



# Advancing wound care in the changing healthcare environment

For providers, this service has never offered more challenges – or rewards

A SPECIAL SUPPLEMENT TO

**McKnight's**  
LONG-TERM CARE NEWS

SPONSORED BY



# 360° of Healing™

*Only from V.A.C.® Therapy. Only from KCI.*



When you see the V.A.C.® Therapy System from KCI, you see the NPWT device that set the standard for advanced wound healing. But what you get is so much more. Only KCI encompasses the latest technologies, nationwide support and documented results no other NPWT company can match. Which is why V.A.C.® Therapy is not only the most complete NPWT, it's also the most prescribed, with over 3,000,000 wounds treated.\* **That's 360° of Healing™**

**For more information, call 1-800-275-4524 or visit [www.kci1.com](http://www.kci1.com).**

**Visit us at AHCA — Booth 1523**

\*Among NPWT providers. KCI data on file.

**NOTE: Specific indications, contraindications, warnings, precautions and safety information exist for KCI products and therapies. Please consult a physician and product instructions for use prior to application.**  
CAUTION: Federal law restricts this device to sale/rental by or on the order of a physician.

©2010 KCI Licensing, Inc. All Rights Reserved. All trademarks designated herein are proprietary to KCI Licensing, Inc., its affiliates and/or licensors. DSL#10-0160.MKJ (Rev. 10/10)





Dear Long-term Care Professionals,

There is no greater validation of our work than hearing someone say "thank you." Hopefully you hear the phrase every day as expression of gratitude from patients and caregivers. At KCI, we work hard to earn your thanks and loyalty.



It may sound simple, but winning your trust and delivering on our promises takes hard work, consistency and follow-through. I can't lose sight of this as we advance the KCI wound care business through innovation, diversification, global expansion and improving our organizational readiness.

While KCI operates on a global scale, I'm constantly reminded that healthcare is a local industry. The needs of long-term healthcare professionals in the U.S. are unique to you.

Our research and clinical teams partner with you and your healthcare professionals to truly understand your world and needs. We listen and use your input — use it to create new ideas, new methods, and new devices — all with your business in mind. We'll continue to build new products designed for you, based on your ideas and suggestions.

From easy-to-use dressings, to cutting-edge products that reach more wound types, to time-saving practices, we help you achieve optimal care for your patients while maintaining an economic advantage.

Please read more about the new KCI offerings and how they perform in the long-term care setting. Ask us questions, hopefully we're asking some of you, too.

Thank you for setting high standards in patient care and the trust you put in KCI as you meet those standards.

A handwritten signature in black ink that reads "Mike".

Mike Genau  
Global President, Active Healing Solution™  
KCI

Mailing:  
P.O. Box 659508  
San Antonio, Texas 78265-9508  
(800) 275-4524 / Fax (210) 255-6998

Corporate:  
8023 Vantage Drive  
San Antonio, Texas 78230-4726  
(210) 524-9000

Manufacturing:  
4958 Stout Drive  
San Antonio, Texas 78219-4334  
(210) 662-9191

---

Providing optimal wound care in the evolving health-care environment has never been more challenging — or rewarding



# Advancing wound care in the

Healthcare professionals face many issues in the long-term healthcare space, from changes within the prospective payment system, to challenges with staffing and unnecessary hospital readmissions. One issue that tends to be overshadowed by this array of challenges is the costly treatment of chronic wounds.

Pressure ulcers, the most common type of chronic wound, affect 2.5 million patients annually.<sup>1</sup> Despite reduction in reimbursement to the long-term environment, cost of care for stage III and IV pressure ulcers is still estimated to be as high as \$70,000 per case, and the total cost of treatment is estimated at more than \$11 billion per year within U.S. healthcare.<sup>1</sup>

Considering the impact treating these chronic wounds has on long-term facilities' operating margins and profits, early intervention and the use of cost-effective, evidence-based treatment options for chronic wound patients are needed now more than ever.

