Driscoll Health Plan
Medical Necessity Guideline

Medical Necessity Guideline: Umbilical Herniorrhaphy - Children < 5 Years of Age and Adults	**Creation Date:** 09/01/2007	**Review Date:** 05/31/2024	**Effective Date:** 06/11/2024

PURPOSE:

Define the indications and required documentation for umbilical hernia repair.

LINE OF BUSINESS: STAR, STAR Kids, and CHIP

DEFINITIONS:

Umbilical hernia - an outward bulging (protrusion) of the lining of the abdomen or part of the abdominal organ(s) through the area around the belly button [4].

GUIDELINE:

1. Repair of umbilical hernia is considered medically necessary, regardless of the member's age, if it is incarcerated or strangulated.
2. Children (under 18 years of age) - Repair of umbilical hernia is medically necessary for the following conditions:
    - The hernia has not closed by age 5 [1, 3].
    - The hernia is larger than 2 cm [3].

3. Adults (18 years of age and older) - Repair of umbilical hernia is medically necessary for the following conditions:
    - The hernia is progressively increasing in size [5]
    - The hernia defect is greater than 1 cm [6]
    - There is pain at the hernia site [1, 5, 6]
    - There is overlying skin ulceration or thinning [1, 6]
    - There is a rupture of the hernia [6]
    - There is uncontrollable ascites [1]

Required Documentation:
DHP requires the following documentation to assess medical necessity for this procedure:

- In a child, a current clinic note describing the course or progression of the hernia with age, if the size is greater than 2 cm, and reducibility.
- In an adult, a current clinic note describing the course or progression of the hernia, if the size of the hernia is greater than 1 cm, reducibility, if the overlying skin has thinning or ulceration, and if the underlying condition of the patient is resulting in persisting ascites.

4525 Ayers St.
Corpus Christi, Texas 78415
Telephone (877) 455-1053 Fax (866) 741-5650

BACKGROUND:

Children:
Umbilical hernias are common in infants. The soft swelling over the belly button often bulges when the baby sits up, cries, or strains. However, the bulge may be flat when the infant lies on the back and is quiet. Umbilical hernias are usually painless. Most hernias in children heal on their own [4].

Holcomb and Ashcraft's Pediatric Surgery [2] states the following prognostic statistics: "Several studies have demonstrated spontaneous resolution rates of >90% of hernias by one (1) year of age. One study found that 50% of hernias at age four to five (4–5) years will close by age 11. Another study suggests that hernias with fascial defects greater than 1.5 cm are unlikely to close by age six (6) years. In contrast, other series conclude that even large defects may spontaneously resolve without an operation. The primary danger associated with observation is the possibility of incarceration or strangulation. Studies have shown these complications to be rare, with an incidence of less than 1%. Patients with small fascial defects (0.5–1.5 cm in diameter) appear more prone to incarceration."

The book chapter by Chung in Sabiston Textbook of Surgery [3] states that "Enlarging umbilical hernia over time, in particular with a large skin proboscis more than 3 cm or a significantly large umbilical fascial defect (>2 cm), is unlikely to resolve spontaneously; therefore, surgical repair should be considered at an early age."

Discussion: Based on a review of authoritative textbooks and online resources [1, 2, 3, 4], it appears reasonable for the medical necessity cut-off age (other than incarceration or strangulation) to be 5 years for children or for the size cut-off to be a 2 cm fascial defect.

Adults:
Umbilical hernias are relatively common in adults. They are seen more in overweight people and women, especially after pregnancy. They tend to get bigger over time.

Smaller hernias with no symptoms can sometimes be watched. Surgery may pose more significant risks for patients with serious medical problems. Without surgery, there is a risk that some fat or part of the intestine will get stuck (incarcerated) in the hernia and become impossible to push back in. This is usually painful. If the blood supply to this area is cut off (strangulation), urgent surgery is needed. Nausea and vomiting may be experienced, and the bulging area may turn blue or darker.

To avoid this problem, surgeons often recommend repairing the umbilical hernia in adults. Surgery is also used for hernias that are getting larger or are painful. Surgery secures the weakened abdominal wall tissue (fascia) and closes any holes [5].

Benjamin et al., in Sabiston Textbook of Surgery [1], state that "Small asymptomatic umbilical hernias barely detectable on examination need not be repaired. Adults who have symptoms, a large hernia, incarceration, thinning of the overlying skin, or uncontrollable ascites should have a hernia repair."

