Pressure ulcers
– prevention and treatment
A Coloplast quick guide
# Table of contents

Pressure ulcers – prevention and treatment ................................ 3  
What is a pressure ulcer? ........................................................... 4  
How do pressure ulcers arise? ................................................... 5  
Who gets pressure ulcers? ......................................................... 6  
Prevalence of pressure ulcers ..................................................... 7  
Risk factors................................................................................ 8  
The Braden scale for predicting pressure ulcer risk ..................... 9  
Prevention of pressure ulcers ................................................... 10  
Prevention protocols by risk level.............................................. 11  
International NPUAP-EPUAP pressure ulcer classification system .......................................... 12  
Treatment of pressure ulcers .................................................... 15  
Wound infection....................................................................... 18  
Coloplast solutions for pressure ulcers ..................................... 20  
Biatain – superior absorption - faster healing ............................ 24  
Other Coloplast products for pressure ulcers............................ 26  
References .............................................................................. 27
Pressure ulcers
– prevention and treatment

Although the quality of pressure ulcer prevention and treatment has increased considerably over the past years, pressure ulcers remain a frequently occurring problem in health care. Especially in older people and those that are confined to a chair or bed are susceptible to pressure ulcers. In recent years, new international guidelines have been published.

This quick guide is intended for educational and informational purposes only. It contains some of the most important advice for prevention and treatment of pressure ulcers, and will be helpful to health care professionals who are not dealing with pressure ulcers every day.

Please note that in this quick guide we have described only very general guidelines. For a full description of the optimal treatment of pressure ulcers at the different stages, please refer to your national guidelines and to the ‘Pressure ulcer Prevention – Quick reference guide’ published by the NPUAP-EPUAP in 2009 (www.epuap.org).

For more extensive guidance on treatment of pressure ulcers, please refer to ‘Pressure Ulcer Treatment – Quick reference guide’ published by the NPUAP-EPUAP in 2010 (www.epuap.org).

Good advice and useful tools for pressure ulcer prevention are also available at the Braden-homepage (www.braden.com) and at www.judy-waterlow.co.uk.

Coloplast A/S, March 2012.
What is a pressure ulcer?

International NPUAP-EPUAP pressure ulcer definition:

A pressure ulcer (decubitus ulcer) is a localised injury to the skin and/or underlying tissue usually over a bony prominence and is the result of pressure, or pressure in combination with shear.

Shear is a mechanical force that acts on an area of skin in a direction parallel to the body’s surface (e.g. when the skeleton moves down the bed under gravity but skin, the buttocks and back moves upwards.) The twisting and dragging effect occludes blood vessels, which causes a reduction in blood supply and results in tissue death.
How do pressure ulcers arise?

A pressure ulcer is defined as a degenerative change caused by biological tissue (skin and underlying tissue) being exposed to pressure and shearing forces. The pressure prevents the blood from circulating properly, and causes cell death, tissue necrosis and the development of ulcers.

The effect of compressive forces and shear forces on tissues and blood supply

Without load  Compressive forces  Shear forces
Who gets pressure ulcers?

Anyone is at risk for the development of a pressure ulcer, but some are more likely to develop one than others. This is particularly true for those with impaired sensation, prolonged immobility, or advanced age.

Whether young or old, if somebody with frail skin remains in one position for too long without shifting their weight, they are at risk for pressure ulcers. Wheelchair users or people confined to a bed (for example, after surgery or an injury), are especially at risk and those people who have a pressure ulcer are at an even greater risk for developing another pressure ulcer.

The most common sites for pressure ulcers to occur are over a bony prominence such as the buttock (sacrum/ischium), heels, hips (trochanter), elbows, ankles (lateral or medial malleolus), back, shoulders, back of head (occipit) and ears.

Common sites of pressure ulcers
Prevalence of pressure ulcers

National prevalence studies have been conducted in several countries. In the UK Incidence of pressure ulcers in the acute sector in the literature is low, but many range from 1.17% to 4.03%. Prevalence surveys in the U.S., among patients in acute care hospitals, indicated a pressure ulcer prevalence ranging from 10.1% to 17%.4 Pressure ulcer prevalence of 6.6% in the community has been reported, with some community trusts achieving below 5%.19 Recently, 5947 patients were surveyed in 25 hospitals in five European countries. The pressure ulcer prevalence (Stage 1–4) was 18.1%, if Stage 1 ulcers were excluded it was 10.5%. The sacrum and heels were the most affected locations. Only 9.7% of the patients in need of prevention received fully adequate preventive care.4
Risk factors

