



Cardio Policy:

Cardiac Resynchronization Therapy Implantation

POLICY NUMBER UM CARDIO_1149	SUBJECT Cardiac Resynchronization Therapy Implantation		DEPT/PROGRAM UM Dept	PAGE 1 OF 4
DATES COMMITTEE REVIEWED 08/03/11, 01/09/13, 08/22/13, 06/30/14, 08/12/15, 11/28/16, 12/21/16, 11/03/17, 02/13/19, 03/08/19, 07/30/19, 12/11/19, 08/12/20, 10/14/20, 07/14/21, 08/11/21, 07/13/22	APPROVAL DATE July 13, 2022	EFFECTIVE DATE July 29, 2022	COMMITTEE APPROVAL DATES 08/03/11, 01/09/13, 08/22/13, 06/30/14, 08/12/15, 11/28/16, 12/21/16, 11/03/17, 02/13/19, 03/08/19, 07/30/19, 12/11/19, 08/12/20, 10/14/20, 07/14/21, 08/11/21, 07/13/22	
PRIMARY BUSINESS OWNER: UM		COMMITTEE/BOARD APPROVAL Utilization Management Committee		
URAC STANDARDS HUM v8: UM 1-2; UM 2-1	NCQA STANDARDS UM 2		ADDITIONAL AREAS OF IMPACT	
CMS REQUIREMENTS	STATE/FEDERAL REQUIREMENTS		APPLICABLE LINES OF BUSINESS Commercial, Exchange, Medicaid	

I. PURPOSE

Indications for determining medical necessity for Cardiac Resynchronization Therapy Implantation.

II. DEFINITIONS

Cardiac pacing modalities that utilize BiV (Biventricular) or LV (Left Ventricular) stimulation to optimize cardiac pump function through synchronization of ventricular contraction is referred to as cardiac resynchronization therapies (CRT). The rationale for resynchronization is based on the clinical observation that CHF patients with intraventricular conduction defects (IVCD) have mechanical dyssynchronization between the left ventricle (LV) and the right ventricle (RV) throughout the cardiac cycle which adversely affects LV performance.

BiV pacing simultaneously activates the right and left ventricles using a combination of conventional dual chambers pacing of the right atrium and the right ventricle and specialized pacing of the left ventricle through leads positioned via the coronary sinus.

An appropriate diagnostic or therapeutic procedure is one in which the expected clinical benefit exceeds the risks or negative consequences of the procedure by a sufficiently wide margin such that the procedure is generally considered acceptable or reasonable care. The ultimate objective of AUC

is to improve patient care and health outcomes in a cost-effective manner but is not intended to ignore ambiguity and nuance intrinsic to clinical decision making.

Appropriate Care- Median Score 7-9

May be Appropriate Care- Median Score 4-6

Rarely Appropriate Care- Median Score 1-3

III. POLICY

Indications for approving a request for medical necessity for CRT-D implantation include:

