Electrical Bioimpedance for Cardiac Output Monitoring (BioZ)

MPM 5.4

Disclaimer

Refer to the member’s specific benefit plan and Schedule of Benefits to determine coverage. This may not be a benefit on all plans or the plan may have broader or more limited benefits than those listed in this Medical Policy.

Description

Electrical bioimpedance measures the response of body fluids to an applied electrical current. A low level current is directed through the body and the impedance to the current flow is measured. Bioimpedance decreases as body fluid increases. There are numerous applications of electrical bioimpedance. However, this Medical Policy addresses the use of electrical bioimpedance for cardiac output monitoring.

Cardiac output determined by electrical bioimpedance, also known as thoracic electrical bioimpedance, is based upon the resistive changes in the thorax to an applied current. A special monitor is designed to measure impedance during the cardiac cycle. Since impedance changes are related to the flow of blood, both stroke volume and cardiac output can be derived. Related hemodynamic parameters such as cardiac index, index of contractility, acceleration index, thoracic fluid content and systemic vascular resistance can also be subsequently estimated.¹

Coverage Determination

Prior Authorization is not required. However, all claims are subject to retrospective review.

The Presbyterian Medical Policy for this procedure has been retired. Presbyterian now uses MCG (formerly Milliman) Criteria # A-0400. Due to contractual restrictions providers may not access the MCG website but may obtain a copy of the criteria from the Prior Authorization staff.

Approval Signatures:
Clinical Quality Committee: Norman White MD
Medical Director: Pedro Cardona MD
This Medical Policy is intended to represent clinical guidelines describing medical appropriateness and is developed to assist Presbyterian Health Plan and Presbyterian Insurance Company, Inc. (Presbyterian) Health Services staff and Presbyterian medical directors in determination of coverage. The Medical Policy is not a treatment guide and should not be used as such.

For those instances where a member does not meet the criteria described in these guidelines, additional information supporting medical necessity is welcome and may be utilized by the medical director in reviewing the case. Please note that all Presbyterian Medical Policies are available on the Internet at:

http://www.phs.org/phs/healthplans/providers/healthservices/Medical/index.htm