3M™ Veraflo™ Therapy

Start smart for effective and efficient wound care.

3M™ Veraflo™ Therapy makes it easier than ever to initiate therapy.

Delayed healing and wound complications are significant care and cost burdens.

40%

of all wounds are infected or critically colonized.[1]

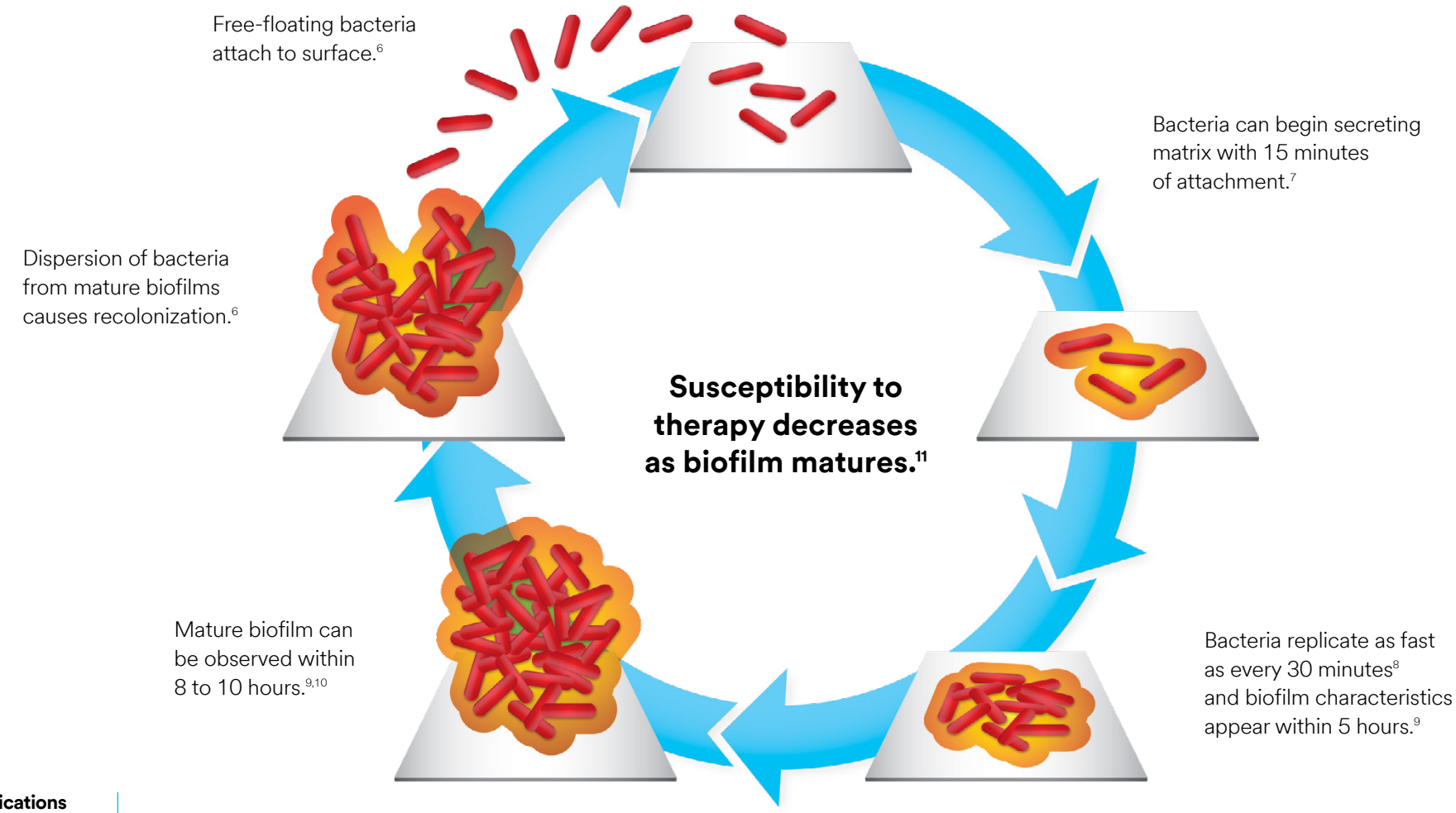
In the average 500-bed hospital, infected wounds can add 9.58 days in excess length of stay and $38,656 in excess charges.[2]

Costs are expected to increase even more as the population ages and the incidence of comorbid conditions that give rise to wounds increases.[3]

A smart start to managing bioburden.

The number of microorganisms with which an object is contaminated is referred to as the bioburden.[4]

Bioburden formation is commonly considered to occur in five main stages:[5]



3M™ Veraflo™ Therapy helps manage bioburden through repeated cleansing cycles.

Cleanse

Delivers topical wound solutions that dwell in the wound to help dilute and solubilize infectious material.[12]

Remove

Removes solubilized wound debris and infectious materials under negative pressure to manage bioburden.[13]

Promote

Promotes granulation tissue formation and perfusion to prepare the wound for closure.[14]

Reduce

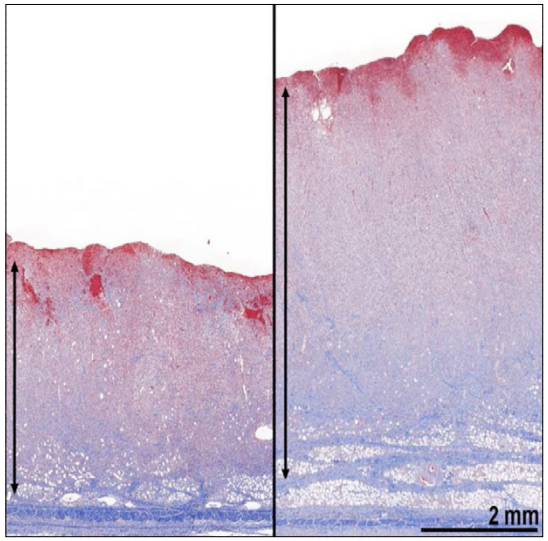
Reduces the number of surgical debridements required when used with either 3M™ Veraflo™ Cleanse Choice Complete™ Dressing or 3M™ V.A.C. Veraflo Cleanse Choice™ Dressing.

