Anthem

Clinical UM Guideline

Subject: Pressure Reducing Support Surfaces - Groups 1, 2 & 3
Guideline #: CG-DME-16
Status: Reviewed
Publish Date: 09/27/2023
Last Review Date: 08/10/2023

Description

This document addresses the use of pressure reducing support surfaces. A pressure reducing support surface is designed to prevent or promote the healing of certain types of pressure ulcers by reducing or eliminating tissue interface pressure. Most of these devices reduce interface pressure by conforming to the contours of the body so that pressure is distributed over a larger surface area rather than concentrated on a more restricted site.

Clinical Indications

Group 1 Support Surfaces (as defined in the Definition Section)

Medically Necessary:

Use of a group 1 mattress overlay or mattress is considered **medically necessary** if the individual meets:

A. Criterion 1, **or**
B. Criterion 2 **or** 3 and at least one of criteria 4-7
    1. Completely immobile – that is, individual cannot make changes in body position without assistance
    2. Limited mobility – that is, individual cannot independently make changes in body position significant enough to alleviate pressure
    3. Any stage pressure ulcer on the trunk or pelvis
    4. Impaired nutritional status
    5. Fecal or urinary incontinence
    6. Altered sensory perception
    7. Compromised circulatory status

Group 2 Support Surfaces (as defined in the Definition Section)

Medically Necessary:

A. Criteria 1 and 2 and 3, **or**
B. Criterion 4, **or**
C. Criteria 5 and 6
    1. Multiple stage II pressure ulcers located on the trunk or pelvis
    2. Individual has been on a comprehensive ulcer treatment program (*see below) for at least the past 30 days that has included the use of an appropriate group 1 support surface
    3. The ulcers have worsened or remained the same over the past month
    4. Large or multiple stage III or IV pressure ulcer(s) on the trunk or pelvis
    5. Recent myocutaneous flap or skin graft for a pressure ulcer on the trunk or pelvis (surgery within the past 60 days)
    6. The individual has been on a group 2 or 3 support surface immediately prior to a recent discharge from a hospital or nursing facility (discharge within the past 30 days)

*The comprehensive ulcer treatment program described above should generally include:

- Education of the individual and caregiver on the prevention and/or management of pressure ulcers
- Regular assessment by a nurse, physician or other licensed healthcare practitioner (usually at least weekly for an individual with a stage III or IV ulcer)
- Appropriate turning and positioning
- Appropriate wound care (for a stage II, III or IV ulcer)
- Appropriate management of moisture/incontinence
- Nutritional assessment and intervention consistent with the overall plan of care

Continued use of a group 2 support surface is considered **medically necessary** until the ulcer is healed or, if healing does not continue, there is documentation in the medical record to show that:

A. Other aspects of the care plan are being modified to promote healing; **or**
B. The use of the group 2 support surface is medically necessary for wound management.

When a group 2 pressure reducing support surface is prescribed following a myocutaneous flap or skin graft, continued use is considered **medically necessary** for up to 60 days from the date of surgery.

Group 3 Support Surfaces (as defined in the Definition Section)

Medically Necessary:

Use of a group 3 support surface (air-fluidized bed) is considered **medically necessary** if the individual meets **all** of the following:

1. The individual has a stage III (full thickness tissue loss) or stage IV (deep tissue destruction) pressure sore or is status post muscle/skin flap repair of a stage III or IV pressure sore. An air-fluidized bed is typically needed only 6-12 weeks status-post surgery; **and**
2. The individual is bedridden or chair bound as a result of severely limited mobility; **and**
3. In the absence of an air-fluidized bed, the individual would require institutionalization; **and**
4. The air-fluidized bed is ordered, in writing, by the individual's attending physician based upon a comprehensive assessment and evaluation of the individual after completion of a course of conservative treatment designed to optimize conditions that

promote wound healing; **and**

5. The course of conservative treatment (*see below) must have been at least one month in duration without progression toward wound healing. This month of prerequisite conservative treatment may include some period in an institution as long as there is documentation available to verify that the necessary conservative treatment was rendered; **and**
6. A trained adult caregiver is available to assist the individual with activities of daily living, fluid balance, dry skin care, repositioning, recognition and management of altered mental status, dietary needs, prescribed treatments, and management and support of the air-fluidized bed system and its problems such as leakage; **and**
7. A physician directs the home treatment regimen and re-evaluates and re-certifies the need for the air-fluidized bed every three months; **and**
8. All other alternative equipment has been considered and ruled out.

