**Name of Policy:**
Pressure Reducing Support Surfaces

Policy #: 247
Category: Durable Medical Equipment

Latest Review Date: September 2011
Policy Grade: **Active Policy but no longer scheduled for regular literature reviews and updates.**

**Background/Definitions:**
As a general rule, benefits are payable under Blue Cross and Blue Shield of Alabama health plans only in cases of medical necessity and only if services or supplies are not investigational, provided the customer group contracts have such coverage.

The following Association Technology Evaluation Criteria must be met for a service/supply to be considered for coverage:

1. The technology must have final approval from the appropriate government regulatory bodies;
2. The scientific evidence must permit conclusions concerning the effect of the technology on health outcomes;
3. The technology must improve the net health outcome;
4. The technology must be as beneficial as any established alternatives;
5. The improvement must be attainable outside the investigational setting.

Medical Necessity means that health care services (e.g., procedures, treatments, supplies, devices, equipment, facilities or drugs) that a physician, exercising prudent clinical judgment, would provide to a patient for the purpose of preventing, evaluating, diagnosing or treating an illness, injury or disease or its symptoms, and that are:

1. In accordance with generally accepted standards of medical practice; and
2. Clinically appropriate in terms of type, frequency, extent, site and duration and considered effective for the patient’s illness, injury or disease; and
3. Not primarily for the convenience of the patient, physician or other health care provider; and
4. Not more costly than an alternative service or sequence of services at least as likely to produce equivalent therapeutic or diagnostic results as to the diagnosis or treatment of that patient’s illness, injury or disease.
Description of Procedure or Service:
Pressure reducing support surfaces include mattress overlays, special mattresses that can be separately purchased or whole beds. Pressure reducing support surfaces are designed for patients with limited or no mobility who are bed confined most or all of the day and therefore prone to developing pressure ulcers over bony prominences.

Group 1 - Mattress overlays and mattresses
HCPCS codes E0185, E0197-E0199, and E0371 describe non-powered pressure reducing mattress overlays. These devices are designed to be placed on top of a standard hospital or home mattress.
A gel mattress overlay (E0185) is characterized by a gel layer with a height of two inches or greater.
An air mattress overlay (E0197), is characterized by interconnected air cells having a cell height of three inches or greater that are inflated with an air pump.
A water mattress overlay (E0198) is characterized by a filled height of three inches or greater.
A foam mattress overlay (E0199) is characterized by all of the following:
• Base thickness of two inches or greater and peak height of three inches or greater if it is a convoluted overlay (e.g. egg crate) or an overall height of at least three inches if it is a non-convoluted overlay; and
• Foam with a density and other qualities that provide adequate pressure reduction; and
• Durable, waterproof cover.

Group I non-powered pressure reducing mattresses are described by HCPCS codes E0184, E0186, E0187, E0196 and E0373.
A non-powered foam mattress (E0184) is characterized by all of the following:
• Foam height of five inches or greater; and
• Foam with a density and other qualities that provide adequate pressure reduction; and
• Durable, waterproof cover; and
• Can be placed directly on a hospital bed frame.

Non-powered pressure reducing air, water or gel mattresses (E0186, E0187, E0196) are characterized by all of the following:
• Height of five inches or greater of the air, water, or gel layer (respectively); and
• Durable, waterproof cover; and
• Can be placed directly on a hospital bed frame.

Group 1 powered pressure reducing mattress overlay systems (alternating pressure or low air loss) are described by HCPCS codes E0180, E0181, E0182, E0372 and A4640. They are characterized by all of the following:
• An air pump or blower, which provides both sequential inflation and deflation of air cells or a low interface pressure throughout the overlay; and
• Inflated cell height of the air cells through which air is being circulated is 2.5 inches or greater; and
• 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 patient lift, reduce pressure and prevent bottoming out (see Key Points section).