3M™ Veraflo™ Therapy: Shown to promote granulation tissue formation in a porcine model.

A significant increase in granulation thickness

43%*

(p=0.05).



*Shown to promote granulation tissue formation in porcine studies.

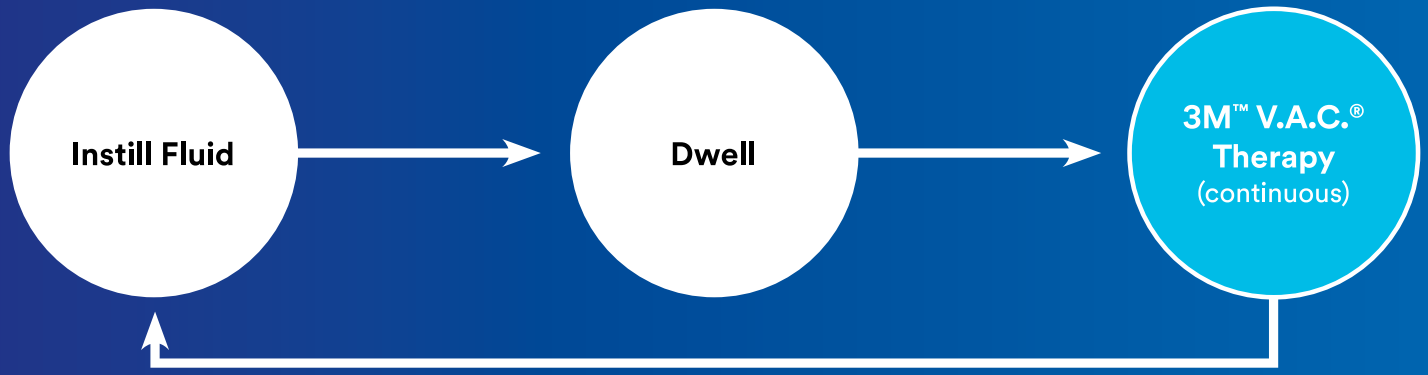
Histological images from a porcine study showed a 43% increase in granulation tissue thickness between 3M™ V.A.C.® Therapy with the 3M™ V.A.C.® Granufoam™ Dressing (left) and Veraflo Therapy with the 3M™ V.A.C. Veraflo™ Dressing (right) after 7 days of therapy.[15]

The first and only negative pressure wound therapy (NPWT) dressings that can hydromechanically remove non-viable tissue.

3M™ Veraflo™ Therapy when used with **3M™ Veraflo™ Cleanse Choice Complete™ Dressing** or **3M™ V.A.C. Veraflo Cleanse Choice™ Dressing** can help:

Soften | **Solubilize** | **Separate** | **Remove** | **Reduce**

3M™ Veraflo™ Therapy (NPWTi-d).



Veraflo Therapy combines the benefits of V.A.C.® Therapy with an instillation therapy option featuring both **automated volumetric delivery** of topical wound treatment solutions and a **programmable soak feature,** which allows solution to dwell in the wound for thorough contact.

3M™ Veraflo™ Therapy has demonstrated positive clinical outcomes over standard of care, including traditional NPWT.[16]

A systematic review of comparative studies and meta-analysis[16] evaluated the performance of Veraflo Therapy versus control in 13 studies and 720 patients with various wound types. Results of the analysis revealed Veraflo Therapy delivered significant advantages over standard of care.

>30% fewer surgical debridements.[16,17]

(1.77 debridements vs 2.69, *p*=0.008)

Wounds were **2.39 times more likely to close.**[16]

(*p*=0.01)

>50% reduced length of therapy.[16,17]

(9.88 days vs 21.8 days, *p*=0.02)

Reduced bacterial count from baseline.[16]

(Odds were 4.4 times greater *p*=0.003)