Conservative treatment **must include:*

- Frequent repositioning of the individual with particular attention to relief of pressure over bony prominences (usually every two hours); **and**
- Use of a group 2 support surface to reduce pressure and shear forces on healing ulcers and to prevent new ulcer formation; **and**
- Necessary treatment to resolve any wound infection; **and**
- Optimization of nutrition status to promote wound healing; **and**
- Debridement by any means, including wet-to-dry gauze dressings, to remove devitalized tissue from the wound bed; **and**
- Maintenance of a clean, moist bed of granulation tissue with appropriate moist dressings protected by an occlusive covering while the wound heals.

Wet-to-dry dressings, when used for debridement, do not require an occlusive dressing. Use of wet-to-dry dressings for wound debridement, begun during the period of conservative treatment and which continue beyond 30 days, does not in and of itself affect the medical necessity of an air-fluidized bed. Should additional debridement again become necessary while the individual is using an air-fluidized bed (after the first 30-day course of conservative treatment) that will not in and of itself affect the medical necessity of an air-fluidized bed.

In addition, conservative treatment should generally include:

- Education of the individual and caregiver on the prevention and management of pressure ulcers
- Assessment by a physician, nurse or other licensed healthcare practitioner at least weekly
- Appropriate management of moisture or incontinence

Continued use of an air-fluidized bed is considered **medically necessary** until the ulcer is healed or, if healing does not continue, there is documentation in the medical record to show that:

A. other aspects of the care plan are being modified to promote healing **or**
B. the use of the air-fluidized bed is medically necessary for wound management.

Not Medically Necessary:

Use of a group 1 or group 2 overlay, mattress, or bed is considered **not medically necessary** when the criteria above are not met.

Use of a group 3 support surface (air-fluidized bed) is considered **not medically necessary** under **any** of the following circumstances:

A. The individual has coexisting pulmonary disease (the lack of firm back support makes coughing ineffective and dry air inhalation thickens pulmonary secretions)
B. The individual requires treatment with wet soaks or moist wound dressings that are not protected with an impervious covering such as plastic wrap or other occlusive material
C. The caregiver is unwilling or unable to provide the type of care required by the individual on an air-fluidized bed
D. Structural support is inadequate to support the weight of the air-fluidized bed system (it generally weighs 1600 pounds or more)
E. Electrical system is insufficient for the anticipated increase in energy consumption
F. Other known contraindications exist

Use of a support surface (group 1 or group 2) that does not meet the characteristics specified in the Definition section of this document is considered **not medically necessary.**

Coding

The following codes for treatments and procedures applicable to this document are included below for informational purposes. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement policy. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

When services may be Medically Necessary when criteria are met:

HCPCS	
	Group 1 support surfaces:
A4640	Replacement pad for use with medically necessary alternating pressure pad owned by patient
E0181	Powered pressure reducing mattress overlay/pad, alternating, with pump, includes heavy duty
E0182	Pump for alternating pressure pad, for replacement only
E0183	Powered pressure reducing underlay/pad, alternating, with pump, includes heavy duty
E0184	Dry pressure mattress
E0185	Gel or gel-like pressure pad for mattress, standard mattress length and width
E0186	Air pressure mattress
E0187	Water pressure mattress
E0188	Synthetic sheepskin pad
E0189	Lambswool sheepskin pad, any size
E0196	Gel pressure mattress
E0197	Air pressure pad for mattress, standard mattress length and width
E0198	Water pressure pad for mattress, standard mattress length and width