#### **V.A.C.<sup>®</sup> Therapy: Aiding in Your Treatment of Wound Care Patients**

Kinetic Concepts, Inc. (KCI), a leading global medical technology company, provides a negative pressure wound technology (NPWT) platform that can aid in the cost-effective treatment of chronic wound care patients. With more published clinical evidence than any other form of NPWT, KCI V.A.C.<sup>®</sup> Therapy has been selected as the treatment of choice for more than four million patients worldwide since its introduction in 1996.

The therapies in the KCI NPWT platform supply critical negative pressure therapy to a patient's wound site, enhancing the healing process. Indicated to treat a wide range of wound types, the V.A.C.<sup>®</sup> Therapy platform consists of a therapy unit that delivers negative pressure; SensaT.R.A.C.<sup>™</sup> Technology that regulates pressure at the wound site to provide prescribed therapy settings; and, V.A.C.<sup>®</sup> Granu-Foam<sup>™</sup> Dressings that conform to the wound and enable uniform pressure and removal of wound fluids.

**“KCI products, in general, enable us to achieve wound healing in less time.”**

*Susan Nelson  
Brian Center*



Six different, easy-to-use therapy models, designed with the clinician and patient in mind, allow healthcare professionals in long-term healthcare and skilled nursing facilities (SNFs) to focus on achieving desired patient outcomes in a timely manner.

#### **The Truest Test: Product Performance in the Clinical Setting**

When Nursing Director Susan Nelson, a registered nurse at the Brian Center Health & Rehab Hickory Viewmont, uses advanced wound care products, she expects them to actually deliver what they intend to provide.

Located in Hickory, North Carolina, the Brian Center Health & Rehab Hickory Viewmont is a SNF that tends to senior patients facing serious illnesses or disabilities. Some patients require short-term rehabilitation, while others require a longer medical treatment regimen.

Susan relies on products, like V.A.C.<sup>®</sup> Therapy, to address many wound care needs of the Brian Center's ever-changing patient population.

In her five years using KCI products, she has found them effective from a clinical and economical perspective. [“V.A.C.<sup>®</sup> Therapy and] KCI products, in general, enable us to achieve wound healing, while helping to reduce overall therapeutic costs and nurse management time,” says Susan.

# changing healthcare environment

The Brian Center uses V.A.C.® Therapy units they purchased from KCI to treat dehisced and general surgical wounds, pressure ulcers, diabetic ulcers, and trauma wounds. KCI's lightweight, portable devices help patients at the center return to their activities for daily living, which is any SNF's goal for its wound care treatment programs.

### The Science & Research Supporting NPWT in Wound Healing

In a research study titled "The Consistent Delivery of Negative Pressure to Wounds Using Reticulated, Open Cell Foam and Regulated Pressure Feedback," published last year in the *Wounds* medical journal, Amy McNulty, Ph.D., lead researcher with KCI, addresses the use of negative pressure wound therapy (NPWT) using a reticulated open cell foam (ROCF) as a means to manage and promote wound healing. Through the use of an adhesive drape, a reticulated open cell foam (ROCF), and a vacuum pump, the transfer of consistent negative pressure to the wound site ultimately produces a wound healing environment.

