiac defibrillator) may be considered **medically necessary** as an alternative to a right ventricular pacemaker in patients who meet all of the following criteria:

- NYHA class I, II, III, or IV heart failure; **and**
- Left ventricular ejection fraction ≤50%; **and**
- The presence of atrioventricular (AV) block with requirement for a high percentage pacing (see Policy Guidelines section); **and**
- Patients treated with guideline-directed medical therapy (see Policy Guidelines section)

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Biventricular pacemakers with or without an accompanying implantable cardiac defibrillator (i.e., a combined biventricular pacemaker plus implantable cardiac defibrillator is considered **investigational** as a treatment for patients with New York Heart Association class I heart failure who do not meet the above criteria. There is insufficient evidence to support a general conclusion concerning the health outcomes or benefits associated with this procedure.

Biventricular pacemakers, with or without an accompanying implantable cardiac defibrillator (i.e., a combined biventricular pacemaker plus implantable cardiac defibrillator), are considered **investigational** as a treatment for heart failure in patients with atrial fibrillation who do not meet the above criteria. There is insufficient evidence to support a general conclusion concerning the health outcomes or benefits associated with this procedure.

Triple-site (triventricular) cardiac resynchronization therapy, using an additional pacing lead, is considered **investigational**. There is insufficient evidence to support a general conclusion concerning the health outcomes or benefits associated with this procedure.

An intrathoracic fluid-monitoring sensor is considered **investigational** as a component of a biventricular pacemaker. There is insufficient evidence to support a general conclusion concerning the health outcomes or benefits associated with this procedure.

Cardiac resynchronization therapy with wireless left ventricular endocardial pacing is considered **investigational**. There is insufficient evidence to support a general conclusion concerning the health outcomes or benefits associated with this procedure.

The use of biventricular pacemakers (cardiac resynchronization therapy) for treatment of heart failure in situations other than those described in the policy section are considered **investigational**. There is insufficient evidence to support a general conclusion concerning the health outcomes or benefits associated with this procedure.

The use of Cardiac Contractility Modulation (CCM) Therapy is considered **experimental and investigational** for treatment of heart failure. There is insufficient evidence to support a general conclusion concerning the health outcomes or benefits associated with this procedure.

Policy Guidelines

Atrioventricular (AV) block with a requirement for a high percentage of ventricular pacing is considered to be present when there is either:

- Third-degree AV block; **or**
- Second-degree AV block or a PR interval of ≥300 ms when paced at 100 beats per minute.

Guideline-directed medical therapy for heart failure is outlined in 2022 American Heart Association, American College of Cardiology, and Heart Failure Society of America guidelines for the management of heart failure (Heidenreich et al [2022]).

Cross-references:

MP 1.081 Cardioverter-Defibrillators (Implantable and External)
MP 2.051 Cardiac Hemodynamic Monitoring for the Management of Heart Failure in the Outpatient Setting

II. PRODUCT VARIATIONS

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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. The FEP Medical Policy manual can be found at: https://www.fepblue.org/benefit-plans/medical-policies-and-utilization-management-guidelines/medical-policies.

III. DESCRIPTION/BACKGROUND

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Heart Failure

An estimated six million adults in the United States 20 years of age and older had heart failure between 2015 and 2018. The prevalence continues to increase over time with the aging of the population. Prevalence of disease is higher in women than men 80 years of age and older. Overall prevalence is especially high in Black individuals. A 2008 study demonstrated that Black individuals had the highest risk of developing heart failure, followed by Hispanic, White, and Chinese individuals in the United States. Higher risk reflected differential prevalence of hypertension, diabetes, and lower socioeconomic status. Black individuals also had the highest proportion of incident heart failure not preceded by myocardial infarction (75%). Additionally, Black individuals have a greater 5-year case fatality rate associated with heart failure compared to White individuals. It is estimated that 20% to 30% of patients with heart failure have intraventricular conduction disorders resulting in a contraction pattern that is not coordinated and a wide QRS interval on the electrocardiogram. This abnormality appears to be associated with increased morbidity and mortality.

Treatment

Biventricular pacemakers using three leads (one in the right atrium, one endocardial in the right ventricle, one epicardial for the left ventricle), also known as cardiac resynchronization therapy (CRT), have been investigated as a technique to coordinate the contraction of the ventricles, thus improving patients' hemodynamic status. Originally developed CRT devices typically used two ventricular leads for biventricular pacing. Devices and implantation techniques have been developed to allow for multisite pacing, with the goal of improving CRT response. This may be accomplished in one of two ways: through the use of multiple leads within the coronary sinus (triventricular pacing) or through the use of multipolar left ventricular pacing leads, which can deliver pacing stimuli at multiple sites. Wireless left ventricular endocardial pacing is also being evaluated for patients who are not candidates for or do not respond to standard epicardial pacing leads.