E0199	Dry pressure pad for mattress, standard mattress length and width
E0272	Mattress, foam rubber
	Group 2 support surfaces:
E0193	Powered air flotation bed (low air loss therapy)
E0277	Powered pressure-reducing air mattress
E0371	Non powered advanced pressure reducing overlay for mattress, standard mattress length and width
E0372	Powered air overlay for mattress, standard mattress length and width
E0373	Non powered advanced pressure reducing mattress
	Group 3 support surfaces:
E0194	Air fluidized bed

ICD-10 Diagnosis

All diagnoses

When services are Not Medically Necessary:
For the procedure codes listed above when criteria are not met, or for situations designated in the Clinical Indications section as not medically necessary.

Discussion/General Information

Pressure reducing support surfaces are designed to prevent or promote the healing of pressure ulcers by reducing or eliminating tissue interface pressure. Most of these devices reduce interface pressure by conforming to the contours of the body so that pressure is distributed over a larger surface area rather than concentrated on a more restricted site. Pressure reducing support surfaces that contain multiple components are categorized according to the clinically predominant component, which is usually the topmost layer of a multi-layer product.

A group 1 pressure reducing support surface includes pressure pads for mattresses, non-powered pressure reducing mattresses and powered pressure reducing mattress overlay systems. A group 2 pressure reducing support surface includes powered pressure reducing mattresses, semi-electric hospital beds with powered pressure reducing mattresses, powered pressure reducing mattress overlays, advanced non-powered pressure reducing mattresses and advanced non-powered pressure reducing mattress overlays. A Group 3 pressure reducing support surface (for example, air-fluidized bed) is a device employing the circulation of warm filtered air through small, silicone coated ceramic beads creating the characteristics of fluid. When the individual is placed in the bed, his or her body weight is evenly distributed over a large surface area, which creates the sensation of “floating.”

For all types of support surfaces, the support surface provided should be one in which the individual does not “bottom out.” Bottoming out is the finding that an outstretched hand, placed palm up between the undersurface of the overlay or mattress and the individual’s bony prominence (coccyx or lateral trochanter), can readily palpate the bony prominence. This bottoming out criterion should be tested with the individual in the supine position with their head flat, in the supine position with their head slightly elevated (no more than 30 degrees), and in the side lying position.

In a meta-analysis by Nicosia and colleagues (2007) the authors concluded data support the use of foam mattresses, air mattresses or overlays versus a standard hospital mattress to reduce the risk of developing heel pressure ulcers. However, the authors noted the results are limited based on the small number and poor quality of controlled clinical trial data included in the meta-analysis.

One Cochrane review (McInnes, 2015) concluded that individuals at high risk for developing pressure ulcers should use higher specification foam mattresses (mattresses which contour to the body) rather than standard hospital foam mattresses. Another Cochrane review (McInnes, 2018) looked at 19 trials of support surfaces for treatment of pressure ulcers. The authors concluded that “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” and further studies are required to determine which support surfaces are most effective in the treatment of pressure ulcers.

A 2013 literature review by White-Chu and colleagues looked at 14 articles which addressed the prevention of pressure ulcers in individuals with advanced illness. These articles included one systematic review, one randomized control trial, three prospective trials, two retrospective cohort trials, one cost-effective analysis, one quality improvement study, one comparative descriptive design trial, and four review articles. The systematic review evaluated the use of any support surfaces for the prevention of pressure ulcers and concluded that a higher specification mattress is more likely to prevent pressure ulcers compared to standard hospital mattresses. The randomized controlled trial evaluated frequent positioning as a method to prevent pressure ulcers. This trial did not reach its participant enrollment target. Three prospective trials evaluated different modalities (repositioning, support surfaces, and skin integrity maintenance) for the prevention of pressure ulcers. One of the prospective trials showed the incidence of pressure ulcers was 0% for individuals on a low air loss mattress and 18% for individuals on an integrated power pressure redistribution bed. However, the integrated power pressure redistribution beds were 7 years old and the low air loss beds were brand new. The two retrospective cohort trials evaluated repositioning techniques and risk assessment. One of the retrospective trials found that repositioning every 2 hours did not decrease the incidence of pressure ulcers. The quality improvement study focused on skin integrity and incontinence issues using a barrier product for incontinence, using aqueous cream instead of soap and dermal pads over previous pressure ulcer sites. This study reported a reduction in pressure ulcer prevention from 14% to 1.28% in 6 months. However, this study did not analyze statistical significance. The comparative description design trial looked at 20 participants and the impact of repositioning on blood flow. They reported that blood flow to bony prominences decreased when an individual was in the 30° lateral position as opposed to the supine position. There is limited published literature on the prevention of pressure ulcers in advanced illness and more research is needed to explain how pressure ulcers form in those individuals with advanced illness.

