





#### **Wound management** incorporates these crucial aspects<sup>7</sup>:

**Tissue Management** 

**Infection & Inflammation Control** 

**Moisture Balance** 

**Epithelial Edge Advancement** 

**Repair and Regeneration** 





# Best practices start with effective solutions.

The 3M wound care portfolio provides clinicians with the tools they need to help reduce the risk of and manage pressure injuries.



# Your patients' safety begins with their skin integrity.

Skin integrity and management of skin conditions (like incontinence-associated dermatitis) is critical in the prevention of pressure injuries (PI) including medical device related pressure injuries. The National Pressure Injury Advisory Panel (NPIAP) recommends a preventative skin care regimen to aid in prevention of PIs that includes cleansing and protecting the skin with a barrier product.

Patients with IAD are

More likely
to experience a facility acquired

sacral PI than patients

without IAD.8

# The connection between PI and IAD.

In addition to pressure, shear and friction, research suggests that incontinence-associated dermatitis (IAD) is a significant factor for developing pressure injuries in the sacral area.<sup>9</sup>

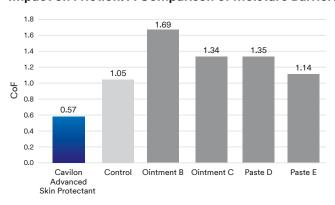
#### 3M<sup>™</sup> Cavilon<sup>™</sup> Advanced Skin Protectant

Cavilon Advanced Skin Protectant's unique formula creates a highly durable, ultra-thin, transparent, breathable and flexible barrier that protects skin from caustic, corrosive bodily fluids.

- ► Waterproof—attaches to wet, weepy damaged skin
- ► Lasts up to 7 days
- ► Helps prevent, halt and reverse the effects of IAD\*
- Forms a protective barrier that helps manage friction and can help reduce risks that contribute to Pls

# The use of traditional moisture barriers such as ointments and pastes are common practice to prevent and treat IAD. Recent research shows these products can actually increase friction.<sup>9</sup>

#### Impact on Friction: A Comparison of Moisture Barriers



Note: Data was generated in a laboratory setting using a slide sled apparatus.

#### 3M™ Cavilon™ No Sting Barrier Film

A trusted barrier film ideal for routine skin protection from moisture and friction.

- ► Over heels, elbows, tops of ears
- ► Breathable

**Protect** 

▶ Non-sticky



#### 3M<sup>™</sup> Cavilon<sup>™</sup> No-Rinse Skin Cleanser

A liquid skin cleanser that also moisturizes.

- ► Gentle, hypoallergenic, pH balanced formula
- ► Contains gentle surfactants

Cleanse

- ► Helps control odor
- ► Easy-to-use spray



 $oldsymbol{4}$ 

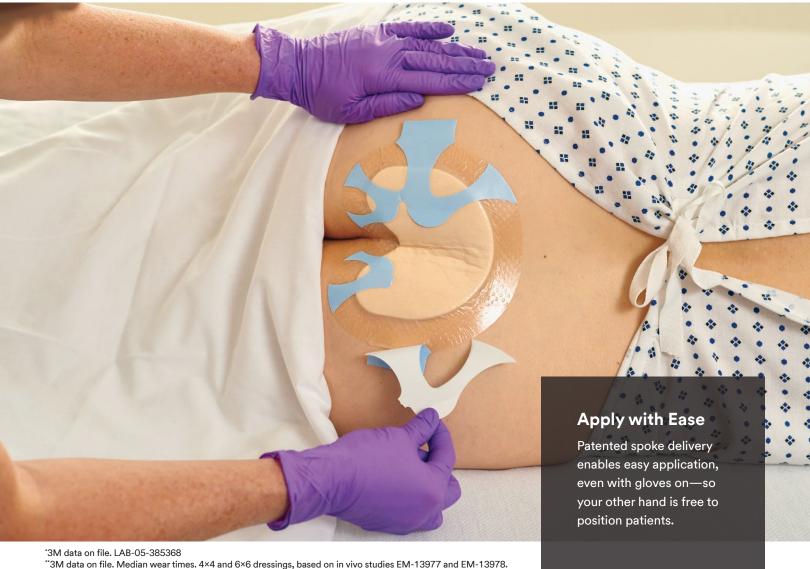
<sup>\*</sup>The protective barrier creates a favorable environment for healing.



