Fetal Surgeries in Utero

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Effective Date	3/2008
Next Review Date	2/13/2024
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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 be 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.

Purpose:

This policy addresses Fetal Surgeries in Utero.

Description & Definitions:

Fetal Surgeries in Utero uses minimally invasive techniques or open repairs to operate on a fetus (unborn baby) in the uterus with a malformation, or specific birth defects.

Criteria:

Fetal surgery in utero is considered medically necessary for **1 or more of the following**:

- Ablation of anastomotic vessels in acardiac twins
- Treatment of congenital diaphragmatic hernia (CDH) using fetoscopic endoluminal tracheal occlusion (FETO) with **All** of the following:
  - Fetus has a poor congenital diaphragmatic hernia prognosis
  - Fetus has an Isolated left congenital diaphragmatic hernia
  - Fetus shows evidence of an observed/expected lung area to head circumference ratio (o/e LHR) <25 percent
  - Fetus has a normal microarray
  - Fetus is a singleton pregnancy
  - Mother does not have a short cervix
  - Fetus is between 27 + 0 to 29 + 6 weeks gestation
- Repair of myelomeningocele with **All** of the following:
  - Fetus is a singleton pregnancy
  - Fetus has a myelomeningocele with the upper boundary of the lesion located between T1 and S1 vertebrae
  - Fetus shows evidence of a hindbrain herniation
  - Fetus is between 19 + 0 to 25 + 9 weeks gestation
  - Fetus has a normal fetal karyotype
  - Fetus and mother have **All** of the following:
    - Fetus has no anomalies unrelated to the myelomeningocele

        - Fetus does not have fetal kyphosis
        - Pregnancy is negative for placental abruption
        - Mother does not have a short cervix (less than or equal to 15 mm)
        - Mother has not had a previous pre-term birth
        - Mother's body mass index (BMI) is less than 35
        - Mother has not had a prior hysterotomy in the upper uterine segment
        - Mother and fetus have no contraindications to surgery
- Resection of malformed pulmonary tissue, or placement of a thoraco-amniotic shunt as a treatment of **1 or more** of the following:
    - Congenital cystic adenomatoid malformation
    - Extralobar pulmonary sequestration
- Sacrococcygeal teratoma removal
- Twin-twin transfusion syndrome (TTTS) with **All** of the following:
    - Condition has been clinically and ultrasonographically confirmed as severe
    - Twins are less than 26 weeks gestation
    - Twins are monozygotic
- Vesico-amniotic shunting as a treatment of urinary tract obstruction

Fetal Surgeries in Utero is considered **not medically necessary** for any use other than those indicated in clinical criteria, to include but not limited to:

- Amniotic band syndrome
- Aqueductal stenosis (i.e., hydrocephalus)
- Cleft lip and/or cleft palate
- Congenital heart defects (e.g. mitral valve dysplasia)
- In utero fetal gene therapy
- In utero fetal stem cell transplantation

Coding:

Medically necessary with criteria:

Coding	Description
59076	Fetal shunt placement, including ultrasound guidance
59897	Unlisted fetal invasive procedure, including ultrasound guidance
S2400	Repair, congenital diaphragmatic hernia in the fetus using temporary tracheal occlusion, procedure performed in utero
S2401	Repair, urinary tract obstruction in the fetus, procedure performed in utero
S2402	Repair, congenital cystic adenomatoid malformation in the fetus, procedure performed in utero
S2403	Repair, extralobar pulmonary sequestration in the fetus, procedure performed in utero
S2404	Repair, myelomeningocele in the fetus, procedure performed in utero

S2405	Repair of sacrococcygeal teratoma in the fetus, procedure performed in utero
S2409	Repair congenital malformation of fetus, procedure performed in utero, not otherwise classified
S2411	Fetoscopic laser therapy for treatment of twin-to-twin transfusion

Considered Not Medically Necessary:

Coding	Description
	None

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

Document History:

Revised Dates:

- 2022: February
- 2021: February
- 2020: March
- 2019: October
- 2015: January
- 2013: December
- 2012: January
- 2011: February, July
- 2009: January

Reviewed Dates:

- 2024: February
- 2023: February
- 2018: December
- 2017: December
- 2016: January
- 2014: January
- 2010: January

Effective Date:

- March 2008

References:

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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Special Notes: *

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 be 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.*

Keywords:

In utero, fetal surgery, obstetrics 10, OB, Laser Cord Ablation, Twin Transfusion Syndrome, TTTS, myelomeningocele, acardiac twins, Sacrococcygeal teratoma, monozygotic twins, Fetoscopic endoluminal tracheal occlusion, FETO, congenital diaphragmatic hernia, CDH, Intrauterine fetal surgery, IUFS, fetoscopic surgery, In utero fetal surgery, fetoscopy, Keyhole fetal surgery, Open maternal–fetal surgery