A 2018 systematic review by Rae and colleagues evaluated the literature regarding the different types of pressure relief and their comparative effectiveness regarding pressure ulcer prevention and treatment. There were 24 randomized controlled trials and 9 systematic reviews included in the analysis. Of the 9 systematic reviews, 5 reported enough heterogeneity to allow for a meta-analysis. The included reviews showed sufficient affirmation that pressure mattresses were more effective than standard mattresses. However, the literature was inconclusive comparing the different types of pressure mattresses. The authors noted the results should be considered with caution as the majority of the studies in the systematic reviews were identified as poor quality and were under-powered. Methodological concerns were also noted in regard to poor reporting of surface description. Among the randomized controlled trials, there were confounding factors including variable frequency of repositioning between groups and the use of different mattresses. A difficulty with researching mattresses is the visible difference between the mattress types which does not allow blinding of the participants and treating clinicians. Focus on specifically comparing brands is also difficult due to the rapid changes in technology.

A 2018 prospective, non-comparative, observational study by Meaume and colleagues assessed the use of a specific alternating-pressure mattress overlay (APMO) and whether participants who were at risk of developing a pressure ulcer did so after using the APMO. There were 83 participants included in the study. None of the participants had pressure ulcer at baseline and all were considered at medium to high risk of pressure ulcer using the Braden scale. Participants were included if they sat in a chair during the day for at least 4 hours and were lying in bed between 15–20 hours per day. Participants were excluded if they had a life expectancy of less than 6 months or had signs of malnutrition. The primary endpoint was the percentage of participants who developed a pressure ulcer of at least a category II (according to the National Pressure Ulcer Advisory Panel classification). Secondary endpoints included subject comfort and satisfaction with the APMO and safety which was analyzed by the description of adverse events. With a follow-up period of 35 days, 1 participant developed a pressure ulcer of at least a category II. This was a sacral pressure ulcer (1.5 cm in diameter) that occurred on day 21. The participant had a baseline Braden score of 12/23 and lay on the bed for 19 to 20 hours per day. Participants reported a high level of satisfaction concerning the comfort of the APMO. There were three adverse events that were considered related to the APMO; 1 participant with worsening general state of health with development of a sacral pressure ulcer (stage II) leading to drop-out at day 27, 1 participant with lower back pain who dropped out at day 4, and 1 participant with back pain caused by the APMO on a dorsal scar which led to drop out on day 1. There are several limitations to this study including the absence of a control group, what could be considered a short duration time, and potential bias with the exclusion of those with a life expectancy of less than 6 months and lack of signs of malnutrition as this population could be at particular risk of pressure ulcer. With the low incidence of pressure ulcer development, recommendations could be made for use of APMO for those who are bed confined for 15-20 hours per day.