#### **3M™ Tegaderm™ Silicone** Foam Dressings

These silicone foam dressings deliver where others may fall short or fall off—providing impressive adhesion that's strong yet gentle.

- ► Reduces exposure to high levels of tissue strain
- ► Recent clinical research has shown that these dressings help reduce tissue deformation, minimizing the effects of pressure, friction
- ► 2X longer wear time than the leading competitive silicone foam dressing when worn for seven days and lifted daily for inspection of wound/PI.\*\*
- ► Supports the ideal microclimate to help reduce the potential for skin maceration.



#### Treat patients with 3M™ V.A.C. Therapy/V.A.C. Veraflo Therapy

According to the NPIAP, negative pressure wound therapy (NPWT) has been used as a first-line treatment for wounds, and there is a growing body of evidence that supports its use for pressure injuries.

#### pain management strategies as a first line strategy. 3M™ Dermatac™ Drape

The Dermatac Drape is the first silicone acrylic hybrid drape designed for better handling, improved placement and patient comfort during V.A.C. Dressing and V.A.C. Veraflo Dressing changes.

Managing pain is priority for people with pressure injuries, the NPIAP advises the use of non-pharmacological

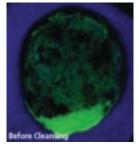
- ► Gentle to periwound skin
- ► Strong and effective seal
- ► Improved patient comfort

#### V.A.C. Veraflo Therapy

#### **Veraflo Therapy Cleaning Effect**

In an ex vivo wound study, Veraflo Therapy demonstrated effective cleansing in this model,

#### reducing debris by >90%.<sup>10</sup>





Contralateral porcine wounds were inoculated with fluoresceindextran and cleansed with saline. Cleansing was evaluated with a fluorescence camera system before and after cleaning.

#### **Veraflo Therapy Effect on** granulation tissue formation<sup>11</sup> in a porcine model.

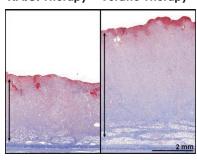


after 7 days of therapy

A significant increase in granulation thickness (p=0.005)

These results have not been confirmed in human studies.

#### V.A.C. Therapy Veraflo Therapy



Histological images from swine study showing a difference in granulation tissue thickness between 3M™ V.A.C. Granufoam™ Dressing (left) and V.A.C. Veraflo Therapy with the V.A.C. Veraflo Dressing (right) after 7 days of therapy.