Group 2 - Special mattresses alone or fully integrated into a bed
HCPCS code **E0277** describes a powered pressure-reducing mattress (alternating pressure, low air loss, or powered flotation without low air loss), while **E0193** describes a semi-electric or total electric hospital bed with a fully integrated powered pressure-reducing mattress. These are characterized by all of the following:

- An air pump or blower, which provides both sequential inflation and deflation of the air cells or a low interface pressure through the mattress; **and**
- Inflated cell height of the air cells through which air is being circulated is five inches or greater; **and**
- 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 patient lift, reduce pressure and prevent bottoming out (see Key Points section); **and**
- A surface designed to reduce friction and shear; **and**
- Can be placed directly on a hospital bed frame.

HCPCS code **E0371** describes an advanced non-powered pressure-reducing mattress overlay that is characterized by all of the following:

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

HCPCS code **E0372** describes a powered pressure reducing mattress overlay (low air loss, powered flotation without low air loss, or alternating pressure), which is characterized by all of the following:

- An air pump or blower which provides either sequential inflation and deflation of the air cells or a low interface pressure throughout the overlay; and
- Inflated cell height of the air cells through which air is being circulated is 3.5 inches or greater; and
- 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 patient lift, reduce pressure and prevent bottoming out (see Key Points section); and
- A surface designed to reduce friction and shear.

HCPCS code **E0373** describes an advanced pressure-reducing mattress, which is characterized by all of the following:

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

Group 3 - Air Fluidized Beds
An air-fluidized bed (E0194) is a device employing the circulation of filtered air through silicone coated ceramic beads, creating the characteristics of fluid. When the patient is placed in the bed, his/her body weight is evenly distributed over a large surface area, which creates a sensation of floating.

Policy:
Group 1 - Mattress overlays and mattresses (E0180-E0187, E0196-E0199, E0371-E0373, A4640)
A Group 1 mattress overlay or mattress meets Blue Cross and Blue Shield of Alabama’s medical criteria for coverage when the following criteria are met:
1. The mattress overlay or mattress is one on which the patient does not "bottom out" (see Key Points section); and
2. The patient is limited in mobility, usually requiring the assistance of another individual for positional changes

OR

3. Any stage pressure ulcer on the trunk or pelvis; or
4. Impaired nutritional status; and at least one of the following:
   A. Fecal or urinary incontinence; or
   B. Altered sensory perception; or
   C. Compromised circulatory status.

Foam overlay or mattress without waterproof covers do not meet Blue Cross and Blue Shield of Alabama’s medical criteria for coverage, as they are not considered durable equipment.

Group 2 - Special Mattresses alone or fully integrated into a bed (E0193, E0277, E0371-E0373)
A Group 2 support surface meets Blue Cross and Blue Shield of Alabama’s medical criteria for coverage when the following criteria are met:
1. The Group 2 support surface is one on which the patient does not "bottom out" (see Key Points section); and
2. Multiple stage II pressure ulcers located on the trunk or pelvis; and
3. Patient has been on a comprehensive ulcer treatment program for at least one month, which has included the use of an appropriate Group 1 support surface; and
4. The ulcers have worsened or remained the same over the past month.

OR
1. Large or multiple stage III or IV pressure ulcer(s) on the trunk or pelvis.

OR
2. Recent myocutaneous flap or skin graft for a pressure ulcer on the trunk or pelvis (surgery within the past 60 days); and
3. The patient has been on a Group 2 or 3 support surfaces immediately prior to a recent discharge from a hospital or nursing facility (discharge within the past 30 days).

OR

1. Protein calorie malnutrition requiring parenteral or enteral supplements; and
   a. The mattress overlay or mattress is one on which the patient does not "bottom out" (see Key Points section); and
   b. The patient is limited in mobility, usually requiring the assistance of another individual for positional changes

When a Group 2 device is used as part of a treatment plan for wound healing, the device meets medical criteria or coverage until:
1. The ulcer is healed; or
2. 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.

