

CATEGORY: MOISTURE-ASSOCIATED SKIN DAMAGE

TOTAL BARRIER PROTECTION™

MAKING THE CASE

INTRODUCTION TO MOISTURE-ASSOCIATED SKIN DAMAGE

Moisture-associated skin damage (MASD) refers to a group of conditions that result from prolonged exposure to irritants including urine, stool, perspiration or exudate. It is critical to assess and appropriately treat the local cause of MASD, alongside a wider skin care and continence regimen (Dowsett and Allen, 2013). Patients may experience pain and discomfort, disrupted daily activities, and an increased susceptibility to secondary infections (Bartlett et al, 2009; Minassian et al, 2013; Campbell et al, 2014). As well as this patient burden, MASD also incurs a high financial cost. According to a UK market overview for skin care products in the community, annual spend on protectant ointments, barrier creams, films and medical adhesive removers is considerable: £43,510,209 for 24,209,186 units in 2015 (NHS Business Service Authority, 2015).

TREATING MOISTURE-ASSOCIATED SKIN DAMAGE: THE CHALLENGES

**Assessment and diagnosis:** The cause of damage must be identified in order to implement appropriate treatment. This requires differentiation between distinct types of skin damage: incontinence-associated dermatitis (IAD), intertrigo dermatitis, periwound moisture-associated dermatitis, and peristomal moisture-associated dermatitis. It is also important to differentiate damage caused by a moisture irritant (i.e. IAD) from pressure damage, while remembering that both may exist concurrently (Dowsett and Allen, 2013).

**Product selection:** Choice of product should take into account parameters including moisture source, damage severity and presence of complications. Since a diverse selection of treatments is available, with varying indications, contraindications and guidelines for use, it can be challenging to select an optimal product. It is not uncommon for individual clinicians to approach skin care differently for the same patient, leading to inconsistent care (Brunner et al, 2012).

**Protocols and procedures:** While protocols exist that support evidence-based skin care interventions, many are incomplete and non-adherence to procedure, resulting in incorrect utilisation of skin care products, is common. This non-adherence may be due to a lack of caregiver understanding and a need for training in incontinence management and product usage (Nix and Ermer-Sultan, 2004).

PROVIDING EFFECTIVE CARE FOR MOISTURE-ASSOCIATED SKIN DAMAGE

A treatment strategy for MASD must meet the needs of patients, clinicians and budgets. It should simplify choice and provide guidance to reduce potential misuse or overuse of products (Hughes, 2016). A recent consensus highlighted the need for:

- Clear guidance on the primary purpose of each product to support clinician choice
- A process to determine when each product should be used
- Indication of the degree of efficacy and protection of each product
- Clearly defined, evidence-based guidelines to promote clinical decision-making (Doughty et al, 2012).

INTRODUCTION TO THE TOTAL BARRIER PROTECTION™ RANGE

Total Barrier Protection™ (Medicareplus International) is a fully integrated treatment strategy for MASD that prevents, protects, repairs and restores skin integrity. The range incorporates:

- Medi Derma-S Medical Barrier Cream™
- Medi Derma-S Medical Barrier Film™
- Medi Derma-PRO Foam & Spray Cleanser™
- Medi Derma-PRO Skin Protectant Ointment™
- Medi Lifteez Non-Sting Medical Adhesive Remover™.

As a single, structured range of products, Total Barrier Protection provides users with a simple regimen for MASD management. Incorporating a barrier cream, barrier film, foam and spray cleanser, skin protectant ointment and a medical adhesive remover, Total Barrier Protection is delivered with clear guidance and rationale for when to use each product, so patients receive the most appropriate care for their condition at every stage of treatment. Education for caregivers supports implementation. Use of a structured regimen like Total Barrier Protection could lead to cost savings if caregiver training is improved, treatment choices are simplified and product misuse is reduced.

Q ARE YOU TREATING PATIENTS WITH MOISTURE-ASSOCIATED SKIN DAMAGE APPROPRIATELY?

COSTS PER UNIT WITHIN THE TOTAL BARRIER PROTECTION RANGE

The Drug Tariff (DT) costs associated with each product within the Total Barrier Protection range are provided below. Greater savings are available with NHS Supply Chain costs compared with those shown in the table. In addition, a wider range of product formats and sizes is also available.