Granulate

Pain

Addressing

Cleanse

**Promote Healing** 

6 |

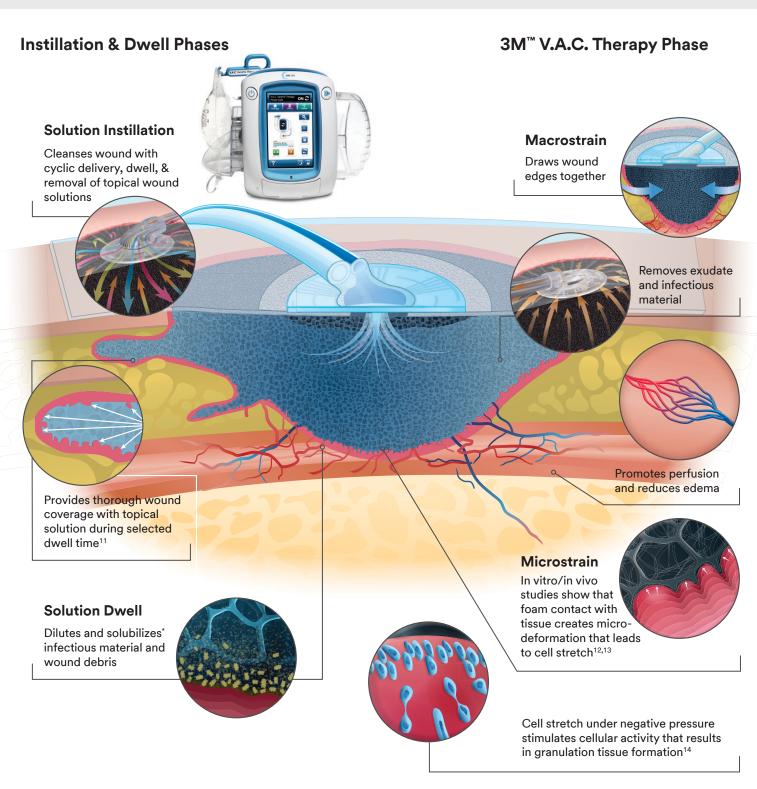
| 7

### 3M<sup>™</sup> Veraflo<sup>™</sup> Therapy Mechanisms of Action (MOA)

#### 3M™ V.A.C. Veraflo Cleanse<sup>™</sup> Dressing

Clinical study using negative pressure wound therapy with instillation to remove thick exudate. (Teot, 2017)<sup>15</sup>

Methods: A retrospective data analysis was conducted for 21 patients with 21 large, complex wounds—all treated in one hospital by several surgeons. Eleven of the patients were Para/quadriplegic, and 18 of the wounds were pressure injuries in the sacrum, ischium and trochanter, all containing substantial areas of devitalized tissue and/or yellow fibrinous slough. Wounds presented with various ranges of clinical situations, including hard-to-heal wounds and necrotic and/or fibrinous tissue on the wound surface.



<sup>\*</sup>Topical solution dependent

8 |

As with any case study, the results and outcomes should not be interpreted as a guarantee or warranty of similar results. Individual results may vary, depending on the patient's circumstances and condition.

#### **Patients:**

#### Cleaning

black non-viable tissue remaining after an average of 1-3 applications (3–9 days of therapy)

(12/21) had < 10% surface area with yellow fibrinous slough remaining after an average of 1-3 applications (3–9 days of therapy)

#### Granulation

95.2% wounds (20/21) displayed rapid granulation tissue formation under the portion of the foam directly in contact with the wound bed (3–9 days of therapy)

#### **Therapy Settings:**

#### **Dressing:**

V.A.C. Veraflo Cleanse Dressing

#### **Dwell Time:**

10 minutes

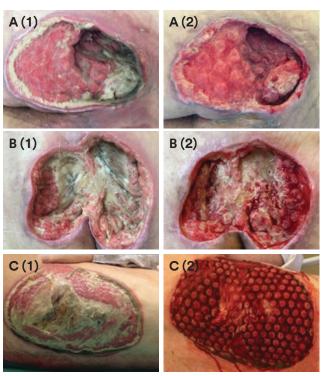
**Negative Pressure** Time: 3.5 hours

#### **Pressure Setting:** -125mmHg

#### Solution: Normal saline

#### **Representative Cases:**

After 9 Days of Veraflo Therapy<sup>15</sup>



Note: No debridement performed during dressing changes.

#### Case Study: Sacral Pressure Ulcer

Day 0: V.A.C. Veraflo Cleanse Choice Dressing with Veraflo Therapy was applied.



Day 3: Wound at first dressing change. Significant reduction in non-viable tissue and rapid increase in granulation tissue formation noted



A 64-year-old male presented with a stage 4 pressure ulcer of the sacrum present for more than 4 years. Patient comorbidities included former tobacco use, poor nutritional status, hypertension. chronic paraplegia (present for more than 15 years), leukocytosis, multiple previous pressure ulcers and osteomyelitis of the sacrum. The wound had been previously treated with NPWT, offloading, silver dressings, air mattress use, hydrofiber dressings, alginate dressings and wound debridement. Bedside sharp debridement was performed but limited by inability to achieve adequate hemostasis.