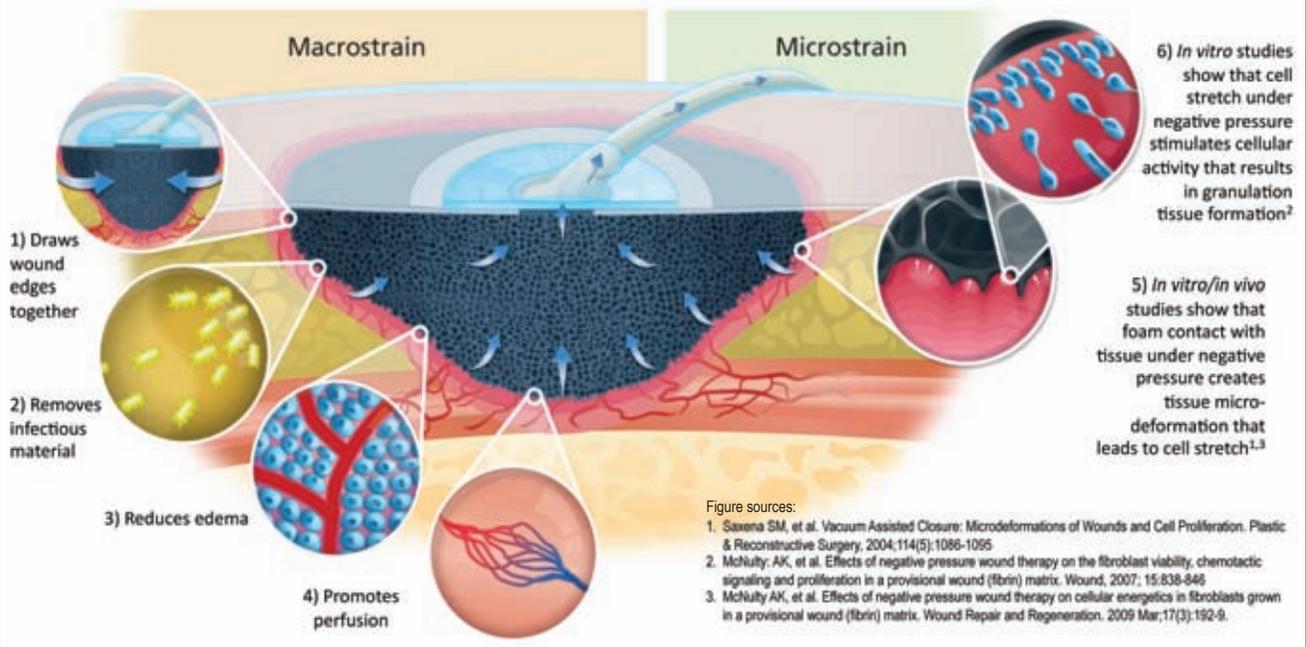
According to Dr. McNulty's study, two important actions occur at the wound site when negative pressure wound therapy is applied to the site: macrostrain and microstrain. *Macrostrain* is the visible change of wound shape and size that occurs upon application of negative pressure through ROCF. As negative



pressure is applied, the ROCF begins to collapse. As it continues to collapse, wound edges are drawn together, creating a smaller wound. A smaller wound size requires less granulation tissue to fill. *Microstrain* is the cellular micro deformation that occurs when the tissue contacts the foam dressing under negative pressure. This change in cell shape induces a cellular response that leads to wound healing. Over subsequent dressing changes, the granulation tissue fills the wound bed, further reducing the wound's volume and preparing it for secondary or delayed primary closure.

## V.A.C.® Therapy creates an environment that promotes wound healing

The application of uniform negative pressure delivered by V.A.C.® Therapy induces a physical response (Macrostrain) and a biological response (Microstrain). Macrostrain draws wound edges together, removes exudate and infectious material, reduces edema, and promotes perfusion. Microstrain creates tissue microdeformation, causing cells to stretch. Cell stretch leads to cell migration and proliferation that result in the formation of granulation tissue.





## KCI: Joined with the Skilled Nursing Community in the Business of Wound Care

KCI's R&D, clinical and sales representatives have a long history of partnering with skilled nursing professionals to address the localized needs of healthcare facilities.

According to Bryan Hatton, the administrator of the Brian Center, "There is acuity in long-term managed care that I think rivals, and sometimes exceeds, that of some hospitals' depending upon the marketplace. The support and demands on these facilities to maintain high degrees of care are even greater, and administrators and directors of nursing want to know what current products and future protocols are available — and they want to know before their competition."

