





Medical Necessity Guideline:	Creation	Review	Effective
Specialty Hospital Beds (Pediatric, Safety,	Date:	Date:	Date:
Automated Rotation Beds)	06/22/2020	05/25/2024	06/11/2024

PURPOSE:

To provide a guideline for the determination of medical necessity for a specialty hospital bed (Pediatric, Safety, Automated Rotation) authorization for purchase.

DEFINITIONS:

Hospital Bed: A medical device with all of the following features: an articulating frame that allows adjustment of the head and foot of the bed, a headboard, a footboard, a mattress, and side rails of any type.

Pediatric Hospital Bed: Bed (manual, semi-electric, full electric) for members 20 years of age and younger that allows adjustment of the head and foot of the bed, with 360-degree side enclosures, and top of headboard, footboard, and side rails up to 24 inches above the spring. The bed includes a mattress tightly fitted into the frame and is typically requested with integrated side padding on the four interior walls/rails.

Pediatric Crib: Pediatric hospital bed with side rails greater than 24 inches above the mattress.

Fixed height hospital bed: The hospital bed allows head and foot elevation to be performed manually, but the floor to mattress height remains the same.

Variable height hospital bed: Hospital bed that allows for the mattress to floor height to be changed manual or electric) to permit transfers in and out of bed.

Semi-electric hospital bed: Hospital bed that allows electric adjustment of the head and foot position, with manual adjustment of floor to mattress height to promote self-positioning and comfort.

Fully electric hospital bed: Hospital bed that allows for electric control of the head, foot elevation, and mattress to flow height to promote functional independence and self-care.

Safety Bed: Full enclosure surrounding a mattress inclusive of a canopy, designed to prevent the occupant from leaving the space/bed unsupervised. The safety bed may have the head of the bed elevation.

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Automated Lateral Rotation Bed: Electric hospital bed, programmed for continuous repositioning along the longitudinal body axis for pressure redistribution and postural drainage of the lung fields.

GUIDELINE: (1)

1. General

Hospital beds may be considered for prior authorization for clients who cannot safely utilize a regular bed.

Bed rails and frames that have been purchased are anticipated to last a minimum of 5 years.

2. Pediatric Hospital Beds and Safety Enclosure Criteria:

Pediatric hospital beds and pediatric cribs may be considered for prior authorization when the documentation clearly shows the requested bed or crib will correct or ameliorate the client's condition. The documentation must meet at least one of the following criteria:

- The client's medical condition requires positioning the body in ways that are not feasible in an ordinary bed, including but not limited to positioning for pain.
- The head of the bed must be elevated 30 or more degrees most of the time due to, but not limited to, congestive heart failure, chronic pulmonary disease, or problems with aspiration; and alternative measures, such as wedges or pillows, have been attempted but have failed to manage the client's medical condition.
- A semi-electric or fully electric hospital bed may be considered for prior authorization when the submitted documentation shows that the client has a medical condition that requires frequent changes in body position or might require an immediate change in body position to avert a life-threatening situation.
- The safety enclosure frame, canopy, or bubble top may be considered for prior authorization with documentation that the protective canopy top or bubble will provide for the client's safety. Prior authorization will not be considered when it will be used as a restraint or for the convenience of family or caregivers.

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3. Required documentation:

The following documentation must be submitted for clients who are birth through 20 years of age:

- The diagnosis, medical needs, treatments, developmental level, and the child's functional skills. A diagnosis alone is insufficient information to consider prior authorization of the requested equipment.
- The age, length, and weight of the child.
- Description of any other devices that have been used, the length of time used, and why they were ineffective.
- How the requested equipment will correct or ameliorate the client's condition beyond that of a standard child's crib, regular bed, or standard hospital bed/crib.
- The manufacturer's name and the manufacturer's suggested retail price (MSRP).
- Applicable CPT codes.
- Serial number and date of purchase of a previous bed.