Case courtesy of Kimberly D. Hall, DNP, RN, GCNS-BC, CWCN-AP, COCN | Jessica Patterson, BSN, RN, CWOCN

Choice Dressing

**Dwell Time:** 1 minute

**Negative Pressure Time:** 

**Pressure Setting:** 

Instillation Solution:

19



#### 3M™ Kerracel™ Ag Gelling Fiber Dressing

Powered by patented Ag Oxysalts,<sup>™</sup> Kerracel Ag Dressing combines a carboxymethyl cellulose (CMC) gelling fiber dressing with Ag Oxysalts<sup>™</sup> Technology.

Ag Oxysalts<sup>™</sup> (Ag3+) provides **up to 6 times more power** than traditional silvers (Ag1+) to reduce barriers that create a hostile wound environment *in vitro*.<sup>16</sup>

- ► Kills at least 99.999% (5log) of broad spectrum bacterias including multi-drug resistant organisms<sup>+17,18</sup>
- ► Eliminates dead space at the wound bed<sup>19</sup>
- ► Locks away exudate and bacteria<sup>†20</sup>
- ► Designed to reduce the risk of periwound maceration<sup>†19</sup>



#### **3M™ Promogran Prisma™ Matrix**

Promogran Prisma Matrix is comprised of 44% Oxidized Regenerated Cellulose (ORC), 55% Collagen, and 1% Silver-ORC, which contains 25% w/w ionically bound silver, a well-known antimicrobial agent.

The powerful components of Oxidized Regenerated Cellulose (ORC) + Collagen + Silver-ORC have been shown to:

- ► Support granulation tissue formation
- ► Maintain a moist wound environment<sup>21</sup>
- ► Protect from bacterial bioburden in the dressing



† as demonstrated in vitro

## Innovating for over 50 years

Our comprehensive portfolio of advanced wound care solutions has changed the practice of medicine with proven clinical outcomes. Our commitment to improving lives of patients and supporting clinicians continues.

#### **Ordering Information**

| Product                              | Cat Number | Size                                  | Items/Box | Boxes/<br>Case | HCPCS Code                        |
|--------------------------------------|------------|---------------------------------------|-----------|----------------|-----------------------------------|
| 3M™ Tegaderm™ Silicone Foam Dressin  | gs         |                                       |           |                |                                   |
| Non-Bordered Dressing                | 90631      | 4 in. x 4.25 in. / 10 cm x 11 cm      | 10        | 4              | A6210                             |
| Non-Bordered Dressing                | 90632      | 6 in. x 6 in. / 15 cm x 15 cm         | 10        | 4              | A6210                             |
| Bordered Dressing                    | 90643      | 2 in. x 2 in. / 5 cm x 5 cm           | 10        | 6              | A6212                             |
| Bordered Dressing                    | 90640      | 3 in. x 3 in. / 7.5 cm x 7.5 cm       | 10        | 6              | A6212                             |
| Bordered Dressing                    | 90641      | 4 in. x 4 in. / 10 cm x 10 cm         | 10        | 6              | A6212                             |
| Bordered Dressing                    | 90642      | 6 in. x 6 in. / 15 cm x 15 cm         | 10        | 4              | A6213                             |
| Heel & Contour                       | 90646      | 6 in. x 6 in. / 16.5 cm x 16.5 cm     | 5         | 4              | A6212                             |
| Small Sacral                         | 90647      | 6 in. x 6.75 in. / 15 cm x 17 cm      | 10        | 4              | A6213                             |
| Large Sacral                         | 90648      | 7.25 in. x 8.75 in. / 18.5 cm x 22 cm | 5         | 4              | A6213                             |
| 3M™ Cavilon™ Advanced Skin Protectar | nt         |                                       |           |                |                                   |
| Cavilon Advanced Skin Protectant     | 5050       | 2.7 mL / applicator                   | 20        | 1              | A6250                             |
| Cavilon Advanced Skin Protectant     | 5051       | 0.7 mL / applicator                   | 20        | 1              | _                                 |
| 3M™ Cavilon™ No-Rinse Skin Cleanser  |            |                                       |           |                |                                   |
| Cavilon No-Rinse Skin Cleanser       | 3380       | 8 oz. bottle                          | 12        | 1              | A6250                             |
| 3M™ Cavilon™ No Sting Barrier Film   |            |                                       |           |                |                                   |
| Cavilon No Sting Barrier Film        | 3343       | 1 mL wand                             | 25        | 4              | Skin Care: A6250<br>Ostomy: A5120 |
| Cavilon No Sting Barrier Film        | 3344       | 1 mL wipe                             | 30        | 4              | Skin Care: A6250<br>Ostomy: A5120 |
| Cavilon No Sting Barrier Film        | 3345       | 3 mL wand                             | 25        | 25             | Skin Care: A6250<br>Ostomy: A5120 |
| Cavilon No Sting Barrier Film        | 3346       | 28 mL spray bottle                    | 12        | 1              | Skin Care: A6250<br>Ostomy: A4369 |