Regulatory Status

There are numerous CRT devices, combined implantable cardioverter-defibrillator (ICD) plus CRT devices (CRT-D), and combined CRT plus fluid monitoring devices. Some devices are discussed here. For example, in 2001, the InSync® Biventricular Pacing System (Medtronic), a stand-alone biventricular pacemaker, was approved by the U.S. Food and Drug Administration (FDA) through the premarket approval process for the treatment of patients with New York Heart Association (NYHA) class III or IV heart failure, on a stable pharmacologic regimen, who also have a QRS duration of 130 ms or longer and a left ventricular ejection fraction (LVEF) of 35% or less. Devices by Guidant (CONTAK-CD® CRT-D System) and Medtronic (InSync® ICD Model 7272) have been approved by the FDA through the premarket approval process for combined CRT defibrillators for patients at high risk of sudden cardiac death due to ventricular arrhythmias and who have NYHA class III or IV heart failure with a LVEF of 35% or less, QRS interval 130 ms or longer (≥120 ms for the Guidant device), and remain symptomatic despite a stable, optimal heart failure drug therapy. In 2006, Biotronik Inc. received premarket approval from the FDA for its combined ICD-D device with ventricular pacing leads (Tupos LV/ATx CRT-D/Kronos LV-T CRT-D systems); in 2013, the company received FDA approval for updated ICD-D devices (Ilesto/Iforia series). On the basis of the Multicenter Automatic Defibrillator Implantation Trial with Cardiac Resynchronization Therapy (MADIT-CRT) study, indications for 3 Guidant CRT-D (Cognis®, Livian®, and Contak Renewal; Boston Scientific) devices were expanded to include patients with heart failure who receive stable optimal pharmacologic therapy for heart failure and who meet any of the following classifications:

- Moderate-to-severe heart failure (NYHA class III or IV) with an ejection fraction less than 35% and QRS interval greater than 120 ms.
- Left bundle branch block with a QRS interval greater than or equal to 130 ms, ejection fraction less than 30%, and mild (NYHA class II) ischemic or nonischemic heart failure or asymptomatic (NYHA class I) ischemic heart failure.

In April 2014, the FDA further expanded indications for multiple Medtronic CRT devices to include patients with NYHA class I, II, or III heart failure, who have a LVEF of 50% or less on stable, optimal heart failure medical therapy, if indicated, and have atrioventricular block that is expected to require a high percentage of ventricular pacing that cannot be managed with algorithms to minimize right ventricular pacing. The expanded indication was based on data from the Biventricular versus Right Ventricular Pacing in Heart Failure Patients with Atrioventricular Block (BLOCK HF) study, a Medtronic-sponsored randomized controlled trial that evaluated the use of CRT in patients with NYHA class I, II, or III heart failure, LVEF of 50% or less, and atrioventricular block.

Several CRT devices have incorporated a fourth lead, providing quadripolar pacing. The Medtronic Viva™ Quad XT and the Viva Quad S have a fourth lead, and the Medtronic Attain Performa® has a left ventricular lead, which received clearance for marketing from the FDA in August 2014. The Dynagen™ X4 and Inogen™ X4 devices (Boston Scientific) also incorporate

a fourth lead. Other CRT devices with quadripolar leads have been approved for use outside of the United States (eg, St. Jude Quartet™ left ventricular lead).

Multiple devices manufactured by Medtronic combine a CRT with the OptiVol™ monitoring system. For example, in 2005, the InSync Sentry® system was approved by the FDA through the supplemental premarket approval process. This combined biventricular pacemaker plus ICD is also equipped to monitor intrathoracic fluid levels using bioimpedance technology, referred to as OptiVol™ Fluid Status Monitoring. Bioimpedance measures, defined as the electrical resistance of tissue to flow of current, are performed many times a day using a vector from the right ventricular coil on the lead in the right side of the heart to the implanted pacemaker devices; changes in bioimpedance reflect intrathoracic fluid status and are evaluated using a computer algorithm. For example, changes in a patient's daily average of intrathoracic bioimpedance can be monitored; differences in the daily average are compared with a baseline and reported as the OptiVol™ Fluid Index. It has been proposed that these data may be used as an early warning system of cardiac decompensation or may provide feedback that enables a physician to tailor medical therapy. Medical Policy 2.051 addresses the use of external bioimpedance devices as stand-alone devices to assess cardiac output noninvasively.