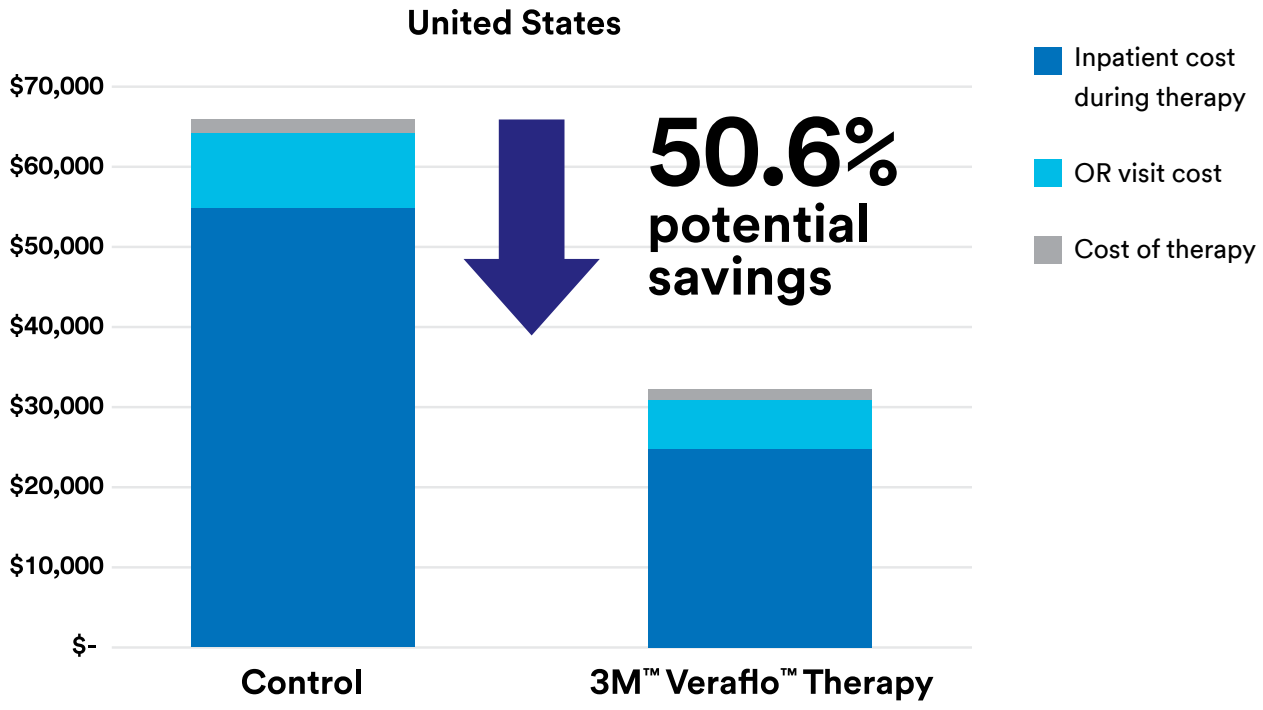
Ready for closure almost **twice as fast.**[16,17]

(7.88 days vs 14.36 days, *p*=0.003)

Use of 3M™ Veraflo™ Therapy can potentially reduce costs versus standard of care.

Based upon the meta-analysis by Allen Gabriel, MD et al. an economic model[16] was developed to compare the cost of using Veraflo Therapy to traditional wound care options, including 3M™ V.A.C.® Therapy.

Despite the higher therapy cost of Veraflo Therapy, the reduction in therapy time and required OR visits resulted in a potential savings of 50%, or up to $33,337 per patient.[17]



$33,337
in savings per patient

Overall potential cost saving with NPWTi-d versus control based on fewer OR visits and shorter therapy.

Specifications

References

Note: The model uses select study data to provide an illustration of estimates of costs for use. This model is an illustration and not a guarantee of actual individual costs, savings, outcomes, or results. Savings may not be typical and may vary.

Can the timing of 3M™ Veraflo™ Therapy initiation help impact outcomes?

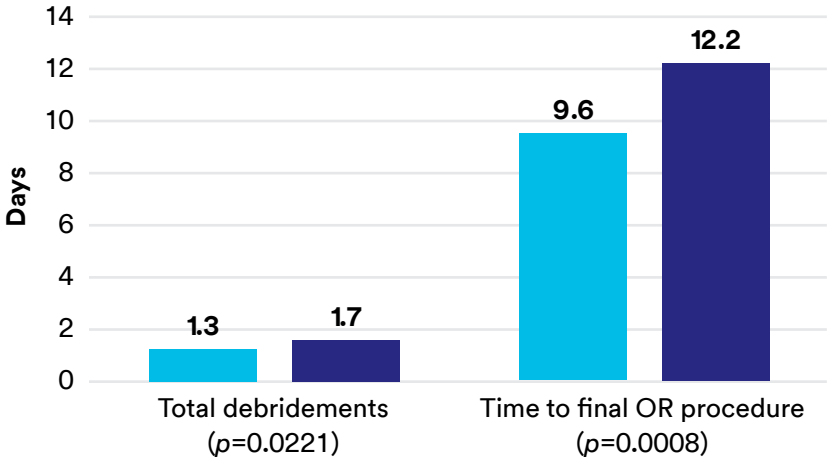
Wound complications and their associated costs can increase when treatment is delayed. A retrospective analysis of a national, all-payer hospital database of patients of 514 patients (257 per group)[18] who received Veraflo Therapy in 2019 suggests that early use* of Veraflo Therapy (within 1 day of NPWT application) compared to late initiation of Veraflo Therapy (within 2-7 days) can help improve clinical outcomes and reduce the cost of care.[18]

- Patients who received Veraflo Therapy on the first day of NPWT required **4.4 fewer days of treatment** than patients who received Veraflo Therapy from day 2 through 7 ($p<0.0001$)[18]
- Patients who received Veraflo Therapy on day 1 **had fewer wound-related readmissions†** than patients receiving late therapy (at 30 days 6 vs. 16; $p=0.0293$, and at 60 days 10 vs. 24; $p=0.0130$)[18]
- The mean **total cost of index admissions was $10,877 less** for patients who received Veraflo Therapy on day 1, $34,161 vs. patients who received Veraflo Therapy from day 2 through 7, $45,038 ($p<0.0001$)[18]

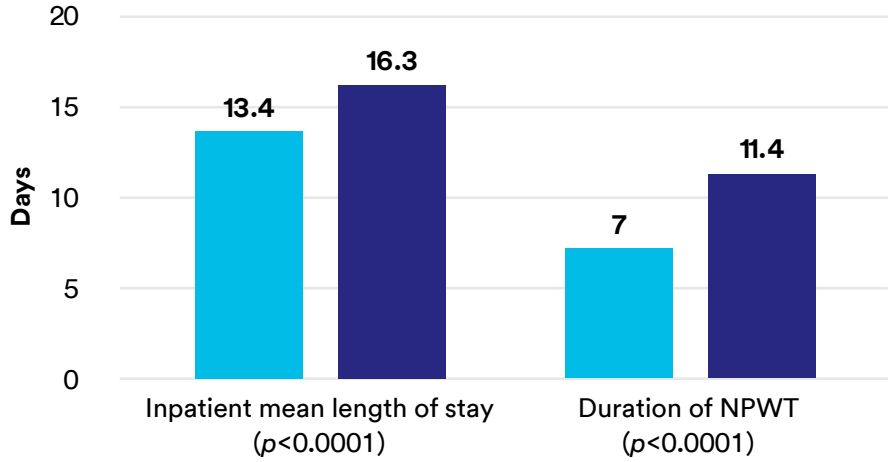
*Early initiation of Veraflo Therapy was considered on patients who received it as their initial negative pressure treatment or within one day of NPWT application, and late initiation for patients that received Veraflo Therapy within 2-7 days of initial NPWT.

