Pectus Deformity Repair

Guideline Number: CS094.Q
Effective Date: July 1, 2022

➲ Instructions for Use

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Related Community Plan Policy
- Cosmetic and Reconstructive Procedures

Commercial Policy
- Pectus Deformity Repair

Application

This Coverage Determination Guideline does not apply to the states listed below; refer to the state-specific policy/guideline, if noted:

State	Policy/Guideline
Indiana	Pectus Deformity Repair (for Indiana Only)
Kentucky	Pectus Deformity Repair (for Kentucky Only)
Louisiana	Pectus Deformity Repair (for Louisiana Only)
New Jersey	Pectus Deformity Repair (for New Jersey Only)
Pennsylvania	Pectus Deformity Repair (for Pennsylvania Only)
Tennessee	Pectus Deformity Repair (for Tennessee Only)

Coverage Rationale

Indications for Coverage

Surgical repair of Pectus Excavatum is considered reconstructive and medically necessary when the following criteria has been met:

- Imaging studies confirm Haller Index greater than 3.25; and
- A Functional Impairment defined in physician office notes; and
  - For restrictive lung capacity the total lung capacity is documented in the physician office notes as < 80% of the predicted value; or
  - There is cardiac compromise as demonstrated by decreased cardiac output on the echocardiogram; or
  - There is objective evidence of exercise intolerance as documented by cardiopulmonary exercise testing that is below the predicted values

Surgical repair of Pectus Carinatum may be considered reconstructive and medically necessary.
Requests for coverage of repair of Pectus Carinatum will be reviewed by a UnitedHealthcare Medical Director on a case-by-case basis.

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Documentation Requirements

Medical notes documenting the following, when applicable:

- Diagnosis
- History of the medical condition(s) requiring treatment or surgical intervention
- Documentation of functional limitation/impairment
- Results of all recent imaging studies and applicable diagnostics, including results of:
  - CT scan confirming Haller Index calculation
  - Pulmonary function test
  - Echocardiogram including ejection fraction
  - Stress test including cardiopulmonary values
- Physician treatment plan

Coverage Limitations and Exclusions

UnitedHealthcare excludes Cosmetic Procedures from coverage including but not limited to the following:

- Procedures that correct an anatomical Congenital Anomaly without improving or restoring physiologic function are considered Cosmetic Procedures. The fact that a Covered Person may suffer psychological consequences or socially avoidant behavior as a result of an Injury, Sickness or Congenital Anomaly does not classify surgery (or other procedures done to relieve such consequences or behavior) as a reconstructive procedure.
- Procedures that do not meet the reconstructive criteria in the Indications for Coverage section.

Definitions

Check the definitions within the member benefit plan document that supersede the definitions below.

Congenital Anomaly: A physical developmental defect that is present at the time of birth, and that is identified within the first twelve months of birth.

Cosmetic Procedures: Procedures or services that change or improve appearance without significantly improving physiological function.

Functional or Physical or Physiological Impairment: A Functional or Physical or Physiological Impairment causes deviation from the normal function of a tissue or organ. This results in a significantly limited, impaired, or delayed capacity to move, coordinate actions, or perform physical activities and is exhibited by difficulties in one or more of the following areas: physical and motor tasks; independent movement; performing basic life functions.

Haller Index: The Haller index, or pectus severity index, is the most commonly used scale for determining the severity of chest wall deformities. Computerized tomography (CT) is used to determine the index, which is obtained by dividing the inner width of the chest at its widest point by the distance between the posterior surface of the sternum and the anterior surface of the spine. This measurement uses the deepest level of the inner sternal depression to the anterior aspect of the vertebral body. A normal chest has a Haller index of about 2.5.

Pectus Carinatum: A protrusion of the chest over the sternum. It is extremely uncommon that Pectus Carinatum will cause a functional or physiological deficit. Pectus Carinatum is not a Congenital Anomaly; it is a developmental condition of the cartilage that generally occurs during an adolescent's growth spurt.

Pectus Excavatum: Posterior depression of the sternum and adjacent costal.

Reconstructive Procedures: Reconstructive Procedures when the primary purpose of the procedure is either of the following:

- Treatment of a medical condition
- Improvement or restoration of physiologic function

Reconstructive Procedures include surgery or other procedures which are related to an Injury, Sickness or Congenital Anomaly. The primary result of the procedure is not a changed or improved physical appearance.

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Procedures that correct an anatomical Congenital Anomaly without improving or restoring physiologic function are considered Cosmetic Procedures. The fact that you may suffer psychological consequences or socially avoidant behavior as a result of an Injury, Sickness or Congenital Anomaly does not classify surgery (or other procedures done to relieve such consequences or behavior) as a reconstructive procedure.

Sickness: Physical illness, disease or Pregnancy. The term Sickness includes Mental Illness or substance-related and addictive disorders, regardless of the cause or origin of the Mental Illness or substance-related and addictive disorder.

Applicable Codes

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this policy does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by federal, state, or contractual requirements and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

CPT Code	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

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Diagnosis Code	Description
Q67.6	Pectus excavatum
Q67.7	Pectus carinatum

References

Goretsky M, Kelly R, Croitoru D, et al. Chest wall anomalies: pectus excavatum and pectus carinatum. Adolescent Med Clinic. 2004 Oct; 15(3):455-71.

Jaroszewksi, D., Notrica, D., McMahon, L., Steidely, D. E., Deschamps, C. (2010). Current Management of Pectus Excavatum. Journal of the American Board of Family Medicine. March-April 2010. 23(2), 230-239.

Guideline History/Revision Information

Date	Summary of Changes
07/01/2022	**Application** *Mississippi, Nebraska, and North Carolina* • Updated language to indicate this Coverage Determination Guideline applies to the states of Mississippi, Nebraska, and North Carolina (retired state-specific policy versions) **Supporting Information** • Archived previous policy version CS094.P

Instructions for Use

This Coverage Determination Guideline provides assistance in interpreting UnitedHealthcare standard benefit plans. When deciding coverage, the federal, state or contractual requirements for benefit plan coverage must be referenced as the terms of the federal, state or contractual requirements for benefit plan coverage may differ from the standard benefit plan. In the event of a conflict, the federal, state or contractual requirements for benefit plan coverage govern. Before using this guideline, please

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check the federal, state or contractual requirements for benefit plan coverage. UnitedHealthcare reserves the right to modify its Policies and Guidelines as necessary. This Coverage Determination Guideline is provided for informational purposes. It does not constitute medical advice.

UnitedHealthcare may also use tools developed by third parties, such as the InterQual® criteria, to assist us in administering health benefits. The UnitedHealthcare Coverage Determination Guidelines are intended to be used in connection with the independent professional medical judgment of a qualified health care provider and do not constitute the practice of medicine or medical advice.

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