Medica Coverage Policy

Policy Name:	**Non-Invasive Measurement of Left Ventricular End Diastolic Pressure**
Effective Date:	**8/21/2023**

Important Information – Please Read Before Using This Policy

These services may or may not be covered by all Medica plans. Coverage is subject to requirements in applicable federal or state laws. Please refer to the member's plan document for other specific coverage information. If there is a difference between this general information and the member's plan document, the member's plan document will be used to determine coverage. With respect to Medicare, Medicaid, and other government programs, this policy will apply unless these programs require different coverage. Members may contact Medica Customer Service at the phone number listed on their member identification card to discuss their benefits more specifically. Providers with questions may call the Medica Provider Service Center toll-free at 1-800-458-5512.

Medica coverage policies are not medical advice. Members should consult with appropriate health care providers to obtain needed medical advice, care, and treatment.

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Note: This policy is no longer scheduled for routine review of the scientific literature.

Non-invasive measurement of left ventricular end diastolic pressure is investigative and unproven and therefore **NOT COVERED**. There is insufficient reliable evidence in the form of high quality peer-reviewed medical literature to establish the efficacy or effects on health care outcomes.

Description

Measurement of left ventricular end diastolic pressure (LVEDP) determines the left ventricular filling pressure (LVFP) of the heart. This result is used to detect congestive heart failure (CHF) and aid in assessment of appropriate therapies in patients with heart failure. LVFP is generally determined invasively in one of two ways. In the first method, a catheter is placed in the pulmonary artery to measure the pulmonary capillary wedge pressure (PCWP). In the second, a catheter is placed in the left ventricle to obtain the LVEDP. Each of these techniques requires cardiac catheterization and is performed in an inpatient setting.

A non-invasive device, the VeriCor System, estimates LVEDP during the stress phase of a Valsalva maneuver. It is based on the premise that arterial pressure during the stress phase of the maneuver may reflect the LVEDP. The VeriCor System consists of a blood pressure tonometer placed over the radial artery and a digital pulmonary manometer for continuous measurement of arterial and expiratory pressure signals during the procedure. The procedure can be performed in an inpatient or outpatient setting and has the potential for home monitoring use. The test requires an eight minute calibration of the equipment. The patient then performs the Valsalva maneuver by blowing into the mouthpiece of the manometer to produce an expiratory pressure of 20-30 mmHg for a minimum of 8 seconds. Arterial blood pressure measurements and expiratory pressures are recorded and stored in a medical-grade computer. The data is then applied to algorithms to estimate the LVEDP. The measurement may be repeated if necessary.

FDA Approval
The VeriCor® System (CVP Diagnostics, Boston MA) received FDA approval in June 2004 through a 510(k) process for use in estimating LVEDP noninvasively. The approval states that the device has been clinically validated in males only. Use of the device in females has not been investigated. Certain patient conditions that should be considered as a basis for excluding individual patients for testing due to a possible risk of the Valsalva maneuver were listed in the FDA approval. These conditions include, but are not limited to, atrial flutter or fibrillation with irregular ventricular response, history of CVA or paradoxical emboli, hypertrophic obstructive cardiomyopathy, uncontrolled hypertension (systolic BP>160mmHg or diastolic BP _100mgHg), or hypotension (systolic BP<90mmHg).

Prior Authorization
Prior authorization is not applicable. Claims for this service are subject to retrospective review and denial of coverage, as investigative services are not eligible for reimbursement.

Coding Considerations
Use the current applicable CPT/HCPCS code(s). The following codes are included below for informational purposes only, and are subject to change without notice. Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement.

CPT Codes:
- **93799** - Unlisted cardiovascular service or procedure

Original Effective Date: 8/1/2005

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3/21/2011
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5/17/2017
2/20/2020 – administrative update; format
6/17/2020
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