†Admitting, or primary diagnosis, or primary procedure is wound-related, or patient had a HCPCS charge for NPWT.

Total debridements and time to final OR procedure



Length of stay and duration of NPWT



Early initiation | Late initiation

3M™ Veraflo™ Therapy with 3M™ V.A.C. Veraflo Cleanse Choice™ Dressing: Stage IV Pressure Injury

A 64-year-old male presented with a stage 4 pressure injury of the sacrum present for more than four years. Patient comorbidities included: former tobacco use, poor nutritional status, hypertension, chronic paraplegia (more than 15 years), leukocytosis, multiple previous pressure ulcers, and osteomyelitis of the sacrum.

The wound had been treated with NPWT, offloading, silver dressings, air mattress, hydrofiber dressings, alginate dressings, and wound debridement. Sharp debridement was performed but limited by the inability to achieve adequate hemostasis.

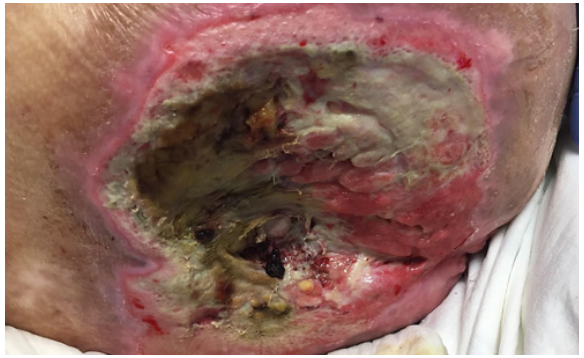
NPWT with instillation and V.A.C. Veraflo Cleanse Choice Dressing was initiated. Saline (22mL) was instilled, followed by 1 minute soak time and 30 min of negative pressure at -150mmHg. On day 7, sharp debridement was done at the bedside, removing the tip of the coccyx and non-viable slough/adipose tissue. Two days after the debridement, the therapy was interrupted due to soiling, and the patient underwent colostomy surgery. Three days post-surgery, Veraflo Therapy using the V.A.C. Veraflo Cleanse Choice Dressing was re-started. On day 5, the therapy switched to 3M™ V.A.C.® Therapy at -125mmHg for nine days.

Conservative sharp debridement was performed at the bedside, and oral antibiotics were initiated.

Request the complete clinical study from your 3M Account Representative.

As the wound required further cleansing, Veraflo Therapy using V.A.C. Veraflo Cleanse Choice Dressing was started.

Hypochlorous solution (80-100 mL) was instilled with a 10-minute dwell time, followed by 2 hours of negative pressure at -125 mmHg. Dressing changes occurred every 3 days. After 9 days, Veraflo Therapy was discontinued, and V.A.C.® Therapy was initiated.



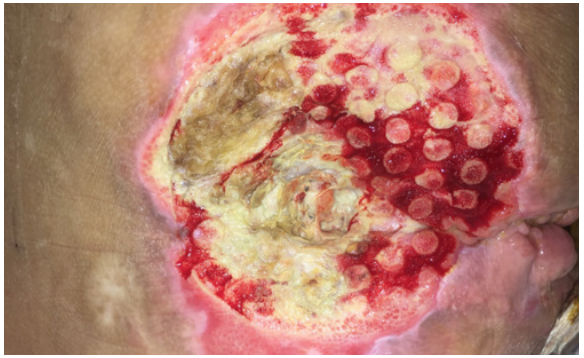
Day 0 of Veraflo Therapy: Wound following bedside sharp debridement.

Veraflo Therapy with V.A.C. Veraflo Cleanse Choice Dressing initiated.

Dwell time: 1 minute

NPWT time: 30 minutes at -150mmHg

Solution: Saline



Day 3 of Veraflo Therapy:

Wound after first V.A.C. Veraflo Cleanse Choice Dressing change.

Specifications

References

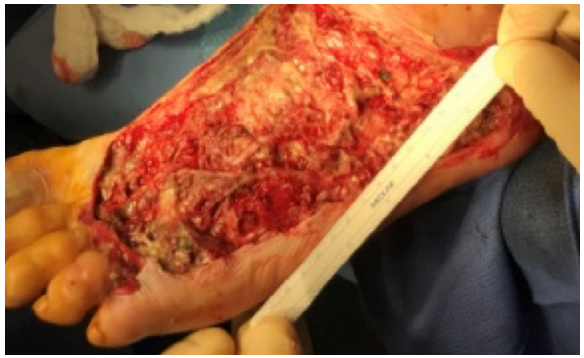
Patient data and photos courtesy of Kimberly D. Hall, DNP, RN, GCNS-BC, CWCN-AP, COCN and Jessica Patterson, BSN, RN, CWOCN

Note: 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.

3M™ Veraflo™ Therapy with 3M™ V.A.C. Veraflo Cleanse Choice™ Dressing: Chronic Wound

A 54-year-old male with hypertension, diabetes mellitus, and Charcot foot was admitted to the hospital with a chronic left foot wound. Patient was treated with an intravenous antibiotic regimen, followed by surgical debridement with excision of necrotic tissue. Veraflo Therapy using V.A.C. Veraflo Cleanse Choice Dressing was applied.