Group 3 – Air-Fluidized Beds (E0194)
Effective for dates of service on or after March 1, 2007:
An air-fluidized bed meets Blue Cross and Blue Shield of Alabama’s medical criteria for coverage in the treatment of post myocutaneous flap procedures in the bedridden or wheelchair bound patient with severely limited mobility or extensively burned individual when all of the following criteria are met:
1. Recent myocutaneous flap or skin graft for a stage III or IV pressure ulcer or extensive burn on the trunk or pelvis (surgery within the past 30 days); and
2. The plan of care is outlined for transition to Group 2 support system after this time; and
3. A trained adult caregiver is available to assist the patient 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
4. A physician directs the home treatment regimen and a medical evaluation including surgery date and anticipated surgery dates is included with the request; and
5. The home environment is able to support the structural needs of the equipment (weight of bed >1,600 pounds) and the electrical system is sufficient to accommodate the anticipated increase in energy consumption even in the event of a power outage.

Effective for dates of service November 10, 2005 through February 28, 2007:
An air-fluidized bed meets Blue Cross and Blue Shield of Alabama’s medical criteria for coverage in the treatment of bedsores/decubitus ulcers and in the treatment of extensive burns for the non-ambulatory bedridden patient when all of the following criteria are met:
1. The patient has a stage III (full thickness tissue loss) or stage IV (deep tissue destruction) pressure ulcer; and
2. The patient is bedridden or chair bound as a result of severely limited mobility; and
3. All conservative treatment has been exhausted without improvement; and
4. In the absence of an air-fluidized bed, the patient would require institutionalization; and
5. The patient’s attending physician, based upon a comprehensive assessment and evaluation of the patient after conservative treatment has been tried without success, orders the air-fluidized bed in writing. Treatment should generally include the elements listed in the description of this policy. The patient must generally have been on the conservative treatment program for at least one-month prior to use of the air-fluidized bed with worsening or no improvement of the ulcer. The evaluation generally must be performed within a week prior to initiation of therapy with the air-fluidized bed; and
6. A trained adult caregiver is available to assist the patient 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-prescribes the air-fluidized bed on a monthly basis; and
8. All other alternative equipment has been considered and ruled out. Such alternatives include, but are not limited to gel flotation pads, egg crate mattresses, and pressure pads and pumps.

An air-fluidized bed does not meet Blue Cross and Blue Shield of Alabama’s medical criteria for coverage under any of the following circumstances:

1. The patient has coexisting pulmonary disease (the lack of firm back support makes coughing ineffective and dry air inhalation thickens pulmonary secretions); or
2. The patient 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; or
3. The caregiver is unwilling or unable to provide the type of care required by the patient on an air-fluidized bed; or
4. Structural support is inadequate to support the weight of the air-fluidized bed system (it generally weighs 1600 pounds or more); or
5. Electrical system is insufficient for the anticipated increase in energy consumption.

Blue Cross and Blue Shield of Alabama does not approve or deny procedures, services, testing, or equipment for our members. Our decisions concern coverage only. The decision of whether or not to have a certain test, treatment or procedure is one made between the physician and his/her patient. Blue Cross and Blue Shield of Alabama administer benefits based on the members' contract and corporate medical policies. Physicians should always exercise their best medical judgment in providing the care they feel is most appropriate for their patients. Needed care should not be delayed or refused because of a coverage determination.
**Key Points:**

Patients needing pressure reducing support surfaces should have a care plan which has been established by the patient’s physician or home care provider and is documented in the patient’s medical records and should generally include the following:

1. Education of the patient and caregiver on the prevention and/or management of pressure ulcers; and
2. Regular assessment by a nurse, physician, or licensed physical therapist; and
3. Appropriate turning and positioning; and
4. Appropriate wound care; and
5. Appropriate management of moisture/incontinence; and
6. Nutritional assessment and intervention consistent with the overall plan of care.

“Bottoming out” is the finding that an outstretched hand, placed palm up between the undersurface of the overlay or mattress and directly under the patient’s bony prominence (coccyx or lateral trochanter) can readily palpate the bony prominence. This bottoming out evaluation should be conducted with the patient in the supine position with their head flat, in the supine position slightly elevated (no more than 30 degrees), and in the side-lying position.