The WiSE-CRT (EBR Systems) provides CRT with a small wireless electrode that is implanted within the left ventricle and controlled by ultrasound. It has European CE approval and is being studied in a multicenter pivotal trial.

FDA product code: NIK.

IV. RATIONALE

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Summary of Evidence

For individuals who have NYHA class III or IV heart failure with a LVEF of 35% or less who are in sinus rhythm, treated with guideline-directed medical therapy, and have either left bundle branch block (LBBB) or a QRS interval of 150 ms or more who receive CRT with or without defibrillator, the evidence includes randomized controlled trials (RCTs) and systematic reviews of RCTs. The relevant outcomes are overall survival, symptoms, functional outcomes, quality of life, hospitalizations, and treatment-related morbidity. There is a large body of clinical trial evidence supporting the use of CRT in patients with NYHA class III or IV heart failure. The RCTs have consistently reported that CRT reduces mortality, improves functional status, and improves QOL for patients with NYHA class III or IV heart failure. Multiple subgroup analyses of RCTs have demonstrated that the benefit of CRT is mainly restricted to patients with LBBB or QRS interval greater than 150 ms. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have NYHA class II heart failure with a LVEF of 30% or less who are in sinus rhythm, treated with guideline-directed medical therapy, and have either LBBB or a QRS

interval of 150 ms or more who receive CRT with or without defibrillator, the evidence includes RCTs and systematic reviews of RCTs. The relevant outcomes are overall survival, symptoms, functional outcomes, quality of life, hospitalizations, and treatment-related morbidity. For patients with NYHA class II heart failure, at least four RCTs assessing CRT have been published. A mortality benefit was reported in one of the four trials, the Resynchronization-Defibrillation for Ambulatory Heart Failure Trial (RAFT). None of the other three RCTs reported a mortality difference, but a subgroup analysis of the Multicenter Automatic Defibrillator Implantation Trial with Cardiac Resynchronization Therapy (MADIT-CRT) trial reported a mortality benefit for patients with LBBB. Among other outcome measures, hospitalizations for heart failure showed consistent reductions, but quality of life and functional status did not improve. Multiple subgroup analyses of RCTs have demonstrated that the benefit of CRT is mainly restricted to patients with LBBB or a QRS interval greater than 150 ms. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have NYHA class I heart failure, who receive CRT with or without defibrillator, the evidence includes RCTs and systematic reviews of RCTs. The relevant outcomes are overall survival, symptoms, functional outcomes, quality of life, hospitalizations, and treatment-related morbidity. Few patients with NYHA class I heart failure have been included in RCTs. The MADIT-CRT trial included 265 patients with class I heart failure. While the treatment effect on death and hospitalization favored combined implantable cardioverter-defibrillator plus CRT devices versus implantable cardioverter-defibrillator alone for class I patients, the confidence interval was large and included a 25% to 30% increase in events. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have NYHA class I, II, III or IV heart failure with LVEF of 50% or less and the atrioventricular nodal block with requirement for a high percentage of ventricular pacing, treated with guideline-directed medical therapy, who receive CRT with or without defibrillator, the evidence includes RCTs. The relevant outcomes are overall survival, symptoms, functional outcomes, quality of life, hospitalizations, and treatment-related morbidity. For patients who have atrioventricular nodal block, some degree of left ventricular dysfunction, and who would not necessarily meet conventional criteria for CRT but would require ventricular pacing, a large RCT has demonstrated improvements in heart failure-related hospitalizations and urgent care visits among patients treated with CRT instead of right ventricular pacing alone. For patients who require ventricular pacing but have no left ventricular dysfunction, results of a small RCT have suggested that biventricular pacing is associated with improved measures of cardiac function, but the trial was small and underpowered to detect differences in clinical outcomes. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have heart failure and atrial fibrillation who receive CRT with or without defibrillator, the evidence includes six RCTs and registry study. The relevant outcomes