Another study by Meaume and colleagues in 2021 (similar to the above 2018 study) reported on the benefit of using a specific alternating-pressure mattress overlay in those at medium to high risk of developing pressure ulcers. In this prospective, multicentre, observational, longitudinal study, there were 83 participants included who had a Braden scale score of 12.8±1.6 and were lying down on average of 16.6 hours per day. None of the participants had a pressure ulcer at the beginning of the study however, 18 participants had a history of pressure ulcers. In this study, participants were lying between 15-20 hours per day on an alternating-pressure mattress overlay. The study duration was 35 days and skin condition was monitored daily for appearance of a pressure ulcer. For the primary endpoint, none of the study participants had a sacral, spine, heel or trochanteric pressure ulcer after 35 days. The secondary endpoints included category I pressure ulcer incidence or pressure ulcer of any category in any area other than the sacrum, spine, heels or trochanteric areas. Secondary endpoints also included participant satisfaction with the comfort of the mattress, acceptance of the sound level of the mattress, and safety (documented as adverse events and technical issues). On day 9, one participant developed a category I sacral pressure ulcer. There were three participants with reported adverse events; two of which were not related to the mattress and there was one technical incident reported (difficulty moving the participant to a shower stretcher due to mattress cover hanging over the mattress). While the study has limitations including the non-comparative nature and short duration of 35 days, there were no mattress-related adverse events and no participants in the medium or high-risk category developed a sacral, spine, heel or trochanteric pressure ulcer.

Marvaki and colleagues (2020) reported on a comparison study between two types of support surfaces for pressure ulcer prevention in an intensive care unit (ICU). There were 70 participants total, 35 who were placed on a support surface which used alternating pressure and active constant low pressure-continuous airflow versus 35 participants who were placed on a standard hospital therapeutic memory foam mattress. Participants also received supportive measures such as change in position every two hours, daily linen change, skin care once a day, and exudate management. Participants were assessed at enrollment and every three days afterward. Primary endpoint was the appearance of pressure ulcers after enrollment as well as the time to appearance of pressure ulcers. During the 21 days of follow-up, pressure ulcer appearance was found in 15/35 participants in the alternating pressure mattress group and 18/35 participants in the standard foam mattress group. The authors also reported on additional findings including the number of pressure ulcers at the first appearance which were 1.13 in the alternating pressure mattress group and 1.22 in the standard foam mattress group. The percentage of participants who had pressure ulcers at stage 2 or higher was 23.8% on the third day after admission and 61.1% on the sixth day with no difference between the two groups of mattresses. The proportion of pressure ulcers healed on the alternating pressure mattress group was 7.7% compared to 66.7% on the standard foam mattress. In conclusion, the authors noted use of the alternating pressure mattress in this study is recommended to prevent the development of pressure ulcers, while use of the standard foam mattress should be used in those who already developed pressure ulcers to promote the healing process.

In 2021 a Cochrane review by Shi and colleagues completed an overview of six other Cochrane reviews which assessed different types of beds, overlays, and mattresses in reducing the incidence of pressure ulcers and increasing healing. There were four reviews which focused on the use of beds, overlays, and mattresses for the prevention of pressure ulcers. The other two reviews focused on the use of beds, overlays, and mattresses for treating pressure ulcers. The authors noted reactive air surfaces may reduce the risk of pressure ulcers and may increase complete healing of ulcers.

Studies are challenging in this area, as technology varies between the support surfaces, care facilities have different programs for turning, re-positioning, and care of participants, and there are multiple factors (for example, incontinence, independence of movement in bed, general health state, co-morbid conditions, etc.) which can contribute to the risk of developing pressure ulcers.

Definitions

Pressure Injury Ulcer (National Pressure Ulcer Advisory Panel, 2016)
A pressure injury is localized damage to the skin and underlying tissue usually over a bony prominence or related to a medical or other device. The injury can present as intact skin or an open ulcer and may be painful. The injury occurs as a result of intense and/or prolonged pressure in combination with shear. The tolerance of soft tissue for pressure and shear may also be affected by microclimate, nutrition, perfusion, co-morbidities and condition of the soft tissue.

Pressure Injury Stages

Stage 1 Pressure Injury: Non-blanchable erythema of intact skin
Intact skin with a localized area of non-blanchable erythema, which may appear differently in darkly pigmented skin. Presence of blanchable erythema or changes in sensation, temperature, or firmness may precede visual changes. Color changes do not include purple or maroon discoloration; these may indicate deep tissue pressure injury.