- A. Ischemic Cardiomyopathy with prior MI > 40 days, LVEF \leq 35%, QRS120-149ms, LBBB, Sinus rhythm with NYHA Class II, despite being on optimal guideline directed medical therapy for at least 3 months. **(AUC Score 7)**^{1,2,3,4}
- B. Ischemic Cardiomyopathy with prior MI > 40 days, LVEF \leq 35%, QRS120-149ms, LBBB, Sinus rhythm with NYHA Class III, ambulatory Class IV, despite being on optimal guideline directed medical therapy for at least 3 months. **(AUC Score 8)**^{1,2,3,4}
- C. Ischemic Cardiomyopathy with prior MI > 40 days, LVEF \leq 35%, QRS \geq 150ms, LBBB, Sinus rhythm with NYHA Class II despite being on optimal guideline directed medical therapy for at least 3 months. **(AUC Score 8)**^{1,2,3,4}
- D. Ischemic Cardiomyopathy with prior MI > 40 days, LVEF \leq 35%, QRS \geq 150ms, LBBB, Sinus rhythm with NYHA Class III, ambulatory Class IV, despite being on optimal guideline directed medical therapy for at least 3 months. **(AUC Score 9)**^{1,2,3,4}
- E. Non-Ischemic Cardiomyopathy LVEF \leq 35%, QRS120-149ms, LBBB, Sinus rhythm with NYHA Class II, despite being on optimal guideline directed medical therapy stable for at least 3 months. **(AUC Score 7)**^{1,2,3,4}
- F. Non-Ischemic Cardiomyopathy LVEF \leq 35%, QRS120-149ms, LBBB, Sinus rhythm with NYHA Class III, ambulatory IV despite being on optimal guideline directed medical therapy stable for at least 3 months. **(AUC Score 8)**^{1,2,3,4}
- G. Non-Ischemic Cardiomyopathy LVEF \leq 35%, QRS \geq 150ms, LBBB, Sinus rhythm with NYHA Class II, III, ambulatory IV despite being on optimal guideline directed medical therapy stable for at least 3 months. **(AUC Score 9)**^{1,2,3,4}
- H. Patients with symptomatic permanent AFib, NYHA Class III-IV, LVEF \leq 35%, QRS \geq 130ms may benefit with CRT-D implantation when done along with AV Nodal Ablation. **(AUC Score 5)**^{1,2,3,4}
- I. Patients with symptomatic permanent AFib with slow ventricular response or have pacemaker dependency, NYHA Class III-IV, LVEF \leq 35%, QRS \geq 130ms may benefit with CRT-D implantation. **(AUC Score 5)**^{1,2,3,4}
- J. Repositioning or revision of previously implanted cardiac venous system (LV) lead is reasonable when there is documentation of LV lead malfunction on a recent device interrogation. **(AUC Score 7)**^{1,2,3,4}
- K. Limitations- Patients with ischemic cardiomyopathy should have a measured LVEF \leq 35%. Patients must **NOT** have any of the following:
 - 1. Cardiogenic shock or symptomatic hypotension while in stable baseline rhythm

2. Had a coronary artery bypass graft (CABG) or percutaneous trans luminal coronary angioplasty (PTCA) within past 3 months
3. Had an enzyme-positive MI within past 40 days
4. Clinical symptoms or findings that would make them a candidate for coronary revascularization
5. Any disease, other than cardiac disease (e.g., cancer, uremia, liver failure) associated with a likelihood of survival less than 1 year.

Indications for approving a request for medical necessity for CRT-P implantation include:

- A. CRT-P implantation is indicated in patients with need for frequent RV pacing > 40% of time, regardless of NYHA class, in the setting of LVEF \leq 50% with narrow QRS. **(AUC Score 7)^{1,2,3,4}**

Limitations

- A. Requests for services that are part of a surveillance protocol for patients who are involved in a clinical trial are considered out of scope (OOS) for New Century Health and cannot be reviewed.

IV. PROCEDURE

- A. In order to review a request for medical necessity, the following items must be submitted for review
 1. Progress note that prompted request
 2. Recent EKG (within 10 days) if not documented in notes
 3. Most recent Echocardiogram/Nuclear Stress Test/MUGA/Cardiac Cath Report, if not documented in notes
- B. Primary codes appropriate for this service: CRT-D Implant 33249+33225, CRT-P 33208+33225, Conversion of existing pacemaker system to biventricular system – 33225+33228 or 33229. Conversion of existing IDC system to biventricular system – 33225+33263 or 33264. Repositioning or revision of LV lead- 33226

V. APPROVAL AUTHORITY

- A. Review – Utilization Management Department
- B. Final Approval – Utilization Management Committee

VI. ATTACHMENTS

- A. None

VII. REFERENCES

1. National Coverage Determination- NCD - Biventricular Pacing/ Cardiac Resynchronization Therapy NCD 20.4
2. Local Coverage Determination- LCD- Biventricular Pacing/ Cardiac Resynchronization Therapy- L33271. FL, 2015
3. Andrea M. Russo, MD, FACC, FHRS, et al. ACCF/HRS/AHA/ASE/HFSA/SCAI/SCCT/SCMR 2013 Appropriate Use Criteria for Implantable Cardioverter Defibrillators and Cardiac Resynchronization Therapy. March 2013, Volume 61, Number 12, Pages 1318-1368.
4. Robert C. Hendel MD, FACC, FAHA, et al. Appropriate use of cardiovascular technology: 2013 ACCF appropriate use criteria methodology update: a report of the American College of

Cardiology Foundation appropriate use criteria task force. Journal of the American College of Cardiology. March 2013, Volume 61, Issue 12, Pages 1305-1317.

5. Ann B. Curtis, et al. Biventricular Pacing for Atrioventricular Block and Systolic Dysfunction. N Engl J Med 2013; 368:1585-1593 DOI: 10.1056/NEJMoa1210356.
6. NCQA UM 2022 Standards and Elements.