Disclaimer: HCPCS codes have been provided to assist you in the preparation of insurance claims. Please note, however, that the reimbursement information provided by 3M health Care and its representatives is intended to provide general information relevant to coverage and coding for 3M products. Insurers' reimbursement policies can vary and the use of the codes discussed here does not guarantee that an insurer will cover or pat at any particular level. Health care providers should exercise independent clinical judgment in choosing the codes which most accurately describe the products provided.

| Product   | Product Number | Size    | Items/Box |
|---|----------------|---------|-----------|
| 3M™ V.A.C.® Ulta Therapy Unit, United States                                  | ULTDEV01/US    |         | 1         |
| 3M <sup>™</sup> Dermatac <sup>™</sup> Drape                                   | DTAC10LDP      |         | 10        |
| 3M <sup>™</sup> V.A.C. Veraflo <sup>™</sup> Dressing                          | ULTVFL05SM     | Small   | 5         |
| V.A.C. Veraflo Dressing   | ULTVFL05MD     | Medium  | 5         |
| 3M <sup>™</sup> V.A.C. Veraflo Cleanse <sup>™</sup> Dressing                  | ULTVCL05MD     | Medium  | 5         |
| V.A.C. Veraflo Dressing   | ULTVFL05LG     | Large   | 5         |
| V.A.C. Veraflo Cleanse Dressing   | ULTVCC05MD     | Medium  | 5         |
| V.A.C. Veraflo Cleanse Dressing   | ULTVCC05LG     | Large   | 5         |
| 3M <sup>™</sup> V.A.C. Veralink <sup>™</sup> Cassette w/Spikeable Cap Adapter | ULTLNK0500     | 33mm    | 5         |
| 3M™ V.A.C. VeraT.R.A.C. Duo™ Tube Set   | ULTDUO0500     |         | 5         |
| Canister with Gel   | M8275063/5     | 500ml   | 1         |
| Canister with Gel   | M8275093/5     | 1000 ml | 1         |

NOTE: Specific indications, contraindications, warnings, precautions, and safety information exist for these products and therapies, some of which may be Rx only. Please consult a clinician and product instructions for use prior to application.