After 14 days and 4 dressing changes, therapy was discontinued. A human dermal collagen matrix was then applied to the wound for closure.

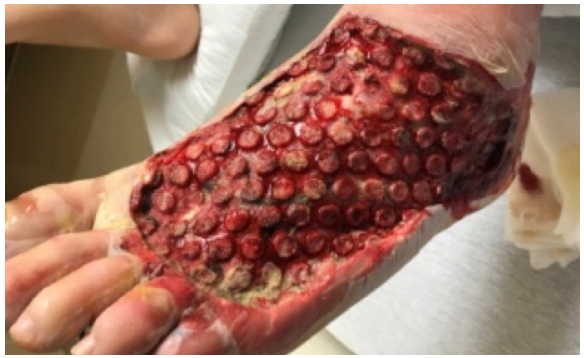


Day 0 with Veraflo Therapy: V.A.C. Veraflo Cleanse Choice Dressing is used

Dwell time: 10 minutes

NPWT time: 3.5 hours at -125mmHg

Solution: Vashe® Wound Therapy Solution



Day 2 with Veraflo Therapy:

After the wound bed displayed healthy granulation tissue with minimal devitalized tissue or thick slough, V.A.C. Veraflo Cleanse Choice Dressing was changed.

Request the complete clinical study from your 3M Account Representative.

Patient data and photos courtesy of Douglas Duke, DO; Director of Wound Care, Flowers Hospital, Dothan, AL.

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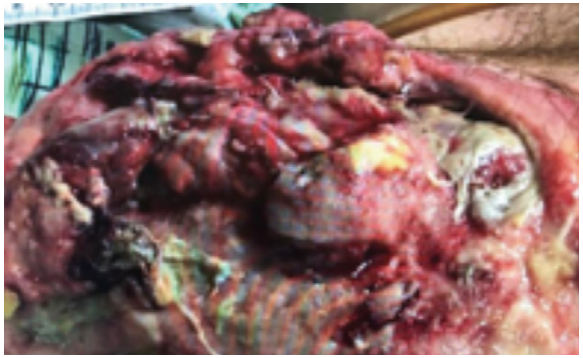
3M™ Veraflo™ Therapy with 3M™ V.A.C. Veraflo Cleanse Choice™ Dressing: Traumatic Wound

A 33-year-old male amputee with history of tobacco use, anemia, and methicillin-resistant *Staphylococcus aureus* presented with infection of above-the-knee stump. Conservative sharp debridement was performed at the bedside, and oral antibiotics were initiated. Veraflo Therapy using V.A.C. Veraflo Cleanse Choice Dressing was started.

Hypochlorous solution (80-100 mL) was instilled with a 10-minute dwell time, followed by 2 hours of negative pressure at -125 mmHg. After 9 days, Veraflo Therapy was discontinued, and 3M™ V.A.C.® Therapy initiated.

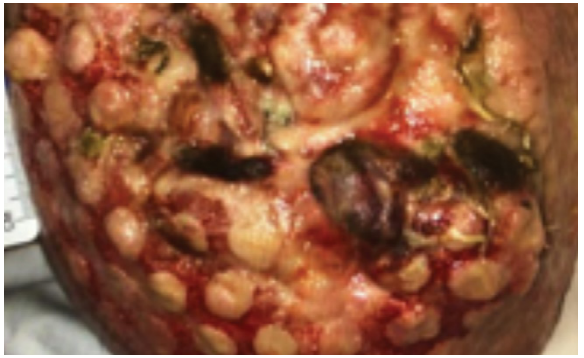


Day 0 of Veraflo Therapy: Wound at presentation

Dwell time: 10 minutes

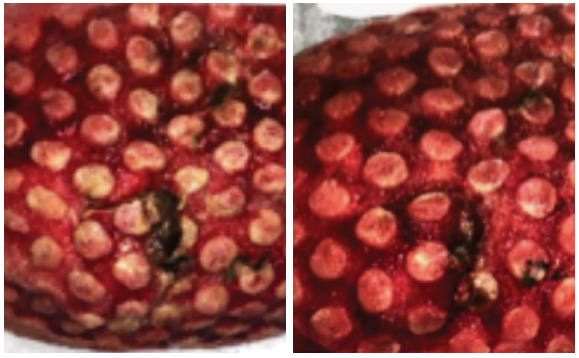
NPWT time: 2 hours at -125mmHg

Solution: Hypochlorous Solution (80-100mL)



Day 3 of Veraflo Therapy: Wound after 3 days of Veraflo Therapy with V.A.C. Veraflo Cleanse Choice Dressing use.

Wound after 3 days of Veraflo Therapy with V.A.C. Veraflo Cleanse Choice Dressing.



Day 6 and 9 of Veraflo Therapy:

Further granulation tissue and reduction in slough after 6 and 9 days of V.A.C. Veraflo Cleanse Choice Dressing. Veraflo Therapy discontinued and switched to V.A.C.® Therapy.

Request the complete clinical study from your 3M Account Representative.

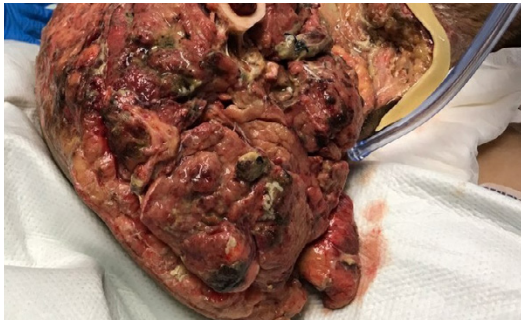
Patient data and photos courtesy of Luis Fernandez, MD, FACS, FASAS, FCCP, FCCM, FICS, University of Texas Health Science Center, Tyler, TX

Note: 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.