Based on a review of authoritative textbooks and online resources [1, 5, 6] it appears that, in adults, other than for the smallest (<1 cm) of hernias, repair is indicated because they inevitably tend to grow larger and cause symptoms.

PROVIDER CLAIMS CODES:

ICD - 10	
K 42.0	Umbilical hernia with obstruction, without gangrene
K 42.1	Umbilical hernia with gangrene
K 42.9	Umbilical hernia without obstruction or gangrene

CPT	
49591	Repair of anterior abdominal hernia, further by initial or recurrent hernia, further by total defect size and by reducible or incarcerated/strangulated.
49592	Repair of anterior abdominal hernia, any approach, initial
49593	Repair of anterior abdominal hernia, any approach, initial
49594	Repair of anterior abdominal hernia, any approach, initial
49595	Repair of anterior abdominal hernia, any approach, initial
49596	Repair of anterior abdominal hernia, any approach, initial
49613	Repair of anterior abdominal hernia, any approach, recurrent
49614	Repair of anterior abdominal hernia, any approach, recurrent
49615	Repair of anterior abdominal hernia, any approach, recurrent
49616	Repair of anterior abdominal hernia, any approach, recurrent
49617	Repair of anterior abdominal hernia, any approach, recurrent
49618	Repair of anterior abdominal hernia, any approach, recurrent

REFERENCES:

1. Benjamin K. Poulose, Alfredo Maximiliano Carbonell and Michael J. Rosen in Sabiston Textbook of Surgery, 21st Edition, 2022, Elselvier Inc., Chapter 45, 1105-1133 https://www.clinicalkey.com/, accessed 5/19/2022
2. Joseph A. Sujka and George W. Holcomb, Holcomb and Ashcraft's Pediatric Surgery, 2020, Elselvier Inc., 49, 780-782, https://www.clinicalkey.com/, accessed 5/19/2020
3. Dai H. Chung. Sabiston Textbook of Surgery, Chapter 67, 1844-1882, 2020, Elselvier Inc., 49, 780-782, https://www.clinicalkey.com/, accessed 5/19/2022
4. Review Date 08/05/2023. Updated by: Neil K. Kaneshiro, MD, MHA, Clinical Professor of Pediatrics, University of Washington School of Medicine, Seattle, WA. Also reviewed by David Zieve, MD, MHA, Medical Director, Brenda Conaway, Editorial Director, and the A.D.A.M. Editorial team. https://medlineplus.gov/ency/article/000987.htm#top, retrieved 05/31/2024.
5. Review Date 01/24/2023. Updated by: Robert A. Cowles, MD, Associate Professor of Surgery (Pediatrics), Yale University School of Medicine, New Haven, CT. Review provided by VeriMed Healthcare Network. Also reviewed by David Zieve, MD, MHA, Medical Director, Brenda Conaway, Editorial Director, and the A.D.A.M. Editorial team. https://medlineplus.gov/ency/article/002935.htm, retrieved 05/31/2024.
6. Taylor, Dana M.D. FACS (Sep 05,2 2023), Umbilical Hernia Repair, In Vikram Kate, (Ed), Medscape, https://emedicine.medscape.com/article/2000990-overview#a2, accessed 05/31/2024.

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Medical Director	06/07/2022	05/23/2023	05/31/2024		
CMO	06/07/2022	06/06/2023	06/11/2024		
Medical Policy Workgroup	06/07/2022	06/06/2023	06/11/2024		
Utilization Management & Appeals	06/21/2022	06/20/2023	06/18/2024		
Provider Advisory Committee (PAC)	6/17/2022	06/09/2023	07/01/2024		
Clinical Management Committee	06/24/2022 & 08/23/2022	07/20/2023	07/24/2024		
Executive Quality Committee	06/28/2022	07/25/2023	07/30/2024		

Document Owner	*Organization*	*Department*
Dr. Fred McCurdy, Medical Director	Driscoll Health Plan	Utilization Management

Review/Revision Date	*Review/Revision Information, etc.*
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11/15/2018	Added new reference
11/30/2019	Changed to new format, added reference and process. No change in benefit guideline
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06/02/2020	Dr. Serrao comments addressed
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05/22/2021	Added update reference Sabiston Textbook of Surgery and replaced quote in guideline – verified current references – Dr. Akhtar
05/09/2022	Initial review by Dr. Thomas Morris
05/24/2022	Final editing and review by Dr. Fred McCurdy

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05/23/2023	Reviewed by Drs Thomas Morris and Fred McCurdy
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