The National Pressure Ulcer Advisory Panel Pressure Ulcer Stages was recently updated in February 2007. The following information is from their web site: [www.npuap.org/pr2.htm](http://www.npuap.org/pr2.htm).

**Pressure Ulcer Stages**

**Suspected Deep Tissue Injury:**
Purple or maroon localized area of discolored intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear. The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue.

**Further Description:**
Deep tissue injury may be difficult to detect in individuals with dark skin tones. Evolution may include a thin blister over a dark wound bed. The wound may further evolve and become covered by thin eschar. Evolution may be rapid exposing additional layers of tissue even with optimal treatment.

**Stage I:**
Intact skin with non-blanchable redness of a localized area usually over a bony prominence. Darkly pigmented skin may not have visible blanching; its color may differ from the surrounding area.

**Further description:**
The area may be painful, firm, soft, warmer or cooler as compared to adjacent tissue. Stage I may be difficult to detect in individuals with dark skin tones. May indicate "at risk" persons (a heralding sign of risk).

**Stage II:**
Partial thickness loss of dermis presenting as a shallow open ulcer with a red pink wound bed, without slough. May also present as an intact or open/ruptured serum-filled blister.
Further description:
Presents as a shiny or dry shallow ulcer without slough or bruising.* This stage should not be used to describe skin tears, tape burns, perineal dermatitis, maceration or excoriation. *Bruising indicates suspected deep tissue injury.

Stage III:
Full thickness tissue loss. Subcutaneous fat may be visible but bone, tendon or muscle are not exposed. Slough may be present but does not obscure the depth of tissue loss. May include undermining and tunneling.

Further description:
The depth of a stage III pressure ulcer varies by anatomical location. The bridge of the nose, ear, occiput and malleolus do not have subcutaneous tissue and stage III ulcers can be shallow. In contrast, areas of significant adiposity can develop extremely deep stage III pressure ulcers. Bone/tendon is not visible or directly palpable.

Stage IV:
Full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present on some parts of the wound bed. Often include undermining and tunneling.

Further description:
The depth of a stage IV pressure ulcer varies by anatomical location. The bridge of the nose, ear, occiput and malleolus do not have subcutaneous tissue and these ulcers can be shallow. Stage IV ulcers can extend into muscle and/or supporting structures (e.g., fascia, tendon or joint capsule) making osteomyelitis possible. Exposed bone/tendon is visible or directly palpable.

Un-stageable:
Full thickness tissue loss in which the base of the ulcer is covered by slough (yellow, tan, gray, green or brown) and/or eschar (tan, brown or black) in the wound bed.

Further description:
Until enough slough and/or eschar is removed to expose the base of the wound, the true depth, and therefore stage, cannot be determined. Stable (dry, adherent, intact without erythema or fluctuance) eschar on the heels serves as "the body's natural (biological) cover" and should not be removed.

Pressure ulcer staging is defined as follows, prior to February 2007:
Stage I
Observable pressure related alteration of intact skin whose indicators as compared to the adjacent or opposite area on the body may include changes in one or more of the following: skin temperature (warmth or coolness), tissue consistency (firm or boggy feel) and/or sensation (pain, itching). The ulcer appears as a defined area of persistent redness in lightly pigmented skin, whereas in darker skin tones, the ulcer may appear with persistent red, blue, or purple hues.
Stage II
Partial thickness skin loss involving epidermis, dermis or both. The ulcer is superficial and presents clinically as an abrasion, blister, or shallow crater.

Stage III
Full thickness skin loss involving damage to, or necrosis of, subcutaneous tissue that may extend down to, but not through, underlying fascia. The ulcer presents clinically as a deep crater with or without undermining of adjacent tissue.

Stage IV
Full thickness skin loss with extensive destruction, tissue necrosis or damage to muscle, bone, or supporting structures (e.g., tendon, joint capsule). Undermining and sinus tracts also may be associated with Stage IV ulcers.