3M™ Veraflo™ Therapy with 3M™ V.A.C. Veraflo Cleanse Choice™ Dressing: Traumatic Wound

Following an injury, a 26-year-old female received a transfemoral amputation resulting in a soft tissue defect. During transportation to the facility, the patient had a Combat Tourniquet and received 13 units of packed red blood cells and eight units of fresh frozen plasma. The wound was surgically debrided and irrigated at different stages of the treatment. She received therapeutic plasma exchange, continuous renal replacement therapy after being diagnosed with macrophage activation syndrome, and 3M™ V.A.C.® Therapy at -125mmHg.

When surgical debridement was not an option, Veraflo Therapy was initiated using a V.A.C. Veraflo Cleanse Choice Dressing, instilling 100ml of 0.125% Dakin's Solution to help remove devitalized tissue. As wound healing progressed, Veraflo Therapy was transitioned to using 3M™ V.A.C. Veraflo™ Dressing, instilling 80ml normal saline. After the tangential excision and split-thickness skin graft, it was covered with a non-adherent layer and bolstered using V.A.C.® Therapy applied at -125mmHg. Systemic antibiotics were administered throughout the patient's treatment period.



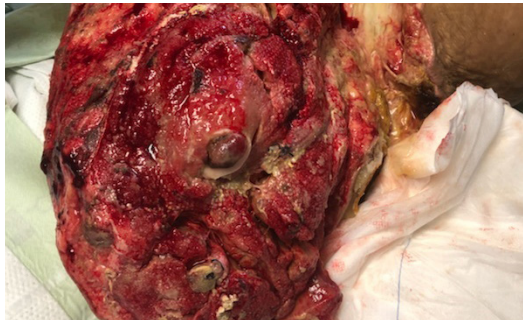
Day 0 of Veraflo Therapy:

With patient in critical condition and debridement no longer an option, Veraflo Therapy with V.A.C. Veraflo Cleanse Choice Dressing was initiated.

Dwell time: 5 minutes

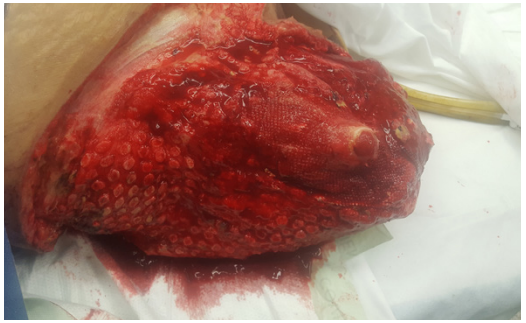
NPWT time: 2 hours at -150mmHg

Solution: Dakin's® Solution



Day 4 of Veraflo Therapy:

Wound demonstrated healing after the use of V.A.C. Veraflo Cleanse Choice Dressing.



Day 8 of Veraflo Therapy:

Wound showed absence of devitalized tissue, with increase in vascularity and significant granulation. Veraflo Therapy was transitioned to V.A.C. Veraflo Dressing.

Request the complete clinical study from your 3M Account Representative.

Patient data and photos courtesy of Brandon Hill, RN, CWCN, FACCWS; Ochsner Louisiana State University Health Shreveport, Shreveport, LA

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Start smart with 3M™ V.A.C.® Ulta Therapy System.

The only device to provide you with a comprehensive selection of negative pressure wound therapy solutions from a single convenient pump. Empower your outcomes by creating multiple efficiencies across multiple settings.

Engage the V.A.C.® Ulta Therapy System to:

- **Streamline** → Inventory requirements
- **Standardize** → Supply protocols
- **Reduce** → The number of SKUs required on the shelf
- **Manage** → Training time efficiency
- **Help** → Clinicians to respond more quickly to patients switching from one negative pressure therapy solution to another

The 3M™ Smart Instill™ Feature for 3M™ Veraflo™ Therapy.

The Smart Instill Feature uses sophisticated software that automates many of the Veraflo Therapy steps and delivers an easier and less time-consuming interaction when initiating instillation therapy:

Now with the Smart Instill Feature

Automatically determines the volume of topical wound solution to instill.

Preprogrammed therapy settings align to global advisory recommendations.[19]

Animated troubleshooting, customizable alarm, and postpone feature.

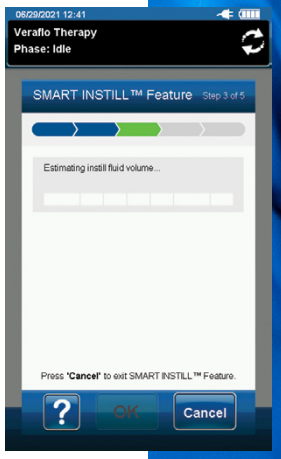
Therapy initiation steps with the 3M™ Smart Instill™ Feature.

Just another reason to start smart with 3M™ Veraflo™ Therapy.

