



UM-CDG-005 Biventricular Pacing

Approved By:
Director, Health Services

Effective Date:
11/10/2025

This Policy applies to all SECUR affiliates, associates, and subsidiaries.

Approved by Courtney Gonzales, Director of Health Services on behalf of the Utilization Management Committee.

PURPOSE

This coverage determination guideline serves to address cardiac resynchronization therapy (CRT)/biventricular pacing.

Heart failure is common and carries a poor prognosis. It is associated with a high burden of illness, complications, high resource utilization, and frequent rehospitalization. Some patients with heart failure experience dyssynchronous contractions of the left and right ventricles due to conduction issues. This further depresses the already insufficient pumping ability of the heart. CRT is a form of cardiac pacing that is used in patients with systolic heart failure and dyssynchronous ventricular activation. CRT involves pacing of the left ventricle and usually simultaneous or near simultaneous pacing of the right ventricle. The goal is to restore ventricular synchrony and improve the left ventricular systolic function.

For SECUR Health Plan members, National Coverage Determinations (NCD) and Local Coverage Determinations (LCD) will be applied to requests when applicable. SECUR Health Plan Coverage Determination Guidelines (CDG) will be utilized in the absence of an appropriate NCD and/or LCD.

DEFINITIONS

None

POLICY

SECUR Health Plan considers the following medically necessary when the following criteria are met:

1. Left Ventricular Ejection Fraction (LVEF) less than or equal to 35%, with ischemic or non-ischemic cardiomyopathy, on maximally tolerated guideline directed medical therapy (GDMT) for at least three (3) months and with no reversible causes, and
 - a. QRS greater than or equal to 150 ms, and
 - b. Any type of bundle branch block (BBB) with evidence of dyssynchrony, and
 - c. NYHA class III or ambulatory IV heart failure
2. LVEF less than or equal to 35%, on maximally tolerated GDMT for at least three (3) months and with no reversible causes, and
 - a. QRS greater than or equal to 150 ms, and
 - b. Left BBB, and
 - c. NYHA classes II, III, or ambulatory IV heart failure
3. LVEF less than or equal to 35%, on maximally tolerated GDMT for at least three (3) months and with no reversible causes, and

- a. QRS 130-149 ms, and
- b. Left BBB, and
- c. NYHA class II, III, or ambulatory IV heart failure
4. In members with atrial fibrillation (AF) or in sinus rhythm who have an indication for a pacemaker implant for second or third degree atrioventricular (AV) block, including those who have or will have AV nodal ablation, or very prolonged first degree block with PR greater than 300 ms, and
 - a. With an EF less than 50%, and
 - b. With NYHA I, II, or III class, and
 - c. Anticipated frequent ventricular pacing
5. Members who are being paced from the right ventricle with a decline in LVEF to a value less than 40% may be considered for upgrade to CRT. For an upgrade from standard pacing to CRT, documentation regarding the risk-benefit balance for the member and their degree of heart failure, QRS duration/morphology, etc., must be provided.

In members with AF and heart failure with CRT planned, documentation to the need for focus on AF control is needed.

Members with chronic obstructive pulmonary disease, in addition to heart failure, should have documentation regarding the related reasonable assumption that the disease is a contributory factor or significantly related to the heart failure.

Members with end stage or advanced renal disease may benefit less from CRT. Documentation regarding the risk-benefit balance must be provided.

Members with an existing CRT device may receive a generator replacement if it is required due to the end of battery life, elective replacement indicator, or device/lead malfunction.

SECUR Health Plan considers the following as not medically necessary:

1. Members with QRS less than 130 ms, with the exception of members undergoing AV nodal ablation or in need of right ventricular pacing due to a second or third degree block or very long first degree block, that are expected to occur a majority of the time.
2. Members with an EF greater than or equal to 50%.
3. CRT in members with non-ambulatory NYHA IV heart failure symptoms or on chronic inotropic heart failure therapy or with left ventricular assist devices in place.

Members with left BBB International Specialty Society Guidance

Guideline (Year)	QRS \geq 150 ms	QRS \geq 150 ms	QRS 130-149 ms	QRS 130-149 ms	QRS 120-129 ms	QRS 120-129 ms
	NYHA Functional Class III/IV	NYHA Functional Class II	NYHA Functional Class III/IV	NYHA Functional Class II	NYHA Functional Class III/IV	NYHA Functional Class II
ESC HFA (2016)	I, A	I, A	I, B	I, B	III, A	III, A
ESC EHRA (2013)	I, A	I, A	I, B	I, B	I, B	I, B
ACC/AHA/HRS (2013)	I, A	I, B	IIa, B	IIa, B	IIa, B	IIa, B

CCS (2017)	I, High	I, High	I, High	I, High	III, Moderate	III, Moderate
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Members with non-left BBB International Specialty Society Guidance

Guideline (Year)	QRS ≥ 150 ms	QRS ≥ 150 ms	QRS 130-149 ms	QRS 130-149 ms	QRS 120-129 ms	QRS 120-129 ms
	NYHA Functional Class III/IV	NYHA Functional Class II	NYHA Functional Class III/IV	NYHA Functional Class II	NYHA Functional Class III/IV	NYHA Functional Class II
ESC HFA (2016)	IIa, B	IIa, B	IIb, B	IIb, B	III, A	III, A
ESC EHRA (2013)	IIa, B	IIa, B	IIb, B	IIb, B	IIb, B	IIb, B
ACC/AHA/HRS (2013)	IIa, A	IIb, B	IIb, B	III, B	IIb, B	III, B
CCS (2017)	IIb, Low	IIb, Low	—	—	III, Moderate	III, Moderate

NYHA Functional Classification

Class Patient Symptoms

- I. No limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation or shortness of breath.
- II. Slight limitation of physical activity. Comfortable at rest. Ordinary physical activity results in fatigue, palpitation, shortness of breath or chest pain.
- III. Marked limitation of physical activity. Comfortable at rest. Less than ordinary activity causes fatigue, palpitation, shortness of breath or chest pain.
- IV. Symptoms of heart failure at rest. Any physical activity causes further discomfort.

References:

Heart.org, Classes and Stages of Heart Failure, Accessed 12/18/2024

<https://www.heart.org/en/health-topics/heart-failure/what-is-heart-failure/classes-of-heart-failure>

Local Coverage Determination L39080, Cardiac Resynchronization Therapy (CRT), 12/11/2021

<https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcdId=39080&ver=4>