Stage 2 Pressure Injury: Partial-thickness skin loss with exposed dermis
Partial-thickness skin loss with exposed dermis. The wound bed is viable, pink or red, moist, and may also present as an intact or ruptured serum-filled blister. Adipose (fat) is not visible and deeper tissues are not visible. Granulation tissue, slough and eschar are not present. These injuries commonly result from adverse microclimate and shear in the skin over the pelvis and shear in the heel. This stage should not be used to describe moisture associated skin damage (MASD) including incontinence associated dermatitis (IAD), intertriginous dermatitis (ITD), medical adhesive related skin injury (MARSI), or traumatic wounds (skin tears, burns, abrasions).

Stage 3 Pressure Injury: Full-thickness skin loss
Full-thickness loss of skin, in which adipose (fat) is visible in the ulcer and granulation tissue and epibole (rolled wound edges) are often present. Slough and/or eschar may be visible. The depth of tissue damage varies by anatomical location; areas of significant adiposity can develop wounds. Undermining and tunneling may occur. Fascia, muscle, tendon, ligament, cartilage and/or bone are not exposed. If slough or eschar obscures the extent of tissue loss this is an Unstageable Pressure Injury.

Stage 4 Pressure Injury: Full-thickness skin and tissue loss
Full-thickness skin and tissue loss with exposed or directly palpable fascia, muscle, tendon, ligament, cartilage or bone in the ulcer. Slough and/or eschar may be visible. Epibole (rolled edges), undermining and/or tunneling often occur. Depth varies by anatomical location. If slough or eschar obscures the extent of tissue loss this is an Unstageable Pressure Injury.

Unstageable Pressure Injury: Obscured full-thickness skin and tissue loss
Full-thickness skin and tissue loss in which the extent of tissue damage within the ulcer cannot be confirmed because it is obscured by slough or eschar. If slough or eschar is removed, a Stage 3 or Stage 4 pressure injury will be revealed. Stable eschar (i.e. dry, adherent, intact without erythema or fluctuance) on the heel or ischemic limb should not be softened or removed.

Deep Tissue Pressure Injury: Persistent non-blanchable deep red, maroon or purple discoloration
Intact or non-intact skin with localized area of persistent non-blanchable deep red, maroon, purple discoloration or epidermal separation revealing a dark wound bed or blood filled blister. Pain and temperature change often precede skin color changes. Discoloration may appear differently in darkly pigmented skin. This injury results from intense and/or prolonged pressure and shear forces at the bone-muscle interface. The wound may evolve rapidly to reveal the actual extent of tissue injury, or may resolve without tissue loss. If necrotic tissue, subcutaneous tissue, granulation tissue, fascia, muscle or other underlying structures are visible, this indicates a full thickness pressure injury (Unstageable, Stage 3 or Stage 4). Do not use DTPI to describe vascular, traumatic, neuropathic, or dermatologic conditions.

Support Surface Descriptions/Definitions

Group 1

Group 1 pressure reducing support surfaces include: pressure pads for mattresses, non-powered pressure reducing mattresses and powered pressure reducing mattress overlay systems.

Pressure pads for mattresses describe non-powered pressure reducing mattress overlays. These devices are designed to be placed on top of a standard hospital or home mattress. This includes:

- A gel or gel-like mattress overlay, which is characterized by a gel or gel-like layer with a height of 2 inches or greater
- An air mattress overlay, which is characterized by interconnected air cells having a cell height of 3 inches or greater that are inflated with an air pump
- A water mattress overlay, which is characterized by a filled height of 3 inches or greater
- A foam mattress overlay, which is characterized by all of the following:
    - Base thickness of 2” or greater and peak height of 3” or greater if it is a convoluted overlay (e.g., egg crate) or an overall height of at least 3 inches if it is a non-convoluted overlay
    - Foam with a density and other qualities that provide adequate pressure reduction
    - Durable, waterproof cover

Non-powered pressure reducing mattresses include:

- A foam mattress, which is characterized by all of the following:
    - Foam height of 5 inches or greater
    - Foam with a density and other qualities that provide adequate pressure reduction
    - Durable, waterproof cover
    - Can be placed directly on a hospital bed frame
- An air, water or gel mattress, which is characterized by all of the following:
    - Height of 5 inches or greater of the air, water or gel layer
    - Durable, waterproof cover
    - Can be placed directly on a hospital bed frame

Powered pressure reducing mattress overlay systems (alternating pressure or low air loss) are characterized by all of the following:

- An air pump or blower that provides either sequential inflation and deflation of air cells or a low interface pressure throughout the overlay
- Inflated cell height of the air cells through which air is being circulated is 2.5 inches or greater
- Height of the air chambers, proximity of the air chambers to one another, frequency of air cycling (for alternating pressure overlays), and air pressure provide adequate member lift, reduce pressure, and prevent bottoming out

Group 2

Group 2 pressure reducing support surfaces include: powered pressure reducing mattresses, semi-electric hospital beds with powered pressure reducing mattresses, powered pressure reducing mattress overlays, advanced non-powered pressure reducing mattresses and advanced non-powered pressure reducing mattress overlays.

A powered pressure reducing mattress (alternating pressure, low air loss, or powered flotation without low air loss) is characterized by all of the following:

- An air pump or blower that provides either sequential inflation and deflation of the air cells or a low interface pressure throughout the mattress
- Inflated cell height of the air cells through which air is being circulated is 5 inches or greater
- Height of the air chambers, proximity of the air chambers to one another, frequency of air cycling (for alternating pressure mattresses), and air pressure provide adequate member lift, reduce pressure, and prevent bottoming out
- A surface designed to reduce friction and shear
- Can be placed directly on a hospital bed frame

A semi-electric hospital bed with a fully integrated powered pressure reducing mattress that has all the characteristics defined above is considered a group 2 pressure reducing support surface.

An advanced non-powered pressure reducing mattress overlay is characterized by all of the following:

- Height and design of individual cells provide significantly more pressure reduction than a group 1 overlay and prevent bottoming out
- Total height of 3 inches or greater
- A surface designed to reduce friction and shear
- Documented evidence to substantiate that the product is effective for the treatment of condition described by the coverage criteria for group 2 support surfaces

A powered pressure reducing mattress overlay (low air loss, powered flotation without low air loss, or alternating pressure) is characterized by all of the following:

- An air pump or blower that provides either sequential inflation and deflation of the air cells or a low interface pressure throughout the overlay
- Inflated cell height of the air cells through which air is being circulated is 3.5 inches or greater
- Height of the air chambers, proximity of the air chambers to one another, frequency of air cycling (for alternating pressure overlays), and air pressure to provide adequate member lift, reduce pressure, and prevent bottoming out
- A surface designed to reduce friction and shear

An advanced non-powered pressure reducing mattress is characterized by all of the following:

- Height and design of individual cells provide significantly more pressure reduction than a group 1 mattress and prevent bottoming out
- Total height of 5 inches or greater
- A surface designed to reduce friction and shear
- Documented evidence to substantiate that the product is effective for the treatment of conditions described by the coverage criteria for group 2 support surfaces
- Can be placed directly on a hospital bed frame

Pressure reducing support surfaces that contain multiple components are categorized according to the clinically predominant component, which is usually the topmost layer of a multi-layer product. For example, a product with 3-inch powered air cells on top of a 3-inch foam base would be categorized as a powered overlay not as a powered mattress.

Group 3

Group 3 pressure reducing support surfaces include air-fluidized beds. An air-fluidized bed uses the circulation of warm filtered air through small, silicone coated ceramic beads creating the characteristics of fluid. When the individual is placed in the bed, his/her body weight is evenly distributed over a large surface area, which creates the sensation of “floating.”

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8. White-Chu EF, Reddy M. Pressure ulcer prevention in patients with advanced illness. Curr Opin Support Palliat Care. 2013; 7(1):111-115.