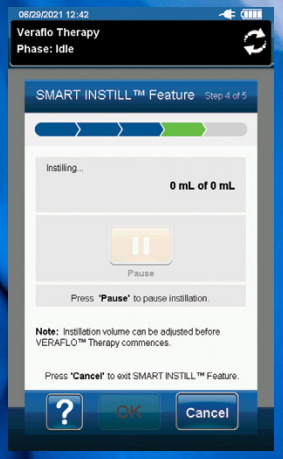
Select
Veraflo Therapy
↓
Select
Smart Instill
Feature

Canister Selection

3M™ Seal Check™ Button/Feature Automated



Fill Estimation Automated

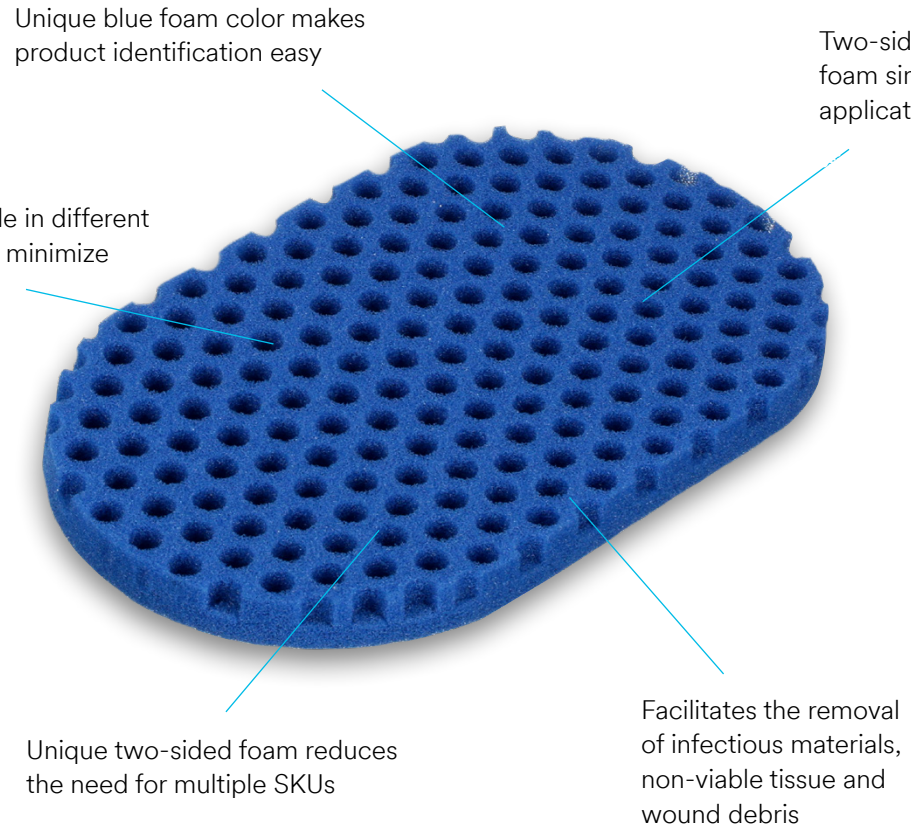


Instillation Automated

Confirmation Optional Automation

3M™ Veraflo™ Cleanse Choice Complete™ Dressing Kit.

3M™ Veraflo™ Cleanse Choice Complete™ Dressing foam has an array of 1cm x 8mm hole array providing hydromechanical movement that works in conjunction with the cyclic delivery of instillation fluid and NPWT. This combination creates a purposefully designed hydromechanical movement at the wound bed, which facilitates the stimulation of granulation tissue and removal of solubilized non-viable tissue.



Therapy Goals:

Cleanse
Cleanse wounds when slough or non-viable tissue remains

Remove
Hydromechanically remove thick, non-viable tissue and infectious materials

Promote
Promote granulation tissue formation

Reduce
Reduces the number of surgical debridements required.

3M™ Veraflo™ Cleanse Choice Complete™ Dressing Kit includes 3M™ Dermatac™ Drape.

Innovative silicone-acrylic hybrid material helps with patient comfort at dressing change.

Apply with ease.

Conforms to different anatomical locations and can be repositioned upon initial placement.

Seal the heal.

Maintains a highly effective seal for wound protection.

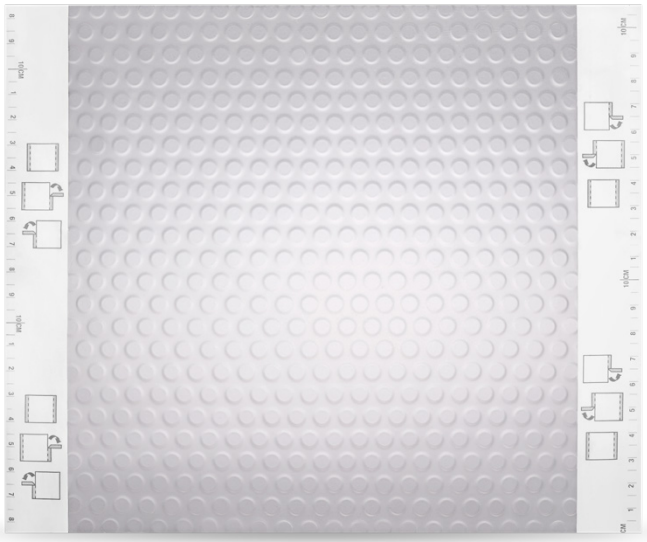
Remove with kindness.

Skin-friendly removal supports optimal healing and patient comfort over standard of care.

Feel confident with a skin-friendly drape that maintains a seal for 72 hours.

Supports the healing process:

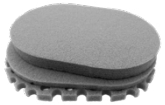
- Gentle to the skin and provides peri-wound protection
- Low tack adhesive properties of Dermatac Drape are strong enough to maintain a seal for V.A.C.® Therapy and Veraflo Therapy, yet gentle enough to help take the pain out of dressing changes[20,21,22]
- Easy to use and reduces the time associated with dressing changes compared to standard of care[20,21]



Improves patient comfort:[23]

Dermatac Drape was placed on 17 patients over a 2-week period, with dressing changes every 48 to 72 hours. At dressing changes, patients were asked how Dermatac Drape felt upon removal.