The following factors increase the risk for pressure ulcers\cite{3,5}

- Being bed or chair bound
- Old age (>75 years)
- Unable to move body or parts of body without help
- Chronic conditions, such as diabetes or vascular disease, which affect blood circulation
- Mental disability from conditions such as Alzheimer’s disease
- Fragile skin
- Urinary and bowel incontinence
- Malnourishment

In their international pressure ulcer prevention guidelines the NPUAP & EPUAP recommend to use a structured approach to risk assessment to identify individuals at risk of developing pressure ulcers.\cite{1} One of the most widely used risk assessment tools worldwide is the Braden Scale for Predicting Pressure Sore Risk\textsuperscript{®}, developed by Barbara Braden and Nancy Bergstrom in 1988.\cite{7} In the UK the Waterflow Assessment tool is most frequently used.
Using a pressure ulcer assessment tool

A pressure ulcer risk assessment tool is a system of recording factors about the patient that would increase their risk of developing a pressure ulcer. These factors are then scored. The scoring mechanism depends upon the actual risk tool being used, for example, Waterlow, Norton, Douglas, Braden etc.

The risk assessment tool should be completed within six hours of admission to an acute hospital, nursing home, community hospital or respite bed and at first visit if in the patient’s own home if being seen by a community nurse. Risk assessments should be undertaken regularly on an ongoing basis.

The **Waterlow Manual** provides comprehensive guidance on the use of the Waterlow scoring system which looks at a number of parameters including:

- Build/Weight
- Incontinence
- Skin type and existing skin damage
- Mobility
- Nutrition and appetite
- Other factors such as co-morbidities

Once all the sections have been assessed and scored, these are totalled to give an overall risk score, interpreted as:

- 10+ = at risk
- 15+ = high risk
- 20+ = very high risk

However, it should not be the total score that directs management and care plan development but the identification of the individual risks.

For example, if incontinence has been identified as a risk factor then the patient should have a care plan developed that aims to effectively manage the incontinence and reduce that as a risk.
Prevention of pressure ulcers

A person that is bed bound or cannot move due to paralysis, diabetes, circulation problems, incontinence, or mental disabilities, should be frequently checked for pressure ulcers. Special attention should be paid to the areas over a bony prominence where pressure ulcers often form.

Look for reddened areas that, when pressed, do not turn white and for blisters, sores, or craters.

In addition, take the following steps\textsuperscript{5,9}

\begin{itemize}
  \item Change the patient’s position no less than every 2 hours to relieve pressure, for example, by using a turning schedule
  \item Use items that can help reduce pressure: pressure-reducing pillows, foam padding, pressure reducing mattresses etc.
  \item Meals must contain the required amount of calories and proteins
  \item Provide adequate vitamins and minerals
  \item Provide and encourage adequate daily fluid intake for hydration
  \item Daily exercise
  \item Keep the skin clean and dry
  \item After urinating or having a bowel movement, clean the area and dry it well. Use creams to help protect the skin
  \item Do NOT massage the area of the ulcer, as massaging can damage tissue under the skin
  \item Ring-shaped cushions are NOT recommended. They interfere with blood flow to that area and cause complications
\end{itemize}
Prevention protocols by risk level

The cornerstone of pressure ulcer prevention is identifying and minimizing risk factors with the use of a validated risk assessment tool. If you use the Braden scale or Waterlow score there is a protocol that can be referred to for each risk level.5

Preventive measures when ‘at risk’/‘moderate risk’
- Frequent turning (turning schedule if moderate risk)
- Maximal remobilisation
- Pressure-reduction support surface
- Lateral positioning (if moderate risk)
- Heel protection (offload the heel completely and distribute weight along the calf with slightly flexed knee1)
- Manage moisture, nutrition, and friction and shear
- Pressure-reduction support surface if bed or chair bound

Additional preventive measures when ‘at high risk’
- Increased frequency of turning
- Supplement with small position shifts

Additional preventive measures when at ‘very high risk’
- Use pressure-relieving surface if the patient has intractable pain (severe pain can be worsened by turning)
- Note: low air loss beds do not substitute for turning schedules

‘Protocols by at risk level’ and suggestion for a turning schedule can be downloaded from www.bradenscale.com/products.htm
International NPUAP-EPUAP pressure ulcer classification system

A pressure ulcer starts as reddened skin that gets worse over time. It forms a blister, then an open sore, and finally a crater.