As long-term care facilities continue to see shifts in their patient populations and reimbursement, KCI is tailoring products and services to meet these needs.

"We understand that skilled nursing facilities are instrumental in the care of wound care patients," says Mike Genau, president of the Active Healing Solutions Division of KCI. "Many wound care patients discharged from hospital facilities may not be able to go immediately home to complete their treatment and, instead, may go to long-term care facilities and nursing facilities, where the cost to care for wounds is very high. KCI is committed to helping manage these costs through new products and programs that play an effective role in these long-term care environments."

In the last several years, KCI has turned a focus to innova-

tion, bringing to market new and improved, cost-effective wound care solutions that can help long-term care facilities deliver optimum outcomes under tight budgets. The KCI V.A.C.<sup>®</sup> Simplace™ and GranuFoam™ Bridge family of dressings and Skin IQ™ Microclimate Manager (MCM) are just a few examples of this commitment to innovation and acknowledgement of SNF needs.

Clinical tests have demonstrated how V.A.C.<sup>®</sup> Simplace™ and GranuFoam™ Bridge dressings can allow for faster application of negative pressure dressings to patients. A recent study indicated a 50% reduction in dressing application steps for both novice and experienced users when using V.A.C.<sup>®</sup> Simplace™ and V.A.C.<sup>®</sup> GranuFoam™ Bridge Dressings versus standard foam NPWT dressings.<sup>2</sup> As staffing is a key driver in nursing care today, SNFs can use this reduction to their advantage when serving the needs of their patient population.

Just last year, the company also released Skin IQ™ Microclimate Manager (MCM), a breakthrough in microclimate management for the prevention and treatment of skin breakdown that works very well in long-term care facilities. Powered by Negative Airflow Technology (NAT), Skin IQ™ MCM continually draws excess moisture away from the skin/mattress interface and helps control skin temperature. Skin IQ™ MCM helps maintain patient comfort. In a healthy human study of 16 subjects, when Skin IQ™ MCM was used on a pressure redistribution surface, it significantly improved the subjects' level of comfort.<sup>4</sup>

Skin IQ™ MCM provides an outstanding moisture vapor transfer rate (MVTR): moisture transfer rate of 130 (g/m<sup>2</sup>)/hr is greater than the average (97.7 (g/m<sup>2</sup>)/hr) for conventional low air loss (LAL) surfaces.<sup>4</sup> By removing excess moisture from the skin/mattress interface, Skin IQ™ MCM may help reduce the incidence of periwound maceration.<sup>2,3</sup>

## Commitment to Wound Care Continues

KCI listens to healthcare professionals, like Susan and Bryan, who are on the frontline of wound care treatment and management. Bryan said he appreciates that KCI has heard their request to "demystify and remove any complexities from wound dressings, and put in place operational systems that allow us to maintain [an optimum] level of care, while continuing to run our business profitably."

It's this kind of candid talk and understanding between KCI and long-term care facility personnel that leads to the company's innovation of the wound care solutions that continues to meet the evolving needs of administrators and nursing professionals.

<sup>1</sup> Baharestani M, de Leon J, Mendez-Eastman S. Consensus Statement: A Practical Guide for Managing Pressure Ulcers with Negative Pressure Wound Therapy Utilizing Vacuum-Assisted Closure- Understanding the Treatment Algorithm. *Advances in Skin and Wound Care*. 2008 Jan;21(Suppl1):1-20.

<sup>2</sup> KCI data on file.

<sup>3</sup> Reger SI, Adams TC, Madklebust JA, Sahgal V. Validation test for climate control on air-loss supports. *Arch Rhys Med Rehabil*. 2001;82(5):597-603.

<sup>4</sup> Bergstrom N, Braden BJ, Laguzza A, Holman V. The Braden Scale for predicting pressure sore risk. *Nurs Res*. 1987;36(4):205-210.

<sup>5</sup> KCI data on file.