4. Concerns Specific to the Pediatric Population

- Entrapment with potential for injury entrapment between mattress and rail, entrapment between half rails, or entrapment between rail and frame.
- Injury due to uncontrolled movements of the extremities and/or head due to seizures, convulsions, spasticity, dystonia, or other neuromotor cause; due to behavioral issue.
- Lack of safety awareness and impaired cognition impairing judgment and ability to anticipate consequences of unsupervised activities.
- Impaired communication of discomfort, pain, anxiety/fear, and illness.
- Evolving changes to body size (height, weight) and functional skills (gross motor, fine motor, communication, self-care).

5. Device-Specific Information:

- a. Pediatric Hospital / Sleep Safe Beds These types of beds may be appropriate for the following members:
 - Bed-bound patient
 - Have uncontrolled body movements (seizures, spasticity, lack of postural control)
 - Aspiration risk with gastrostomy status
 - At the risk of pressure wounds due to immobility or difficulty positioning for contractures
 - At high fracture/injury risk (such as arthrogryposis, osteogenesis imperfecta)
 - Disease processes with significant functional regression as prognosis.
 - Not appropriate for the member who is independent in mobility (ambulation or wheelchair including transfers).

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- b. Safety Beds These types of beds may be appropriate for members with:
 - Poor safety awareness and independent self-mobility (autism or autism spectrum disorder)
 - Moderate to severe intellectual disability and independently mobile
 - Seizure disorder with a high risk of falling out of bed, no pulmonary complications/risks, and normal mobility skills.
- c. Automated Lateral Rotation Beds Research on this bed is entirely short-term use in the hospital setting and primarily with ventilated critically ill patients. Using an automated lateral rotation bed in the home setting is not recommended ⁷. Medical necessity will be determined on a case-by-case basis and will take into consideration:
 - Lack of healing, complication, and persistence of stage III or IV decubitus ulcers
 - Current nursing management
 - Current bed and whether Group 3 support surfaces have been tried and failed
 - Special circumstances that this type of bed might address:

Only a Neurologist or appropriate Rehabilitation Specialist can request an automated lateral rotating bed, and a Letter of Medical Necessity must accompany all requests.

BACKGROUND:

Bed frame and function (hi/lo, articulation) are being considered in this policy, with secondary consideration to the mattress type. Texas Medicaid Provider Procedures Manual categorizes mattresses or support surfaces as Group 1 – 3. Lower-level surfaces must have documented failure to prevent pressure areas from progressing to the next higher-level group. Bed frames vary in level of accessibility, restraint, medical support through positioning, and method of operation. Research supports frequent repositioning, hygiene, moisture reduction, and different mattresses/support surfaces to prevent pressure points. ^(2, 3) Research on automated lateral rotation beds has been limited to short-term use in the hospital setting and primarily with ventilator-assisted patients. Research has shown concern for developing heel and skull pressure wounds in patients using these types of beds unless repositioned by a nurse. Core research on bed surfaces, including the kinetic/rotational beds, was performed around 2006 and continues to be referenced, confirmed, or affirmed in more recent studies and reviews. ^(2, 3, 4, 5) However, there is a lack of research regarding the in-home use of the automated lateral rotation bed for chronic illness management. Research is not available to make recommendations on the bed frame, other than the head of the bed elevation to prevent aspiration on reflux or secretions.

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The aim of a systematic review by McInnes et al. ⁽³⁾ was to determine whether different support surfaces such as specially designed beds, mattresses, or cushions can help treat pressure ulcers. Researchers from Cochrane collected and analyzed all relevant studies (randomized controlled trials) to answer this question and found 19 relevant studies. Based on the current evidence, it is unclear whether any particular type of low- or high-tech support surface is more effective at healing pressure ulcers than standard support surfaces.