Pressure ulcers are categorised by how severe they are, from Stage I (earliest signs) to Stage IV (worst). Pressure ulcers are classified according to the degree of tissue damage observed. In 2009 the EPUAP-NPUAP advisory panel agreed upon four levels of injury:

**Category/Stage I:**

**Non-blanchable redness of intact skin**

Intact skin with non-blanchable erythema of a localised area usually over a bony prominence. Discolouration of the skin, warmth, oedema, hardness or pain may also be present. Darkly pigmented skin may not have visible blanching.

**Further description:** The area may be painful, firm, soft, warmer or cooler as compared to adjacent tissue. Category/Stage I may be difficult to detect in individuals with dark skin tones. May indicate ‘at risk’ persons.

Buttocks, Stage I, NPUAP copyright & used with permission
International NPUAP-EPUAP pressure ulcer classification system

**Category/Stage II:**

**Partial thickness skin loss or blister**

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 or sero-sanginous filled blister.

**Further description:** Presents as a shiny or dry shallow ulcer without slough or bruising. This category/stage should not be used to describe skin tears, tape burns, incontinence associated dermatitis, maceration or excoriation.

**Category/Stage III:**

**Full thickness skin loss (fat visible)**

Full thickness tissue loss. Subcutaneous fat may be visible but bone, tendon or muscle are not exposed. Some slough may be present. May include undermining and tunnelling.

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

Full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present. Often include undermining and tunnelling.

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

For optimal treatment of pressure ulcers there are 4 main concerns:
1. Underlying pathology of the pressure ulcer must be treated if possible
2. Pressure must be relieved or removed by appropriate measures to prevent further injury
3. Nutrition is important for healing of pressure ulcers:
   - Provide sufficient calories
   - Provide adequate protein for positive nitrogen balance
   - Provide and encourage adequate daily fluid intake for hydration
   - Provide adequate vitamins and minerals
4. Wound care must be optimized:
   - If there is black or yellow necrosis in the wound, consider debridement to remove the dead tissue in the wound bed*
   - Cleanse the pressure ulcer and surrounding skin and remove debris at each dressing change to avoid contamination
   - Use appropriate moist wound healing dressings

* Select the debridement method(s) most appropriate to the individual’s condition. Potential methods include sharp (surgical) techniques, autolysis (gel, occlusive/semi-occlusive dressing etc.), enzymatic debridement (gel), mechanical debridement, and bio-surgical debridement (maggot therapy).

These are only general guidelines. For a full description of the optimal treatment of pressure ulcers at the different stages, please refer to your national guidelines and to the ‘Pressure ulcer treatment – Quick reference guide’ published by the NPUAP-EPUAP in 2009.
www.epuap.org/guidelines/Final_Quick_Treatment.pdf
Dressing selection

Wound dressings are a central component of pressure ulcer care. Dressing selection should be based on the tissue in the ulcer bed and the condition of the skin around the ulcer bed.

Suitable wound dressings for pressure ulcers are moist wound healing dressings with good absorption and exudate management properties.

**Dressings for deep wounds**
Fill deep wounds with dressing materials, e.g. alginate filler. Be careful to document the number of dressings that are used to fill large wounds and ensure that all dressings are removed at the next dressing change.

**Dressings for infected wounds**
Assess pressure ulcers carefully for signs of infection and delays in healing.

An adhesive antimicrobial moist wound healing dressing, e.g. a silver foam, or a silver alginate dressing in combination with an adhesive secondary dressing can help prevent or resolve wound infection.
Dressing selection

Dressings for sacral pressure ulcers
Pressure ulcers in the sacral area of patients that are incontinent have a risk of getting contaminated by urine or faeces and thereby infected. Therefore, it is important to keep the wound and peri-ulcer area clean and use a semi-occlusive dressing to protect the wound from contamination from excretions.

Evaluating progress towards healing
A 2-week period is recommended for evaluating progress toward healing. However, weekly assessments provide an opportunity for the health care professional to detect early complications and the need for changes in the treatment plan.

The treatment needs of a pressure ulcer change over time. Treatment strategies should be continuously re-evaluated based on the current status of the ulcer.
Wound infection

All wounds contain bacteria. Even if the wound is healing normally, a limited amount of bacteria will be present. If the bacteria count rises, the wound may become infected. Bacterial overload in a wound can lead to a serious infection that requires antibiotic treatment.

