

STRIDESM (HMO) MEDICARE ADVANTAGE

Subject: Chest Wall Deformities Reconstructive Procedures

Background: Reconstructive surgery includes procedures on abnormal structures of the body caused by congenital defects, developmental abnormalities, trauma, infection, tumors or disease and is generally performed to improve function. It may also be done to approximate a normal appearance in situations where there is severe disfigurement secondary to an injury, illness or congenital anomaly.

Pectus Excavatum accounts for 90% of anterior chest wall disorders and is a deformity of the chest wall characterized by a sternal depression. Clinical significance of pectus excavatum revolves around issues such as cardiopulmonary morbidity and severity of the chest wall defect.

Pectus Carinatum is known as an uncommon deformity of the chest wall. It stated that in more than 90% of individuals, the deformity is noted during early adolescence and dramatically worsens throughout the following years. The decision to treat may be left up to the discretion of the individual.

Authorization:

Prior authorization from Harvard Pilgrim StrideSM (HMO) is required for all reconstructive procedures for chest wall deformities.

Reconstructive procedures for chest wall deformities are authorized when documentation confirms the presence of a functional impairment related to a listed chest deformity, and the requested procedure can reasonably be expected to restore functionality or resolve associated medical symptoms. Procedure-specific criteria (below) must be met.

- In most cases, surgical repair of Pectus deformities (e.g., Carinatum or Excavatum) does not occur until the member is near the end of puberty (generally 15-16 years of age).

Photo documentation, when required, must be mailed or emailed to HPHC as faxed photos cannot be utilized in determination of medical necessity.

For HPHC's policy regarding breast surgeries (i.e., breast reconstruction, reduction mammoplasty, breast implant removal, and inverted nipple repair), see HPHC's Medical Review Criteria for Breast Surgeries.

For HPHC's policy regarding Gynecomastia surgery, see HPHC's Medical Review Criteria for Gynecomastia Surgery.

Policy and Coverage Criteria:

Medical Review Criteria

Chest Wall Deformities Reconstructive Procedures

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Harvard Pilgrim StrideSM (HMO) policies are based on medical science and relevant information including current Medicare coverage (including National and Local Coverage Determinations), Harvard Pilgrim medical policies, and Harvard Pilgrim StrideSM (HMO) Medicare Advantage Plan materials. These policies are intended to provide benefit coverage information and guidelines specific to the Harvard Pilgrim StrideSM (HMO) Medicare Advantage Plan. Providers are responsible for reviewing the CMS Medicare Coverage Center guidance; in the event that there is a conflict between this document and the CMS Medicare Coverage Center guidance, the CMS Medicare Coverage Center guidance will control.

Harvard Pilgrim StrideSM (HMO) considers reconstructive procedures for chest wall deformities to improve or correct a physical functional impairment resulting from congenital defects or birth abnormalities as reasonable and medically necessary when documentation confirms procedure-specific criteria:

Pectus Excavatum:

Surgical repair of Pectus Excavatum is considered medically necessary when ALL the following are met:

1. Degree of deformity and its direct relationship to symptoms is clearly documented; AND
2. Documentation (including imaging studies and photographs documenting the deformity) confirms ANY of the following;
 - EITHER:
 - Haller Index 3.25 or higher; or
 - For members with significant discrepancies of anterior-posterior to medial-lateral dimensions of the chest wall, a Correction Index (CI) of 28% or higher
 - Cardiac compression is demonstrated on imaging
 - Cardiac compromise (e.g., decreased cardiac output) is demonstrated on echocardiogram
3. Exercise intolerance on cardiopulmonary exercise test or exercise pulmonary function test (i.e., results below predicted values)

Pectus Carinatum:

Surgical repair of Pectus Carinatum is considered medically necessary when documentation (including photographs) confirms ALL the following:

1. Deformity is directly related to a physical functional impairment (e.g., impaired cardiac or lung function, exercise tolerance limitations).

Poland Syndrome:

Surgical repair of chest wall deformity (e.g. Poland Syndrome) is considered medically necessary when documentation (including photographs) confirms ANY of the following:

1. Chest wall defects in which the chest viscera are exposed; OR
2. The member has a functional impairment (e.g. respiratory compromise, exercise intolerance) secondary to the chest wall deformity

Exclusions:

Harvard Pilgrim StrideSM (HMO) considers reconstructive procedures for chest wall deformities as experimental/investigational for all other indications. In addition, HPHC does not cover:

- Charges for items or services (e.g. drugs, biologicals) directly related to a non-covered cosmetic procedure
- Cosmetic procedures to reshape body parts in order to improve the member’s appearance or self-esteem when no physical functional impairment exists

Coding:

Codes are listed below for informational purposes only, and do not guarantee member coverage or provider reimbursement. The list may not be all-inclusive. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible.

CPT® Code	Description
21740	Reconstructive repair of pectus excavatum or carinatum; open

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CPT® Code	Description
21742	Reconstructive repair of pectus excavatum or carinatum; minimally invasive approach (Nuss procedure), without thoracoscopy
21743	Reconstructive repair of pectus excavatum or carinatum; minimally invasive approach (Nuss procedure), with thoracoscopy

Billing Guidelines:

Member's medical records must document that services are medically necessary for the care provided. Harvard Pilgrim Health Care maintains the right to audit the services provided to our members, regardless of the participation status of the provider. All documentation must be available to HPHC upon request. Failure to produce the requested information may result in denial or retraction of payment.

References:

1. Chen Yuen Julia, and Shinjiro Hirose. "Pectus Carinatum." *Surgery for Chest Wall Deformities*. Springer International Publishing, 2017. 27-32.
2. Poston PM. The correction index: setting the standard for recommending operative repair of pectus excavatum. *Annals of thoracic surgery* 97.4 (2014): 1176-1180.
3. Peter SD. A novel measure for pectus excavatum: the correction index. *Journal of pediatric surgery* 46.12 (2011): 2270-2273.
4. Pectus carinatum. UpToDate.com/login [via subscription only]. Accessed May 10, 2017.
5. Pectus Excavatum. UpToDate.com/login [via subscription only]. Accessed May 10, 2017.
6. Poston P, Patel S, Rajput M et al. The Correction Index: Setting the Standard for Recommending Operative Repair of Pectus Excavatum. *The Annals of Thoracic Surgery*. 2014;97(4):1176-1180. doi:10.1016/j.athoracsur.2013.12.050.

Summary of Changes:

Date	Revision
6/17	Annual review, background and references updated, policy criteria clarified and policy title changed from Cosmetic and Reconstructive Chest Surgery to Chest Wall Deformities Reconstructive Procedures.
8/16	Annual review. Update references, minor language changes.

Approved by UMPCP: 6/14/17

Reviewed/Revised: 8/16; 6/17

Initiated: 8/26/16 (eff: 1/1/16)

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