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    - Air-Fluidized Bed. NCD #280.8. Effective November 1, 2000.
    - Durable Medical Equipment Reference List. NCD #280.1. Effective May 5, 2005.
2. CGS Administrators LLC and Noridian Healthcare Solutions, LLC. Available at: http://www.cms.gov/mcd/index_local_alpha.asp?from=alphalmrp&letter=P&num_on_page=25&page_num=1. Accessed on July 7, 2023.
    - Local Coverage Determination for Pressure Reducing Support Surfaces – Group 1 (L33830). Updated 05/01/2021.
    - Local Coverage Determination for Pressure Reducing Support Surfaces – Group 2 (L33642). Updated 05/01/2021.
    - Local Coverage Determination for Pressure Reducing Support Surfaces – Group 3 (L33692). Updated 05/01/2021.
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6. Shi C, Dumville JC, Cullum N, et al. Beds, overlays and mattresses for preventing and treating pressure ulcers: an overview of Cochrane Reviews and network meta-analysis. Cochrane Database Syst Rev. 2021(8):CD013761.

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Fluid Air
Mediscus Heavy Duty System
Pressure Reducing Support Surfaces-Group 1
Pressure Reducing Support Surfaces-Group 2
Pressure Reducing Support Surfaces-Group 3

The use of specific product names is illustrative only. It is not intended to be a recommendation of one product over another, and is not intended to represent a complete listing of all products available.

History

Status	Date	Action
Reviewed	08/10/2023	Medical Policy & Technology Assessment Committee (MPTAC) review. Updated References section.
Reviewed	08/11/2022	MPTAC review. Updated Discussion/General Information and References sections. Updated Coding section with 10/01/2022 HCPCS changes; added E0183.
Reviewed	08/12/2021	MPTAC review. Updated Discussion/General Information and References sections.
Reviewed	08/13/2020	MPTAC review. Updated Discussion/General Information and References sections. Reformatted Coding section.
Reviewed	08/22/2019	MPTAC review. Updated Discussion/General Information and References sections.
Reviewed	09/13/2018	MPTAC review. Updated References section.
Reviewed	11/02/2017	MPTAC review. Updated References section. The document header wording updated from “Current Effective Date” to “Publish Date.”
Revised	11/03/2016	MPTAC review. Updated formatting in Clinical Indications section. Made minor language revisions to clinical indications for clarification. Updated Definitions and References sections.
Revised	11/05/2015	MPTAC review. Updated Description/Scope, Background/Overview, and References. Removed ICD-9 codes from Coding section.
Reviewed	11/13/2014	MPTAC review. Updated References.
Reviewed	11/14/2013	MPTAC review. Updated Discussion/General Information and References.
Reviewed	11/08/2012	MPTAC review. Updated Discussion/General Information and References.
Reviewed	11/17/2011	MPTAC review. Updated Coding, Discussion/General Information and References.
Reviewed	11/18/2010	MPTAC review. References updated.
Revised	11/19/2009	MPTAC review. Removed Place of Service section. Updated Coding and References. Title change to Pressure Reducing Support Surfaces – Groups 1, 2 & 3. Merged CG-DME-17 into CG-DME-16.
Reviewed	11/20/2008	MPTAC review. References, Coding, Discussion/General Information section and Definitions updated.
Reviewed	11/29/2007	MPTAC review. Updated information on the definition and staging of pressure ulcers in the Definition section. References updated.
Reviewed	12/07/2006	MPTAC review. References and coding updated.
	01/01/2007	Updated coding section with 01/01/2007 CPT/HCPCS changes; removed HCPCS E0180 deleted 12/31/2006.
New	12/01/2005	MPTAC initial document development.

Pre-Merger Organizations	Last Review Date	Document Number	Title
Anthem, Inc.			No Document
Anthem CO/NV	10/29/2004	DME.212	Pressure Reducing Support Surfaces-Group I
Anthem CO/NV	10/29/2004	DME.213	Pressure Reducing Support Surfaces-Group II
Anthem MW	11/05/2004	DME-011	Pressure Reducing Support Surfaces: Group 2
Anthem CT	10/01/2004	DME Coverage Criteria Guideline, Section F	Pressure Reducing Surfaces
WellPoint Health Networks, Inc.			No Document