are overall survival, symptoms, functional outcomes, quality of life, hospitalizations, and treatment-related morbidity. Results from RCTs have been conflicting, with three reporting improvements for patients with atrial fibrillation, including an all-cause mortality benefit, and others reporting no significant improvements. A registry study reported significant improvements in mortality and hospitalizations for patients with heart failure and atrial fibrillation treated with CRT plus defibrillator compared with implantable cardioverter-defibrillator alone. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have heart failure and atrioventricular nodal block who receive CRT, the evidence includes RCTs. The relevant outcomes are overall survival, symptoms, functional outcomes, quality of life, hospitalizations, and treatment-related morbidity. One large RCT demonstrated that CRT led to reductions in heart failure-related hospitalizations and urgent care visits among patients with heart failure and atrioventricular block but who would not necessarily meet conventional criteria for CRT. For patients who require ventricular pacing but have no left ventricular dysfunction, results of a small RCT have suggested that biventricular pacing is associated with improvement in cardiac function, but the trial was small and underpowered to detect differences in clinical outcomes. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have heart failure who receive triple-site CRT, the evidence includes small RCTs and a meta-analysis that included nonrandomized studies. The relevant outcomes are overall survival, symptoms, functional outcomes, quality of life, hospitalizations, and treatment-related morbidity. The available RCTs have reported improved outcomes on at least one measure of functional status or quality of life with triple-site CRT compared with conventional CRT. However, the trials were small and had methodologic limitations. Also, outcomes reported differed across studies. Triple-site CRT was also associated with higher radiation exposure and a greater number of additional procedures post implantation. Larger, high-quality RCTs are needed to define better the benefit-risk ratio for triple-site CRT compared with conventional CRT. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have heart failure who receive CRT combined with remote fluid monitoring, the evidence includes three RCTs. The relevant outcomes are overall survival, symptoms, functional outcomes, quality of life, hospitalizations, and treatment-related morbidity. Three RCTs have reported no improvement in outcomes associated with remote fluid monitoring for patients with heart failure. The evidence is insufficient to that the technology results in an improvement in the net health outcome.

V. DEFINITIONS

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ARRHYTHMIA REFERS to irregularity, or loss of rhythm, of the heart.

NEW YORK HEART ASSOCIATION CLASS I - Patients with cardiac disease but without resulting limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, dyspnea or anginal pain.

NEW YORK HEART ASSOCIATION CLASS II - Patients with cardiac disease resulting in slight limitation of physical activity. They are comfortable at rest. Ordinary physical activity results in fatigue, palpitation, dyspnea or anginal pain.

NEW YORK HEART ASSOCIATION CLASS III - Patients with cardiac disease resulting in marked limitation of physical activity. They are comfortable at rest. Less than ordinary activity causes fatigue, palpitation, dyspnea or anginal pain.

NEW YORK HEART ASSOCIATION CLASS IV - Patients with cardiac disease resulting in inability to carry on any physical activity without discomfort. Symptoms of heart failure or the anginal syndrome may be present even at rest. If any physical activity is undertaken, discomfort increases.

PREMARKET APPROVAL (PMA) is the FDA process of scientific and regulatory review to evaluate the safety and effectiveness of Class III medical devices. Class III devices are those that support or sustain human life, are of substantial importance in preventing impairment of human health, or which present a potential, unreasonable risk of illness or injury.

VI. BENEFIT VARIATIONS

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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

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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.

VIII. CODING INFORMATION

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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.

Investigational and not covered for: An Intrathoracic Fluid-Monitoring Sensor with Biventricular pacemakers, Triple-site (Triventricular) CRT, Cardiac Resynchronization Therapy with Wireless Left Ventricular Endocardial Pacing, Cardiac Contractility Modulation (CCM) Therapy and Synchronized Diaphragmatic Stimulation.

Procedure Codes								
0408T	0409T	0410T	0411T	0412T	0413T	0414T	0415T	0416T
0417T	0418T	0515T	0516T	0517T	0518T	0519T	0520T	0521T
0522T	33999	C1896	C2621	C1824	K1030			

Covered when medically necessary:

Procedure Codes								
33202	33203	33207	33208	33213	33214	33217	33221	33224
33225	33228	33229	33230	33231	33240	33249	33263	33264
C1721	C1895	C1899	C1900	C2619	G0448			

ICD-10-CM Diagnosis Code	Description
I11.0	Hypertensive heart disease with heart failure
I50.1	Left ventricular failure
I50.20	Unspecified systolic (congestive) heart failure
I50.21	Acute systolic (congestive) heart failure
I50.22	Chronic systolic (congestive) heart failure
I50.23	Acute on 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	Chronic combined systolic (congestive) and diastolic (congestive) heart failure
I50.43	Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure
I50.810	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

