PECTUS DEFORMITY REPAIR

Guideline Number: CS094.H  Effective Date: November 1, 2017

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INSTRUCTIONS FOR USE

This Coverage Determination Guideline provides assistance in interpreting UnitedHealthcare benefit plans. When deciding coverage, the federal, state or contractual requirements for benefit plan coverage must be referenced. The terms of the federal, state or contractual requirements for benefit plan coverage may differ greatly from the standard benefit plan upon which this Coverage Determination Guideline is based. In the event of a conflict, the federal, state or contractual requirements for benefit plan coverage supersedes this Coverage Determination Guideline. All reviewers must first identify member eligibility, any federal or state regulatory requirements, and the contractual requirements for benefit plan coverage prior to use of this Coverage Determination Guideline. Other Policies and Coverage Determination Guidelines may apply. UnitedHealthcare reserves the right, in its sole discretion, 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 MCG™ Care Guidelines, to assist us in administering health benefits. The MCG™ Care 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.

BENEFIT CONSIDERATIONS

Before using this guideline, please check the federal, state or contractual requirements for benefit coverage.

COVERAGE RATIONALE

Indications for Coverage

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

- Pectus Excavatum:
  - Imaging studies confirm a Haller index of greater than 3.25; and
  - The Functional Impairment is defined in physician current office notes; and
    - For restrictive lung capacity, the total lung capacity is documented in the physician current 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.

- Pectus Carinatum:
  - It is extremely uncommon that Pectus Carinatum will cause a functional/physiological deficit. Pectus Carinatum is not a Congenital Anomaly; it is a developmental condition of the cartilage that generally occurs during an adolescents growth spurt.(Goretsky, 2004) Requests for coverage of repair of Pectus Carinatum will be reviewed by a UnitedHealthcare Medical Director on a case by case basis.
**Coverage Limitations and Exclusions**

Some states require benefit coverage for services that UnitedHealthcare considers Cosmetic Procedures, such as repair of external Congenital Anomalies in the absence of a Functional/Physical Impairment. Please refer to the member’s state contract.

- Cosmetic Procedures are excluded from coverage. 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 functional/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.
- Any procedure that does not meet the reconstructive criteria above in the *Indications for Coverage* section.

**DEFINITIONS**

Please 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/Physical Impairment:** A physical/functional 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.

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

**Reconstructive Procedures:** Reconstructive Procedures when the primary purpose of the procedure is either to treat a medical condition or to improve or restore physiologic function. Reconstructive Procedures include surgery or other procedures which are associated with an injury, sickness or congenital anomaly. The primary result of the procedure is not a changed or improved physical appearance. 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.

**Sickness:** Physical illness, disease or pregnancy. The term sickness does not include mental illness or substance abuse, regardless of the cause or origin of the mental illness or substance abuse.

**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 Coverage Determination Guidelines may apply.

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<th>CPT Code</th>
<th>Description</th>
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<td>21740</td>
<td>Reconstructive repair of pectus excavatum or carinatum; open</td>
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<tr>
<td>21742</td>
<td>Reconstructive repair of pectus excavatum or carinatum; minimally invasive approach (Nuss procedure), without thoracoscopy</td>
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21743

Reconstructive repair of pectus excavatum or carinatum; minimally invasive approach (Nuss procedure), with thoracoscopy

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<tr>
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<td>Pectus excavatum</td>
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<tr>
<td>Q67.7</td>
<td>Pectus carinatum</td>
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REFERENCES


GUIDELINE HISTORY/REVISION INFORMATION

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<tbody>
<tr>
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<td>Updated definitions:</td>
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<tr>
<td></td>
<td>o Added instruction to check the definitions within the member benefit plan document</td>
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<tr>
<td></td>
<td>o Modified definition of “Cosmetic Procedures”</td>
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<td></td>
<td>o Removed California plan specific definition of:</td>
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<tr>
<td></td>
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<td>▪ Cosmetic Procedures</td>
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<td>▪ Reconstructive Procedures</td>
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