If the wound is not healing it may be a sign of infection. In the wound, the following symptoms indicate infection:

- Odour
- Increased exudate
- Absent or abnormal granulation tissue
- Increased pain

Pressure ulcer on ankle, NPUAP copyright & used with permission
It has been recommended that antimicrobial dressings should be used for two weeks initially and then the wound, the patient and the management approach should be re-evaluated. An international consensus group has suggested that this initial two week period can be seen as the ‘Two Week Challenge’ during which the efficacy of the silver dressing can be assessed.

Additional clinical symptoms may arise if the infection spreads to the healthy tissue surrounding the wound. Depending on the type of bacteria, the wound exudate may become more pus-like, and the peri-ulcer skin may be tender, red and painful. The patient may also have a fever. If the infection spreads beyond the wound, antibiotics should be used at the discretion of a clinician.
Non-infected pressure ulcers
Suitable wound dressings for pressure ulcers that are not infected are adhesive moist wound healing dressings with superior absorption and exudate management properties.

**Biatain® Silicone**
- superior absorption general purposes
  - Conforms to the wound bed for superior absorption – even under body pressure
  - Soft and flexible dressing silicone adhesive for easy removal with minimal damage or irritation to the skin

**Biatain® Adhesive**
- superior absorption for wounds that need extra adhesion
  - Unique 3D polyurethane foam that conforms closely to the wound bed for superior absorption – even under body pressure
  - Available in sacral shape to ensure close fit to body and skin for prevention of contamination and leakage

**Biatain® Super**
- superior absorption for highly exuding wounds
  - Hydrocapillary pad with super absorbent particles locks away exudate from wound bed and surrounding skin
Coloplast solutions for pressure ulcers

Deep wounds
Deep wounds can be filled with dressing materials, such as Biatain® Alginate filler and covered with an adhesive dressing.

Biatain Alginate
- superior absorption for slough and cavity filling
  · Highly absorbent alginate dressing for moderately to heavily exuding wounds of any size and shape. Faster wound healing by conforming to any wound shape and by debridement of slough

If the wound is dry or necrotic with a need for enzymatic debridement, you can use a gel such as Purilon® Gel and cover with an adhesive dressing

Purilon Gel
- faster wound healing by effective and gentle debridement
  · Fast and effective debridement
  · High cohesion – the gel stays in place
Coloplast solutions for pressure ulcers

Infected pressure ulcers and pressure ulcers at risk of infection

Biatain® Ag Adhesive
– superior absorption for infected wounds that need extra adhesion
  · Unique 3D polyurethane foam that conforms closely to the wound bed for superior absorption – also under body pressure
  · Continuous broad antimicrobial effect during entire wear time
  · Reduction of odour from the wound
  · Available in sacral shape to ensure close fit to body and skin for prevention of contamination and leakage

Physiotulle® Ag
Physiotulle Ag is a silver-containing, non-occlusive, hydrocolloid-based wound contact layer
Infected deep wounds
Infected deep wounds or deep wounds at risk of infection can be filled with antimicrobial dressing materials, such as Biatain® Alginate Ag filler and covered with an adhesive dressing. If the infection spreads beyond the wound, antibiotics should be used at the discretion of a clinician.

Biatain® Alginate Ag
– superior absorption for slough and cavity filling on infected wounds
- Highly absorbent antimicrobial alginate dressing for moderately to heavily exuding infected wounds or wounds at risk of infection. Faster wound healing by conforming to any wound shape and by debridement of slough
- Designed to fight cavity wound infection
- Effect on a broad range of bacteria¹⁶
Biatain® – superior absorption - faster healing