| 11

10 |

#### References:

- 1 Declines in Hospital-Acquired Conditions. Content last reviewed May 2019. Agency for Healthcare Research and Quality, Rockville, MD. https://www.ahrq.gov/data/infographics/hac-rates\_2019.html.
- 2 Health Research & Educational Trust (2016, January). Hospital Acquired Pressure Ulcers (HAPU) Change Package: 2016 Update. Chicago, IL: Health Research & Educational Trust. Accessed at www.hret-hen.org.
- 3 Zaratkiewicz, S., Whitney, J. D., Lowe, J. R., Taylor, S., O'Donnell, F., & Min ton-Foltz, P. (2010). De velopment and Implemen tation of a H ospital-Acquired Pressure Ulcer Incidence Tracking System and Algorithm. Journal for Healthcare Quality, 32(6), 44-51.
- 4 Cox J, Roche, S and Murphy V. (2018). Pressure Injury Risk Factors in Critical Care Patients: A Descriptive Analysis. Adv Skin & Wound Car,. 31(7): 328-334.
- Asmus R, Bodkhe R, Ekholm B, Thayer D, and Bradley J. The Effect of a High Endurance Polymeric Skin Protectant on Friction and Shear Stress. Poster presentation at the 2018 Symposium on Advanced Wound Care Las Vegas NV and 2019 National Pressure Ulcer Advisory Panel Annual Conference St Louis MO.
- 6 Coyer, F., Gardner, A., & Doubrovsky, A. (2017). An interventional skin care protocol (InSPiRE) to reduce incontinence-associated dermatitis in critically ill patients in the intensive care unit: A before and after study. Intensive and Critical Care Nursing, 40, 1-10.
- 7 Atkin L, Bućko Z, Conde Montero E, Cutting K, Moffatt C, Probst A, Romanelli M, Schultz GS, Tettelbach W. Implementing TIMERS: the race against hard-to-heal wounds. J Wound Care 2019; 28(3 Suppl 3):S1–S49
- 8 Gray M, Giuliano KK. (2018). Incontinence-associated dermatitis, characteristics and relationship to pressure injury: a multisite epidemiologic analysis. Journal of Wound Ostomy & Continence Nursing, 45(1):63-67.
- 9 Demarre L et al. (2015). Factors predicting the development of pressure ulcers in an at-risk population who receive standardized preventive care: secondary analyses of a multicentre randomised controlled trial. J Adv Nurs., 71(2):391-403.
- 10 Fernandez L. Early experience with the use of negative pressure wound therapy with instillation and a novel reticulated open cell foam dressing with through holes. Innovations. 2018;1(1):S4-S6.
- 11 Rycerz AM, Slack P, McNulty AK. Distribution assessment comparing continuous and periodic wound instillation in conjunction with negative pressure wound therapy using an agar-based model. Int Wound J. 2013;10:214-20. DOI: 10.1111/j.1742-481X.2012.00968x.
- 12 Saxena SM, et al. Vacuum assisted closure; microdeformations of wounds and cell proliferation. Plastic & Reconstructive Surgery. 2004; 114(5):1086-1095
- 13 McNulty AK, at al. Effects of negative pressure wound therapy on cellular energetic in fibroblasts grown in a provisional wound (fibrin) matrix. Wound Repair and Regeneration. 2009 Mar;17(3):192-9.
- 14 McNulty AK, et al. Effects of negative pressure wound therapy on the fibroblast viability, chemotactic signaling and proliferation in a provisional wound (fibrin) matrix. WOUNDS. 2007; 15:838-846.
- 15 Teot L, Boissiere F, Fluieraru S. Novel foam dressing using negative pressure wound therapy with instillation to remove thick exudate Int Wound J. 2017; 10:1111/iwj.12719.
- 16 Spina C. Silver I, II III: Chemical Characteristics, Properties, and Anti-microbial Activity. 2012. Crawford Healthcare Ltd.
- 17 Crawford Healthcare. Rate of antimicrobial efficacy of KerraCel Ag and Aquacel Ag Extra against S. aureus and P. aeruginosa in vitro. February 28, 2017. CHC R540.
- 18 Antibacterial efficacy of KERRACEL™ Ag and Aquacel® Ag Extra™ against planktonic species over 7 days in vitro. CHC R539. 2017. Crawford Healthcare Ltd.
- 19 Thomason H, Doherty C, Warde D, Stephenson C, McBain A. Silver Dressings A Balance Between Antimicrobial Efficacy and Healing Promotion. Poster presented at Spring, SAWC; May 13-17, 2019; San Diego, CA.
- 20 In vitro fluid handling properties of KERRACEL™ Ag and Aquacel® Ag Extra™. CHC R545. 2017. Crawford Healthcare Ltd.
- 21 Cullen B, Gibson M, Nisbet L. Early adoption of collagen /ORC therapies improves clinican outcomes. Poster presented WUWHS, Japan 2012.

For more information: Contact your local 3M Account Manager, call the 3M Health Care Helpline at 1-800-228-3957

View our full product portfolio at

#### 3M.com/pressureinjury