“Bottoming out” is the finding that an outstretched hand, placed palm up between the undersurface of the overlay or mattress and directly under the patient’s bony prominence (coccyx or lateral trochanter) can readily palpate the bony prominence. This bottoming out evaluation should be conducted with the patient in the supine position with their head flat, in the supine position slightly elevated (no more than 30 degrees), and in the side-lying position.

July 2009 Update
No new information was identified that would alter the coverage statement of this policy.

2011 Update
In 2009 the National Pressure Ulcer Advisory Panel published new clinical practice guidelines for the prevention and treatment of pressure ulcers. There were no new recommendations that would change the current policy.

Key Words:
Pressure reducing support surfaces, mattress, mattress overlay, air-fluidized bed, powered pressure reducing mattress overlay, foam overlay, non-powered pressure reducing mattresses

Approved by Governing Bodies:
Not applicable

Benefit Application:
Coverage is subject to member’s specific benefits. Group specific policy will supersede this policy when applicable.

ITS: Home Policy provisions apply
FEP contracts: Special benefit consideration may apply. Refer to member’s benefit plan.
Pre-certification requirements: Not applicable
Current Coding:
HCPCS codes:

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<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>A4640</td>
<td>Replacement pad for use with medically necessary alternating pressure pad owned by patient</td>
</tr>
<tr>
<td>E0181</td>
<td>Pressure pad, alternation with pump heavy duty</td>
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<tr>
<td>E0182</td>
<td>Pump for alternating pressure pad</td>
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<tr>
<td>E0184</td>
<td>Dry pressure mattress</td>
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<td>E0185</td>
<td>Gel or gel-like pressure pad for mattress, standard mattress length and width</td>
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<td>E0186</td>
<td>Air pressure mattress</td>
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<tr>
<td>E0187</td>
<td>Water pressure mattress</td>
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<tr>
<td>E0188</td>
<td>Synthetic sheepskin pad</td>
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<td>E0189</td>
<td>Lambs wool sheepskin pad, any size</td>
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<td>E0193</td>
<td>Powered air flotation bed (low air loss therapy)</td>
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<td>Gel pressure mattress</td>
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<td>Powered air overlay for mattress standard mattress length and width</td>
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<td>E0373</td>
<td>Nonpowered advanced pressure reducing mattress</td>
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Effective for dates of service on or after January 1, 2007:

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<th>Code</th>
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<tr>
<td>E0181</td>
<td>Powered pressure reducing mattress overlay/pad, alternating, with pump, includes heavy duty</td>
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Previous Coding:

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<tr>
<td>E0180</td>
<td>Pressure pad, alternating with pump (Code deleted effective January 1, 2007)</td>
</tr>
</tbody>
</table>

References:


4. Palmetto GBA Local Medical Policy L11563
5. Palmetto GBA Local Medical Policy L11564
6. Palmetto GBA Local Medical Policy L11565

**Policy History:**
Medical Policy Group, August 2005
Medical Policy Group, September 2005 (2)
Medical Policy Administration Committee, September 2005
Available for comment September 26- November 9, 2005
Medical Policy Group, August 2006 (1)
Medical Policy Group, March 2007 (1)
Medical Policy Administration Committee, April 2007
Medical Policy Group, July 2007 (1)
Available for comment August 3- September 17, 2007
Medical Policy Group, July 2009 (1)
Medical Policy Group, September 2011(3); Updated Key Points and References
Medical Policy Group, September 2012 (3): Effective September 14, 2012 this policy is no
longer scheduled for regular literature reviews and updates.

*This medical policy is not an authorization, certification, explanation of benefits, or a contract. Eligibility and benefits are determined on a case-by-case basis according to the terms of the member’s plan in effect as of the date services are rendered. All medical policies are based on (i) research of current medical literature and (ii) review of common medical practices in the treatment and diagnosis of disease as of the date hereof. Physicians and other providers are solely responsible for all aspects of medical care and treatment, including the type, quality, and levels of care and treatment.*

*This policy is intended to be used for adjudication of claims (including pre-admission certification, pre-determinations, and pre-procedure review) in Blue Cross and Blue Shield’s administration of plan contracts.*