IX. REFERENCES

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X. POLICY HISTORY

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MP 2.007	**CAC 12/2/03**
	CAC 1/27/04
	CAC 10/26/04
	CAC 6/28/05
	CAC 3/28/06
	CAC 3/27/07
	CAC 5/27/08
	CAC 3/31/09 Consensus
	CAC 3/30/10 Minor revision. Statement added that Biventricular pacemakers with or without an accompanying implantable cardiac defibrillator are considered investigational as a treatment of NYHA class I or II heart failure.
	CAC 11/22/11 Minor revision. Biventricular pacemakers now considered medically necessary for NYHA class II indications, remaining investigational for class I. The term “congestive” in reference to the use of biventricular pacemakers was removed.
	CAC 10/30/12 BCBSA criteria adopted for biventricular pacemakers**.** For this review, a new investigational indication was added for the use of biventricular pacemakers for the treatment for heart failure in patients with atrial fibrillation. Policy title revised to **“**Biventricular Pacemakers (Cardiac Resynchronization Therapy) for the Treatment of Heart Failure.” The indication as a treatment for heart failure in patients with atrial fibrillation is considered investigational unless through medications or ablation, the patient would be expected to be pacemaker dependent was added to the policy. Rationale for this use of CRT in patients with atrial fibrillation were also added to the policy background. Criteria for temporary and permanent pacemakers and cardiac pacemaker monitoring removed from the

	policy. FEP variation revised for biventricular pacemakers to refer to the FEP policy. Codes reviewed 9/18/12.
	CAC 11/26/13 Additional investigational policy statement added for triple-site (triventricular) CRT. Added Rationale section. All rationale information now contained in that section. Deleted Medicare variation addressing NCD 220.2 Magnetic Resonance Imaging and L30529 - Cardiac Rhythm Device Evaluation. The CBC policy does not address services described within these documents. Added reference to NCD 20.8.3 in Medicare variation.
	CAC 11/25/14 Consensus review. References and rationale updated. No changes to the policy statements. Coding reviewed no changes.
	CAC 11/24/15. Minor review. For NYHA Class II, III or IV - changed criteria from "QRS duration of ≥ (greater than or equal to) 120-130 msec" to "Either left bundle branch block or QRS duration ≥150 ms" Also changed "Patients treated with a stable and maximal pharmacological medical regimen prior to implant, such as an angiotensin converting enzyme (ACE) inhibitor (or an angiotensin receptor blocker) and a beta blocker, digoxin, and/or diuretics" to "Patients treated with guideline-directed medical therapy. Link added to 2013 American College of Cardiology Foundation/American Heart Association guidelines for the management of heart failure. Policy statement added that CRT in patients with heart failure and AV block may be considered medically necessary with criteria. Rationale and references updated. Coding updated.
	5/1/16 Administrative change. Added Medicare variation to reference LCA A54982 Single Chamber and Dual Chamber Permanent Cardiac Pacemakers – Coding and Billing
	Admin update 1/1/17: Product variation section reformatted.
	CAC 11/29/16 Minor review. Removed the following statement. The use of pacemakers or pacemaker monitoring for conditions other than those described in the policy section is considered investigational. Added the following statement. The use of biventricular pacemakers (cardiac resynchronization therapy) for treatment of heart failure in situations other than those described in the policy section are considered **investigational**. For NYHA Class III or IV changed QRS duration from 150 to 120 ms. Updated rationale and references. Coding reviewed.
	10/1/17 Admin update: Added new ICD 10 codes effective from 10/1/17.
	CAC 12/19/17 Consensus review. No change to policy statements. References and rationale updated. Coding Reviewed. Admin coding review 2/28/18: No changes.
	5/25/18 Minor revision. The policy title was changed to "Cardiac Resynchronization Therapy for the Treatment of Heart Failure." A new statement was added that cardiac resynchronization therapy with wireless left ventricular endocardial pacing is considered investigational. The policy statement regarding biventricular pacemakers with or without an accompanying implantable defibrillator was changed from "as an alternative to a right ventricular pacemaker" to "as a treatment for patients with New York Heart Association class I heart failure who do

	not meet the above criteria." Rationale revised. Background and references updated. Coding Updated. New codes effective 1/1/19 added.
	3/25/2019. Consensus Review. No changes made to policy statement. References updated.
	3/16/2020 Consensus review. Policy statement unchanged. References updated. Coding reviewed.
	6/14/2021 Minor Review. Policy statement updated to include Cardiac Contractility Modulation (CCM) Therapy. Policy Name Change. Codes added. Reference added.
	12/1/2021 Administrative Review. Added 0674T-0685T. Effective date 1/1/2022.
	3/11/2022 Administrative Review. Added K1030. Effective date 4/1/2022.
	09/22/2020 Consensus Review. No change to policy statement. FEP language revised. Background, Rationale and References updated. New references added. Removed codes 0674T - 0685T. Added 0418T.
	08/03/2023- Consensus review. No change to policy statement or intent.

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