Sentara Health Plans

Medicaid

Pectus Surgery and Devices, Surgical 05

Table of Content

Effective Date	2/2010
Next Review Date	2/2026
Coverage Policy	Surgical 05
Version	7

All requests for authorization for the services described by this medical policy will be reviewed per Early and Periodic Screening, Diagnostic and Treatment (EPSDT) guidelines. These services may be authorized under individual consideration for Medicaid members under the age of 21-years if the services are judged to by medically necessary to correct or ameliorate the member's condition. Department of Medical Assistance Services (DMAS), Supplement B - EPSDT (Early and Periodic Screening, Diagnosis and Treatment) Manual.*.

Description & Definitions:

Congenital defects known as **pectus excavatum (PE)**, or funnel chest, and **pectus carinatum**, known as pigeon breast, are anomalies of the anterior chest wall characterized by a deep depression of the sternum. Surgical procedures and devices exist to correct the anomaly.

Other common names: Nuss Procedure, Pectus support bar, Pectus Excavatum Strut, MedXpert Pectus Excavatum System (P.E.S.), Minimally Invasive Repair of Pectus Excavatum (MIRPE), vacuum bell therapy (VBT)

Criteria:

Repair of pectus excavatum or pectus carinatum is considered medical necessary for **1 or more** of the following:

- **Repair of pectus excavatum** by any technique is considered medically necessary for **1 or more** of the following:
  - Documentation of significant physical functional impairment
  - Restrictive lung disease as demonstrated by a total lung capacity less than 80 percent of predicted value
  - Cardiac compression as demonstrated by 1 or more of the following:
    - Computed tomography patients with a Haller index (pectus severity index) of greater than or equal to 3.2
    - Echocardiogram
    - Magnetic resonance imaging (MRI) scan
    - Ultrasound of the chest

- **Repair of pectus carinatum** by **surgical repair or orthotic compression bracing** is considered medically necessary with **1 or more** of the following:
  - Documentation of severe forms of pectus carinatum with **ALL** of the following criteria met:
    - Significant physical functional impairment **1 or more** of the following:
      - Breathing difficulties

        - Cardiac issues related to chest deformity
        - Chest pain directly related to the chest wall deformity that has failed medical management
        - Exercise limitations
    - **Haller index** (pectus severity index) of **less than or equal to 2.0**
    - Individual must meet criteria for cardiopulmonary compromise of **1 or more** of the following:
        - Chest x-ray
        - Echocardiogram
        - Magnetic resonance imaging (MRI) scan
        - Pulmonary function tests
- Documentation of the individual that has failed first line treatment with corrective bracing or corrective bracing is not indicated for the individual.

- Surgical repair for chest wall deformity associated with idividual's diagnosis of Poland syndrome

Pectus Surgery and Devices are considered **not medically necessary** for any use other than those indicated in clinical criteria, to include but not limited to:

- Dynamic compression bracing for individual's who require **more than 7.5 psi** compression to achieve correction and is considered cosmetic (L1320)
- Repair of pectus excavatum or pectus carinatum by any technique to improve appearance, in the absence of functional impairment is considered cosmetic
- Silicone prosthetic inserts (L9900)
- Sternal magnet (i.e. Magnetic Mini Mover Procedure (3MP)) (21740)
- Suit or vest therapy including, but not limited to the Benik vest, Stabilizing Pressure Input Orthosis (SPIO), Adeli Suit, Penguin Suit, Polish Suit, Therapy Suit, Therasuit, andTheraTogs (L9900)
- Vacuum bell (L9900)

Document History:

Revised Dates:

- 2025: February
- 2020: January
- 2016: February
- 2015: October
- 2013: February, June

Reviewed Dates:

- 2025: January
- 2024: January
- 2023: January
- 2022: January
- 2021: January
- 2018: August
- 2017: November
- 2015: February
- 2014: February
- 2012: February
- 2011: February

Effective Date:

- February 2010

Coding:

Medically necessary with criteria:

Commented [A1]: Patients with a PI of >1.29 were associated with mild deformities, 1.28-1.18 had moderate deformities, 1.17-1.07 had severe deformities and a PI of <1.02 was associated with extreme forms of pectus carinatum deformity. (pectus Clinic)

Commented [A2]: The following values are used:
•normal chest: <2.0
•mild excavatum: 2.0-3.2
•moderate excavatum: 3.2-3.5
•severe excavatum: >3.5 [1]
Corrective pectus excavatum surgery is considered with a Haller index ≥3.25.