The authors of systemic reviews completed in 2006 and updated in 2018 ^(4, 5) found that while kinetic bed therapy has been purported to reduce the incidence of nosocomial pneumonia in mechanically ventilated patients, the overall body of evidence is insufficient to support this conclusion. There appears to be a reduction in the incidence of nosocomial pneumonia but no effect on mortality, duration of mechanical ventilation, intensive care, or hospital length of stay. There are no definitive recommendations regarding the use of this therapy due to the lack of consistent benefit and the poor methodological quality of the trials included in this analysis.

Immobility is associated with complications involving many body systems. A definitive review and meta-analysis, oft-cited, appearing in the American Journal of Critical Care ⁽⁷⁾ examined the effect of rotational therapy (use of therapeutic surfaces that turn on their longitudinal axes) on the prevention and/or treatment of respiratory complications in critically ill patients. Additional recent evidence-based articles ^(5,6,8) evaluating prophylaxis and/or treatment were reviewed that affirmed or supported the findings of this study. Various types of beds were evaluated, but few details on the rotational parameters were reported. The usual control was the manual turning of patients by nurses every 2 hours. Researchers have examined the effects of rotational therapy on mucus transport, intrapulmonary shunt, hemodynamic effects, urine output, and intracranial pressure. Little convincing evidence is available. Meta-analysis suggests that rotational therapy using the most effective rotation parameters (e.g., degree, pause time, and amount of time per day decreases the incidence of pneumonia, but has no effect on the duration of mechanical ventilation, number of days in intensive care, or hospital mortality. Rotational therapy may be useful for preventing and treating respiratory complications in selected hospitalized critically ill patients receiving mechanical ventilation during the acute period.

Driscoll Health Plan has approved pediatric hospital beds due to the improved safety components (tight-fitting gel foam mattress, surround padding, solid rails eliminating entrapment) with the idea that the frame should serve the member for ten years to a lifetime. Driscoll Health Plan has approved safety beds as the least restrictive environment for the member with impaired safety awareness, insomnia, and independent locomotion, to prevent injury to self through unsupervised exploration (poisoning, lacerations, and escape from the home).

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PROVIDER CLAIMS CODES:

CPT Code	Description
A9900	Miscellaneous addition to other DME
E0250	Fixed height hospital bed
E0255	Variable height hospital bed
E0260	Semi-electric hospital bed
E0316	Safety enclosure frame/canopy
E0328	Manual pediatric hospital bed
E0329	Semi-electric pediatric hospital bed
E0329	Fully electric pediatric hospital bed
E1399	Miscellaneous medical equipment

REFERENCES:

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- 8) Goldhill, David & Imhoff, Michael & Mclean, Barbara & Waldmann, Carl. (2007). Rotational Bed Therapy to Prevent and Treat Respiratory Complications: A Review and Meta-Analysis. American journal of critical care: An official publication, *American*

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Association of Critical-Care Nurses. 16. 50-61; quiz 62. 10.4037/ajcc2007.16.1.50.; Accessed 05/09/2022.

DOCUMENT HISTORY:

DHP Committee that Approved		Review Appi	oval Date (la	ast 5 years)	
Medical Director	05/30/2023	05/24/2024			
СМО	06/06/2023	06/11/2024			
Medical Policy Workgroup	06/06/2023	06/11/2024			
Utilization Management & Appeals	06/20/2023	06/18/2024			
Provider Advisory Committee (PAC)	06/09/2023	07/01/2024			
Clinical Management Committee	07/20/2023	07/24/2024			
Executive Quality Committee	07/25/2023	07/30/2024			

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

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Review/Revision Date	Review/Revision Information, etc.
05/17/2021	Updated, referenced, by Fred McCurdy, Michele Hays. Editorial review by William Brendel
05/09/2022	Updated including references by Fred McCurdy, MD
05/23/2022	Review and final editing by Dr. Fred McCurdy
05/30/2023	Review by Dr. Fred McCurdy, no changes
05/24/2024	Reviewed and revised by Michele Hays, PT and Dr. Fred McCurdy

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