I. Policy: Surgical Correction of Chest Wall Deformities

II. Purpose/Objective:

To provide a policy of coverage regarding Surgical Correction of Chest Wall Deformities

III. Responsibility:

A. Medical Directors

B. Medical Management Department

IV. Required Definitions

1. Attachment – a supporting document that is developed and maintained by the policy writer or department requiring/authoring the policy.

2. Exhibit – a supporting document developed and maintained in a department other than the department requiring/authoring the policy.

3. Devised – the date the policy was implemented.

4. Revised – the date of every revision to the policy, including typographical and grammatical changes.

5. Reviewed – the date documenting the annual review if the policy has no revisions necessary.

V. Additional Definitions

Medical Necessity or Medically Necessary means Covered Services rendered by a Health Care Provider that the Plan determines are:

a. appropriate for the symptoms and diagnosis or treatment of the Member's condition, illness, disease or injury;

b. provided for the diagnosis, and the direct care and treatment of the Member's condition, illness disease or injury;

c. in accordance with current standards of good medical treatment practiced by the general medical community;

d. not primarily for the convenience of the Member, or the Member's Health Care Provider; and

the most appropriate source or level of service that can safely be provided to the Member. When applied to hospitalization, this further means that the Member requires acute care as an inpatient due to the nature of the services rendered or the Member's condition, and the Member cannot receive safe or adequate care as an outpatient.

Medicaid Business Segment

Medically Necessary — A service, item, procedure, or level of care that is necessary for the proper treatment or management of an illness, injury, or disability is one that:

- Will, or is reasonably expected to, prevent the onset of an illness, condition, injury or disability.
• Will, or is reasonably expected to, reduce or ameliorate the physical, mental or developmental effects of an illness, condition, injury or disability.
• Will assist the Member to achieve or maintain maximum functional capacity in performing daily activities, taking into account both the functional capacity of the Member and those functional capacities that are appropriate for Members of the same age.

**Haller CT index:** Gives an objective measurement for comparing the severity between different patients. It is derived from dividing the transverse diameter of the chest by the anterior-posterior diameter.

**INDICATIONS:**
Surgical repair of Pectus Excavatum and Pectus Carinatum is considered medically necessary if the insured individual meets **ALL** of the following criteria:

1. Well-documented evidence of severe functional impairment arising from the sternal deformity. Complications include but may not be limited to:
   - Cardiopulmonary impairment documented by respiratory and cardiac function tests;
   - Frequent lower respiratory tract infections;
   - Exercise limitations;
   - Atypical chest pain; **AND**
2. An EKG, stress test, echocardiogram, stress echo or cardiac catheterization documented to define the relationship between the cardiopulmonary impairment and the sternal deformity. **AND**
3. A CT scan of the chest that indicates one of the following:
   - A Haller CT index* greater than 3.25; **or**
   - For members with significant discrepancies of anterior-posterior to medial-lateral dimensions of the chest wall, a Correction Index** of 28% or higher


**LIMITATIONS:**
Anatomic studies such as chest x-ray, chest CT scan or anteroposterior diameter without evidence of compromise of physiologic function will not be considered primary considerations for surgical correction.

**EXCLUSIONS:**
Surgical intervention to correct the sternal deformity in the absence of significant medically documented functional impairment and/or cardiopulmonary compromise is considered cosmetic/ not medically necessary and therefore **NOT COVERED.**

**Medicaid Business Segment:**
Any requests for services, that do not meet criteria set in the PARP, may be evaluated on a case by case basis.

**Coding Associated With:** Surgical Correction of Chest Wall Deformities
*The following codes are included below for informational purposes and may not be all inclusive. Inclusion of a procedure or device code(s) does not constitute or imply coverage nor does it imply or guarantee provider reimbursement. Coverage is determined by the member specific benefit plan document and any applicable laws regarding coverage of specific services. Please note that per Medicare coverage rules, only specific CPT/HCPCS Codes may be covered for the Medicare Business Segment. Please consult the CMS website at www.cms.gov or the local Medicare Administrative Carrier (MAC) for more information on Medicare coverage and coding requirements.*

21740  Reconstructive repair of pectus excavatum or carinatum
21742  Reconstructive repair of pectus excavatum or carinatum, minimally invasive approach, without thoracoscopy
21743  Reconstructive repair of pectus excavatum or carinatum, minimally invasive approach, with thoracoscopy

LINE OF BUSINESS:
Eligibility and contract specific benefit limitations and/or exclusions will apply. Coverage statements found in the line of business specific benefit document will supercede this policy. For Medicare, applicable LCD’s and NCD’s will supercede this policy. For PA Medicaid Business segment, this policy applies as written.

REFERENCES:


Park HJ, Lee SY, Lee CS, Youm W, Lee KR. ” The Nuss procedure for pectus Excavatum: Evolution of Techniques and Early Results on 300 Patients” Ann thorac Surg 2004; 77:289-95


Up to Date. Diseases of the chest wall.


This policy will be revised as necessary and reviewed no less than annually.

Devised: 9/99

Revised: 12/01, 12/02 (add medical necessity definition); 10/03 change title, add pectus carinatum
9/05 (defined Haller CT and Extended Criteria); 10/09 (criteria); 5/16 (Removed PA); 10/16 (cited reference for Haller Index)

Reviewed: 10/04, 10/06, 10/07, 10/08, 10/10, 10/11, 10/12, 10/13, 10/14, 10/15, 9/17, 9/18; 9/19, 9/20, 9/21, 9/22, 9/23

Geisinger Health Plan may refer collectively to health care coverage sponsors Geisinger Health Plan, Geisinger Quality Options, Inc., and Geisinger Indemnity Insurance Company, unless otherwise noted. Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.

Coverage for experimental or investigational treatments, services and procedures is specifically excluded under the member's certificate with Geisinger Health Plan. Uncovered services outside of an approved clinical trial are also specifically excluded under the member's certificate with Geisinger Health Plan. This policy does not expand coverage to services or items specifically excluded from coverage in the member's certificate with Geisinger Health Plan. Additional information can be found in MP015 Experimental, Investigational or Unproven Services.

Prior authorization and/or pre-certification requirements for services or items may apply. Pre-certification lists may be found in the member's contract specific benefit document. Prior authorization requirements can be found at https://www.geisinger.org/health-plan/providers/ghp-clinical-policies

Please be advised that the use of the logos, service marks or names of Geisinger Health Plan, Geisinger Quality Options, Inc. and Geisinger Indemnity Insurance Company on a marketing, press releases or any communication piece regarding the contents of this medical policy is strictly prohibited without the prior written consent of Geisinger Health Plan. Additionally, the above medical policy does not confer any endorsement by Geisinger Health Plan, Geisinger Quality Options, Inc. and Geisinger Indemnity Insurance Company regarding the medical service, medical device or medical lab test described under this medical policy.