Commented [A3]: Cleavland Clinic - CXR, CT., MRI

Coding	Description
21740	Reconstructive repair of pectus excavatum or carinatum; open
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
L9900	Orthotic and prosthetic supply, accessory, and/or service component of another HCPCS L code
L1320	Thoracic, pectus carinatum orthosis, sternal compression, rigid circumferential frame with anterior and posterior rigid pads, custom fabricated

Considered Not Medically Necessary:

Coding	Description
L9900	Orthotic and prosthetic supply, accessory, and/or service component of another HCPCS L code

U.S. Food and Drug Administration (FDA) - approved only products only.

The preceding codes are included above for informational purposes only and may not be all inclusive. Additionally, inclusion or exclusion of a treatment, procedure, or device-code(s) does not constitute or imply member coverage or provider reimbursement.

Special Notes: *

- Coverage
  - Requests for brace checks of cosmetically applied pectus carinatum braces will be denied in accordance with group benefit exclusions for cosmetic procedures.
  - See the appropriate benefit document for specific coverage determination. Individual specific benefits take precedence over medical policy.
- Application to products
  - Policy is applicable to Sentara Health Plan Virginia Medicaid products.
- Authorization requirements
  - Pre-certification by the Plan is required.
- Special Notes:
  - Medicaid
    - This medical policy express Sentara Health Plan's determination of medically necessity of services, and they are based upon a review of currently available clinical information. These policies are used when no specific guidelines for coverage are provided by the Department of Medical Assistance Services of Virginia (DMAS). Medical Policies may be superseded by state Medicaid Plan guidelines. Medical policies are not a substitute for clinical judgment or for any prior authorization requirements of the health plan. These policies are not an explanation of benefits.
    - Medical policies can be highly technical and complex and are provided here for informational purposes. These medical policies are intended for use by health care professionals. The medical policies do not constitute medical advice or medical care. Treating health care professionals are solely responsible for diagnosis, treatment and medical advice. Sentara Health Plan members should discuss the information in the medical policies with their treating health care professionals. Medical technology is constantly evolving and these medical policies are subject to change without notice, although Sentara Health Plan will notify providers as required in advance of changes that could have a negative impact on benefits.
    - The Early and Periodic Screening, Diagnostic and Treatment (EPSDT) covers services, products, or procedures for children, if those items are determined to be medically necessary to

"correct or ameliorate" (make better) a defect, physical or mental illness, or condition (health problem) identified through routine medical screening or examination, regardless of whether coverage for the same service or support is an optional or limited service under the state plan. Children enrolled in the FAMIS Program are not eligible for all EPSDT treatment services. All requests for authorization for the services described by this medical policy will be reviewed per EPSDT guidelines. These services may be authorized under individual consideration for Medicaid members under the age of 21-years if the services are judged to by medically necessary to correct or ameliorate the member's condition. Department of Medical Assistance Services (DMAS), Supplement B - EPSDT (Early and Periodic Screening, Diagnosis and Treatment) Manual.

- Service authorization requests must be accompanied by sufficient clinical records to support the request. Clinical records must be signed and dated by the requesting provider withing 60 days of the date of service requested.

References:

Including but not limited to: Specialty Association Guidelines; Government Regulations; Winifred S. Hayes, Inc; UpToDate; Literature Review; Specialty Advisors; National Coverage Determination (NCD); Local Coverage Determination (LCD).

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Keywords:

Pectus, excavatum, sternum, brace, orthotic, carinatum, Haller index, pectus severity index, SHP Pectus Surgery and Devices, SHP Surgical 05, cardiopulmonary compromise, cardiac compression, Suit therapy, vest therapy, Benik vest, Stabilizing Pressure Input Orthosis, SPIO, Adeli Suit, Penguin Suit, Polish Suit, Therapy Suit, Therasuit, TheraTogs, Vacuum bell, sternal magnet, silicone prosthetic inserts, Nuss Procedure, Pectus support bar, Pectus Excavatum Strut