100% (n=17) of patients agreed that Dermatac Drape was **painless upon removal.**

	3M™ Veraflo™ Cleanse Choice Complete™ Dressing Kit - Medium/Large	3M™ V.A.C. Veraflo Cleanse Choice™ Dressing Kit - Medium/Large	3M™ V.A.C. Veraflo™ Dressing Kit - Small/Medium/Large
SKU	**Medium:** VFCCC05MD **Large:** VFCCC05LG 	**Medium:** ULTVCC05MD **Large:** ULTVCC05LG 	**Small:** ULTVFL05SM **Medium:** ULTVFL05MD **Large:** ULTVFL05LG 
Wound characteristics	Wounds with thick fibrinous exudate, slough, infectious material, necrotic tissue and other wound bioburden.	Wounds with thick fibrinous exudate, slough, infectious material, necrotic tissue and other wound bioburden.	Open wounds, including wounds with shallow undermining or tunnel areas where the distal aspect is visible.
Key goal(s) of therapy	• When used in conjunction with 3M™ Veraflo™ Therapy, to initiate therapy and to help facilitate the hydromechanical removal of infectious materials, non-viable tissue and wound debris • Reduces the number of surgical debridements required, while promoting granulation tissue formation, creating an environment that promotes wound healing. • Helps provide protection for sensitive peri-wound skin	• When used in conjunction with Veraflo Therapy, to initiate therapy and to help facilitate the hydromechanical removal of infectious materials, non-viable tissue and wound debris • Reduces the number of surgical debridements required, while promoting granulation tissue formation, creating an environment that promotes wound healing.	• When used in conjunction with Veraflo Therapy, to help facilitate the removal of infectious material and other wound bioburden • Generation of robust granulation tissue
Shape	Two-sided single block foam.	Block foam pre-slit in three layers.	**Small/Medium:** Spiral-cut foam **Large:** Block foam pre-slit into two layers
Application characteristics	**Easy application with flexibility:** • Single piece foam simplifies application • Patterned array of 1cm holes helps facilitate removal of thick wound exudate • Two-sided foam allows flexibility to accommodate therapy goals • 3M™ Dermatac™ Drape is conformable and easy to apply • Single or duo pad application	**Designed for custom application:** • Thin layers for improved conformability • Multiple layers provide application options for wounds with varying depths • Ideal for dirty wounds needing active therapy • Single or duo pad application • Patterned array of 1cm holes helps facilitate removal of thick wound exudate	**Small/Medium:** • Size without scissors • Precut area for pad application when used for bridging • Single pad application **Large:** • Ideal for large surfaces areas with shallow depths • Provided with 3M™ V.A.C. VeraT.R.A.C. Duo™ Tube Set for extended surface area coverage

When therapy goals are achieved with 3M™ Veraflo™ Therapy, step down to other 3M negative pressure wound therapies.

3M™ V.A.C.® Therapy – continue negative pressure wound therapy without instillation while in the acute setting. Canisters are available in 500cc or 1000cc.

3M™ ActiV.A.C.™ Therapy System – when transitioning patients outside of the hospital choose a portable NPWT solution. Its canister size can hold up to 300cc of exudate.

3M™ Prevena™ Therapy Single Use Negative Pressure Wound Therapy – Portable, single-use, disposable therapy unit provides NPWT to help manage closed incisions and low-exudating, small- to medium-sized open wounds. Canisters can hold up to 150 cc of exudate.

3M offers a variety of services to partner with facilities, providers and patients, delivering what is needed most to advance care.

Order

- Online platform for ordering and inventory management
- Same-day delivery

Place

- Local clinical, sales, and service support
- Bedside support during product application

Therapy

- In-home education for dressing changes/alarm resolution
- Mobile app for wound patients
- Digital educational content available on demand

Discharge

- Seamless on-site support for patients transitioning to Out of Hospital care settings
- Payor authorization assistance
- NPWT telemonitoring for patients' in-home care settings
- Billing management support
- 3M device cleaning, repair, and quality control to minimize downtime

3M™ V.A.C.® Ulta Therapy System ordering information for 3M™ Veraflo™ Therapy

Pump & Components	
ULTDEV01/US	3M™ V.A.C.® Ulta Therapy Unit, United States
ULTLNK0500	3M™ V.A.C. Veralink™ Cassette, 5-pack
ULTDUO0500	3M™ V.A.C. VeraT.R.A.C. Duo™ Tube Set, 5-pack
M8275063/5	500mL Canister with gel for use with 3M™ V.A.C.® Ulta Therapy Unit
M8275093/5	1000mL Canister with gel for use with 3M™ V.A.C.® Ulta Therapy Unit

Kits & Dressings	
VFCCC05MD	3M™ Veraflo™ Cleanse Choice Complete™ Dressing Kit, medium, 5-pack
VFCCC05LG	3M™ Veraflo™ Cleanse Choice Complete™ Dressing Kit, large, 5-pack
ULTVCC05MD	3M™ V.A.C. Veraflo Cleanse Choice™ Dressing, medium, 5-pack
ULTVCC05LG	3M™ V.A.C. Veraflo Cleanse Choice™ Dressing, large, 5-pack
ULTVCL05MD	3M™ V.A.C. Veraflo Cleanse™ Dressing, medium, 5-pack
ULTVFL05SM	3M™ V.A.C. Veraflo™ Dressing, small, 5-pack
ULTVFL05MD	3M™ V.A.C. Veraflo™ Dressing, medium, 5-pack
ULTVFL05LG	3M™ V.A.C. Veraflo™ Dressing, large, 5-pack
DTAC10LDP	3M™ Dermatac™ Drape, Case of 10

For more information visit 3M.com/Veraflo

Note: Specific indications, contraindications, warnings, precautions, and safety information exist for these products and therapies. Please consult a clinician and product instructions for use prior to application. This material is intented for healthcare professionals. Rx only.

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Solventum Medical Surgical
2510 Conway Ave.
St. Paul, MN 55144 USA

Phone 1-800-228-3957
Web Solventum.com