Superior absorption for non-infected wounds*

<table>
<thead>
<tr>
<th>Biatain Silicone</th>
<th>Code</th>
<th>NHS</th>
<th>PIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.5x7.5</td>
<td>3434</td>
<td>ELA425</td>
<td>353-3817</td>
</tr>
<tr>
<td>10x10</td>
<td>3435</td>
<td>ELA451</td>
<td>356-9811</td>
</tr>
<tr>
<td>12.5x12.5</td>
<td>3436</td>
<td>ELA426</td>
<td>353-3825</td>
</tr>
<tr>
<td>15x15</td>
<td>3437</td>
<td>ELA427</td>
<td>353-3833</td>
</tr>
<tr>
<td>17.5x17.5</td>
<td>3438</td>
<td>ELA428</td>
<td>353-3841</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Biatain Soft-Hold</th>
<th>Code</th>
<th>NHS</th>
<th>PIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>5x7</td>
<td>3473</td>
<td>ELA404</td>
<td>346-6059</td>
</tr>
<tr>
<td>10x10</td>
<td>3470</td>
<td>ELA274</td>
<td>320-0151</td>
</tr>
<tr>
<td>10x20</td>
<td>3472</td>
<td>ELA275</td>
<td>320-0169</td>
</tr>
<tr>
<td>15x15</td>
<td>3475</td>
<td>ELA276</td>
<td>320-0177</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Biatain Non-Adhesive</th>
<th>Code</th>
<th>NHS</th>
<th>PIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>5x7</td>
<td>6105</td>
<td>ELA414</td>
<td>339-6355</td>
</tr>
<tr>
<td>10x10</td>
<td>3410</td>
<td>ELA039</td>
<td>265-3228</td>
</tr>
<tr>
<td>10x20</td>
<td>3412</td>
<td>ELA260</td>
<td>315-7674</td>
</tr>
<tr>
<td>15x15</td>
<td>3413</td>
<td>ELA041</td>
<td>265-3236</td>
</tr>
<tr>
<td>20x20</td>
<td>3416</td>
<td>ELA047</td>
<td>276-2456</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Biatain Adhesive</th>
<th>Code</th>
<th>NHS</th>
<th>PIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.5x7.5</td>
<td>3462</td>
<td>ELA634</td>
<td>379-3965</td>
</tr>
<tr>
<td>10x10</td>
<td>3430</td>
<td>ELA074</td>
<td>285-7027</td>
</tr>
<tr>
<td>12.5x12.5</td>
<td>3420</td>
<td>ELA044</td>
<td>347-2040</td>
</tr>
<tr>
<td>15x15</td>
<td>3421</td>
<td>ELA635</td>
<td>379-3973</td>
</tr>
<tr>
<td>18x18</td>
<td>3423</td>
<td>ELA045</td>
<td>259-6211</td>
</tr>
<tr>
<td>18x28</td>
<td>3426</td>
<td>ELA259</td>
<td>315-7666</td>
</tr>
<tr>
<td>17x17 Sacral Jr.</td>
<td>3483</td>
<td>ELA636</td>
<td>379-3833</td>
</tr>
<tr>
<td>23x23 Sacral</td>
<td>3485</td>
<td>ELA050</td>
<td>281-6684</td>
</tr>
<tr>
<td>Ø17 Contour</td>
<td>3486</td>
<td>ELA209</td>
<td>304-5721</td>
</tr>
<tr>
<td>19x20 Heel</td>
<td>3488</td>
<td>ELA051</td>
<td>281-6692</td>
</tr>
</tbody>
</table>

* Can be used for all types of exuding wounds.
Biatain® – superior absorption - faster healing

Superior absorption for infected wounds

Biatain Ag Non-Adhesive

<table>
<thead>
<tr>
<th>Size</th>
<th>Code</th>
<th>NHS</th>
<th>PIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>5x7</td>
<td>5105</td>
<td>ELA415</td>
<td>339-6363</td>
</tr>
<tr>
<td>10x10</td>
<td>9622</td>
<td>ELA163</td>
<td>297-6736</td>
</tr>
<tr>
<td>10x20</td>
<td>9623</td>
<td>ELA618</td>
<td>314-2767</td>
</tr>
<tr>
<td>15x15</td>
<td>9625</td>
<td>ELA161</td>
<td>297-6744</td>
</tr>
<tr>
<td>20x20</td>
<td>9626</td>
<td>ELA619</td>
<td>314-2775</td>
</tr>
<tr>
<td>5x8 Cavity</td>
<td>9628</td>
<td>ELA162</td>
<td>299-8528</td>
</tr>
</tbody>
</table>

Superior absorption for painful wounds

Biatain Ag Non-Adhesive

<table>
<thead>
<tr>
<th>Size</th>
<th>Code</th>
<th>NHS</th>
<th>PIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>5x7</td>
<td>4105</td>
<td>ELA408</td>
<td>346-6430</td>
</tr>
<tr>
<td>10x12</td>
<td>4152</td>
<td>ELA320</td>
<td>327-0436</td>
</tr>
<tr>
<td>10x22.5</td>
<td>4158</td>
<td>ELA304</td>
<td>327-0451</td>
</tr>
<tr>
<td>15x15</td>
<td>4115</td>
<td>ELA322</td>
<td>327-0444</td>
</tr>
<tr>
<td>20x20</td>
<td>4120</td>
<td>ELA403</td>
<td>346-6422</td>
</tr>
</tbody>
</table>

