

***Pectus Deformity Repair***

<b>Origination:</b> 02/03/09	<b>Revised:</b>	<b>Annual Review:</b> 12/15/11
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**Purpose:**

The Medical Technology Assessment Committee will review published scientific literature and information from appropriate government regulatory bodies (when available) related to Pectus Deformity Repair in order to determine inclusion in the benefit plan.

**Recommendation:**

A recommendation was made by the MTAC following discussion by committee members based on current literature:

***Additional Information***

- Pectus excavatum is often a cosmetic defect, but it may have varied anatomic and symptomatic presentations. CT scans can be used in Members being evaluated for surgery to document more clearly the severity of the degree of lung compression and clarify the need for operation.
- Another etiology of chest asymmetry is Poland's Syndrome. This consists of absence or hypoplasia of the pectoralis major and minor muscles, hypoplasia or absence of nipple and breast, hypoplasia of subcutaneous fat, absence of axillary hair, and partial absence of the upper costal cartilages and portions of ribs.

***Eligibility Criteria***

- A. Surgery to correct the functional disorders associated with Pectus Excavatum will be considered when ALL of the following criteria are met:
1. Member is at least seven (7) years old;
  2. Cardiac displacement or pulmonary compromise demonstrated by ANY ONE (1) of the following:
    - a. CT scan of the chest with a CT index (Haller index) > 3.2;
    - b. Serial chest xrays showing atelectasis;
    - c. Pulmonary Function testing demonstrating restrictive lung disease;
    - d. Echocardiogram showing MVP or other valvular abnormalities;
    - e. EKG showing A-V conduction delays.

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### **Recommendation, continued:**

#### ***Eligibility Criteria, continued:***

B. Surgery to correct the functional disorders associated with Poland Syndrome will be considered when ALL of the following criteria are met:

1. Member is at least seven (7) years old;
2. Poland Syndrome has been definitely diagnosed by all of the following:
  - a. Absence of the sternal head of the pectoralis major muscle;
  - b. Ipsilateral hypoplasia and/or aplasia of breast or nipple;
  - c. Ipsilateral deficiency of subcutaneous fat and axillary hair;
  - d. Ipsilateral abnormalities of rib cage;
  - e. Ipsilateral upper extremity anomalies including short upper arm, forearm, or fingers;
  - f. Additional features might include:
    - i. Hypoplasia or aplasia or serratus, external oblique, pectoralis minor, latissimus dorsi, infraspinatus and supraspinatus muscles;
    - ii. Total absence of anterolateral ribs and herniation of lung;
    - iii. Syndactyly and hypoplasia or aplasia of the middle phalanges.

C. Photodocumentation will be required to substantiate the above findings.

#### ***Exclusion***

- Surgery to correct Pectus Carinatum is considered cosmetic and not a covered benefit because this deformity does not cause physiologic disturbances from compression of the heart or lungs.

### **References:**

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### **Disclaimer Information:**

Coverage Issues Guidelines and Medical Technology Assessment Recommendations are developed to determine coverage for AvMed Health Plans' benefits, and are published to provide a better understanding of the basis upon which coverage decisions are made. AvMed Health Plans makes coverage decisions using these guidelines, along with the Member's benefit document. The use of this guideline is neither a guarantee of payment nor a final prediction of how specific claim(s) will be adjudicated.

Coverage Issues Guidelines and Medical Technology Assessment Recommendations are developed for selected therapeutic or diagnostic services found to be safe, but proven effective in a limited, defined population of patients or clinical circumstances. They include concise clinical coverage criteria based on current literature review, consultation with practicing physicians in the AvMed Health Plans service area who are medical experts in the particular field, FDA and other government agency policies, and standards adopted by national accreditation organizations.

Treating providers are solely responsible for the medical advice and treatment of Members. This guideline may be updated and therefore is subject to change.