Costs per unit for products within the Total Barrier Protection range			
Product	Cost per unit (DT)	Competitor cost per Unit (DT)	Cost Saving (%)
Medi Derma-S Medical Barrier Cream (90g)	£5.95	£7.94 (equiv.)	25.1%
Medi Derma-S Sterile Barrier Film Applicators (1ml)	£3.70	£5.00	26%
Medi Derma-PRO Foam & Spray Cleanser (250ml)	£5.95	£7.03 (equiv.)	15.4%
Medi Derma-PRO Skin Protectant Ointment (115g)	£8.50	£9.94	14.5%
Medi Lifteez Non-Sting Medical Adhesive Remover (50ml)	£6.75	£9.47	28.7%

**Explanation of how to use this guide:** This document can be used to make the case for implementing effective prevention and management measures and may be supported by data from your own care setting. As well as economic impact, it is important to know the impact of interventions on patient quality of life and outcomes.

# MAKING THE CASE

## EFFICACY AND PATIENT BENEFITS OF PRODUCTS WITHIN THE TOTAL BARRIER PROTECTION RANGE

There are various sources of evidence for products within the Total Barrier Protection range (Figure 1), with key results outlined below:

- A case series of 29 patients with mild-to-severe incontinence-related MASD treated with Medi Derma-Pro Foam & Spray Cleanser and Skin Protectant Ointment found either improvements or unchanged levels in the assessed severity of skin damage (Mild, Moderate, Severe) for 28 patients. Where the overall grade of damage was unchanged, improvements were seen in the frequency of healthy skin, erythema, excoriation and dryness, indicating an overall improvement in skin condition. All patients who were assessed for pain recorded a decreased pain rating during the evaluation.
- In an evaluation of 50 clinicians, 97% reported that Medi Derma-Pro Foam & Spray Cleanser performed the same as or better than their previous cleanser. All clinicians reported that it was effective and easy to use, with only one report of stinging on application. No stinging was reported with the skin protectant ointment, with all clinicians citing effective adherence to damaged skin. The majority reported the ointment was excellent or better than (76%), or the same as (22%), their previous skin barrier product (Bradbury, 2017).
- A case series of six patients with IAD using Medi Derma-S skin barrier protectants demonstrated positive clinical outcomes, including improved skin condition; decreased pain and discomfort; increased independence; and prevention of deterioration of concurrent pressure damage (Southgate and Bradbury, 2016).
- Another case series of six patients provided evidence for Medi Derma-S Barrier Cream & Film, demonstrating rapid and sustained improvement of the periwound skin; improved erythema and less bleeding from the surrounding skin; good ease of use, including quick drying time after application; improved dressing adhesion; and efficacy with just a small amount of product (Bianchi, 2013).
- A study of non-patient volunteers investigated the effect of incontinence pad absorbency of two products from the Medi Skin Protection range (Medi Derma-S and Medi Derma-Pro) compared with other market-leading products. Results showed a small degree of product transfer onto the incontinence pads, but this did not have a major impact on urine absorption. Medi Derma-S and Medi Derma-Pro performed consistently with similar market-leading products. As such, products from the range can be used in association with incontinence pads to prevent and protect skin from incontinence-related MASD (Dykes and Bradbury, 2016).

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Figure 1: The Total Barrier Protection Wheel

## COULD YOUR PATIENTS BENEFIT FROM USE OF THE TOTAL BARRIER PROTECTION REGIMEN?

### Example Case Study

The following case study of a patient using Medi Derma-S Barrier Film highlights the importance of selecting an appropriate barrier product as part of an integrated and coordinated treatment plan (Bianchi et al, 2013).

### Background

A 69-year-old woman with diverticular disease was undergoing treatment in a rehabilitation centre following bowel resection surgery. Negative pressure wound therapy had been used to achieve closure after her wound dishisced. However, the periwound skin had become excoriated, with evidence of skin stripping.

### Treatment

The wound was gently cleansed, followed by application of the Medi Derma-S Barrier Film to protect the periwound skin from further damage. The wound was dressed with a Hydrofiber and a secondary foam with an adhesive border was applied.

### Outcome

**Week 1:** The periwound was less erythematous. The patient had no pain on application of the barrier film and the adhesive dressing stayed in place.  
**Weeks 2 and 3:** Enhanced adhesion of the secondary dressing led to a continued positive response. The patient felt confident to mobilise in preparation for discharge.  
**Week 4:** The wound was continuing to heal and the periwound skin was intact, with no signs of erythema.

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