Biatain Ag Adhesive

<table>
<thead>
<tr>
<th>Size</th>
<th>Code</th>
<th>NHS</th>
<th>PIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.5x12.5</td>
<td>9632</td>
<td>ELA164</td>
<td>297-6751</td>
</tr>
<tr>
<td>18x18</td>
<td>9638</td>
<td>ELA165</td>
<td>297-6769</td>
</tr>
<tr>
<td>23x23</td>
<td>9641</td>
<td>ELA221</td>
<td>313-1398</td>
</tr>
<tr>
<td>Sacral</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19x20</td>
<td>9643</td>
<td>ELA220</td>
<td>313-1406</td>
</tr>
</tbody>
</table>

Biatain Ag Adhesive

<table>
<thead>
<tr>
<th>Size</th>
<th>Code</th>
<th>NHS</th>
<th>PIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>10x12</td>
<td>4162</td>
<td>ELA332</td>
<td>327-0469</td>
</tr>
<tr>
<td>10x22.5</td>
<td>4168</td>
<td>ELA302</td>
<td>327-0485</td>
</tr>
<tr>
<td>15x15</td>
<td>4165</td>
<td>ELA331</td>
<td>327-0477</td>
</tr>
</tbody>
</table>

Biatain Ibu Soft-Hold

<table>
<thead>
<tr>
<th>Size</th>
<th>Code</th>
<th>NHS</th>
<th>PIP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ICode</td>
<td>NHS</td>
<td>PIP</td>
</tr>
<tr>
<td>10x12</td>
<td>4162</td>
<td>ELA332</td>
<td>327-0469</td>
</tr>
<tr>
<td>10x22.5</td>
<td>4168</td>
<td>ELA302</td>
<td>327-0485</td>
</tr>
<tr>
<td>15x15</td>
<td>4165</td>
<td>ELA331</td>
<td>327-0477</td>
</tr>
</tbody>
</table>
Other Coloplast products for pressure ulcers

Biatain Alginate

<table>
<thead>
<tr>
<th>Code</th>
<th>NHS</th>
<th>PIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>5x5</td>
<td>3705</td>
<td>ELS068</td>
</tr>
<tr>
<td>10x10</td>
<td>3710</td>
<td>ELS069</td>
</tr>
<tr>
<td>15x15</td>
<td>3715</td>
<td>ELS070</td>
</tr>
<tr>
<td>3x44 filler</td>
<td>3740</td>
<td>ELS071</td>
</tr>
</tbody>
</table>

Biatain Alginate Ag

<table>
<thead>
<tr>
<th>Code</th>
<th>NHS</th>
<th>PIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>5x5</td>
<td>3755</td>
<td>ELY305</td>
</tr>
<tr>
<td>10x10</td>
<td>3760</td>
<td>ELY306</td>
</tr>
<tr>
<td>15x15</td>
<td>3765</td>
<td>ELY307</td>
</tr>
<tr>
<td>3x44 filler</td>
<td>3780</td>
<td>ELY308</td>
</tr>
</tbody>
</table>

Biatain Super Non-Adhesive

<table>
<thead>
<tr>
<th>Code</th>
<th>NHS</th>
<th>PIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>10x10</td>
<td>4630</td>
<td>ELY106</td>
</tr>
<tr>
<td>12.5x12.5</td>
<td>4632</td>
<td>ELY107</td>
</tr>
<tr>
<td>12x20</td>
<td>4645</td>
<td>ELM086</td>
</tr>
<tr>
<td>15x15</td>
<td>4635</td>
<td>ELY108</td>
</tr>
<tr>
<td>20x20</td>
<td>4639</td>
<td>ELY115</td>
</tr>
</tbody>
</table>

Purilon Gel

<table>
<thead>
<tr>
<th>Code</th>
<th>NHS</th>
<th>PIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 g</td>
<td>3900</td>
<td>ELG003</td>
</tr>
<tr>
<td>8 g</td>
<td>3906</td>
<td>ELG010</td>
</tr>
</tbody>
</table>

Physiotulle Ag

<table>
<thead>
<tr>
<th>Code</th>
<th>NHS</th>
<th>PIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>10x10</td>
<td>3926</td>
<td>EK045</td>
</tr>
</tbody>
</table>
References

1. NPUAP-EPUAP Pressure Ulcer Prevention, Quick reference guide, 2010 (http://www.epuap.org/guidelines/Final_Quick_Treatment.pdf)
9. Wikipedia: pressure ulcers
16. Data on File
After 30 years in wound care, we at Coloplast believe that absorption is the key to better healing. Our Biatain® portfolio brings superior absorption to daily wound care needs, making Biatain the simple choice for faster healing.