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Collagenase SANTYL® Ointment 250 units/g is the only FDA-approved enzymatic debrider that selectively removes necrotic tissue without harming granulation tissue.

Collagenase SANTYL® Ointment is indicated for debriding chronic dermal ulcers and severely burned areas.

Occasional slight transient erythema has been noted in surrounding tissue when applied outside the wound. One case of systemic hypersensitivity has been reported after 1 year of treatment with collagenase and cortisone. Use of Collagenase SANTYL® Ointment should be terminated when debridement is complete and granulation tissue is well established.

Please see complete prescribing information on adjacent page.

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DESCRIPTION: Collagenase SANTYL® Ointment is a sterile enzymatic debriding ointment which contains 250 collagenase units per gram of white petrolatum USP. The enzyme collagenase is derived from the fermentation by Clostridium histolyticum. It possesses the unique ability to digest collagen in necrotic tissue.

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There is no information available on collagenase absorption through skin or observed in clinical investigations and clinical use. If deemed necessary the enzyme may be inactivated by washing the area with povidone-iodine and further cleansing.

INDICATIONS AND USAGE: Collagenase SANTYL® Ointment is indicated for debriding chronic dermal ulcers and severely burned areas.

CONTRAINDICATIONS: Collagenase SANTYL® Ointment is contraindicated in patients who have shown local or systemic hypersensitivity to collagenase.

PRECAUTIONS: The optimal pH range of collagenase is 6 to 8. Higher or lower pH conditions will decrease the enzyme’s activity and appropriate precautions should be taken. The enzymatic activity is also adversely affected by certain detergents, and heavy metal ions such as mercury and silver which are used in some antiseptics. When it is suspected such materials have been used, the site should be carefully cleansed by repeated washings with normal saline before Collagenase SANTYL® Ointment is applied. Soaks containing metal ions or acidic solutions should be avoided because of the metal ion and low pH. Cleansing materials such as Dakin’s solution and normal saline are compatible with Collagenase SANTYL® Ointment. Debilitated patients should be closely monitored for systemic bacterial infections because of the theoretical possibility that debriding enzymes may increase the risk of bacteremia.

A slight transient erythema has been noted occasionally in the surrounding tissue, particularly when Collagenase SANTYL® Ointment was not confined to the wound. Safety and effectiveness in pediatric patients have not been established.

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DOSAGE AND ADMINISTRATION: Collagenase SANTYL® Ointment should be applied once daily (or more frequently if the dressing becomes soiled, as from incontinence). When clinically indicated, crosshatching thick eschar with a #10 blade allows Collagenase SANTYL® Ointment more surface contact with necrotic debris. It is also desirable to remove, with forceps and scissors, as much loosened detritus as can be done readily. Use Collagenase SANTYL® Ointment in the following manner:

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3 – Collagenase SANTYL® Ointment may be applied directly to the wound or to a sterile gauze pad which is then applied to the wound and properly secured.
4 – Use of Collagenase SANTYL® Ointment should be terminated when debride-ment of necrotic tissue is complete and granulation tissue is well established.

HOW SUPPLIED: Collagenase SANTYL® Ointment contains 250 units of collagenase enzyme per gram of white petrolatum USP.

Do not store above 25°C (77°F). Sterility guaranteed until tube is opened.

Collagenase SANTYL® Ointment is available in 15 gram and 30 gram tubes.
Why is it that the people who are the most caring toward others neglect their own needs? Have you noticed this?

I’ve seen it time and time again. The healthcare worker who’s always the last to leave work, who always volunteers to work those extra shifts so patient care won’t be compromised, who never says “No” when it comes to something a friend needs. These same compassionate and devoted clinicians seem to always worry about others and not themselves.

Recently, a personal friend who lives out of state contacted me with the sad news that his wife had died from an inoperable brain tumor at age 59. After swallowing my guilt for not keeping in touch with them better over the years, he related the emotional story of their last year together. He became her private hospice “nurse” and she died at home in his arms. He went on to tell me he’d neglected a serious health problem of his own over the last few years and now was seeking medical attention. His doctors told him his chances of surviving this invasive cancer were compromised due to his delay in seeking treatment.

I had to ask myself, “Did he really think his wife, my friend, would have been happy about the choice he made not to leave her side, which resulted in neglect of his own health?” I knew her well, and the answer is emphatically no.

What about your patients? How do you think they’d react if they knew you were neglecting your family, your financial security, or your health to care for them? The bottom line is this: When you take care of others, they care for you in return. You become their role model. Is your current self-neglecting behavior what you want your patients to model? Probably not.

If you can’t learn to do the things necessary to take better care of yourself, then do it to honor those you care for—to respect their wishes. We all know the saying, “If you don’t take care of yourself, you won’t be there to care for others.” Put yourself first and you’ll be in a better position to care for others and model the behavior you wish to see in them. Caring—for ourselves and others—is what our profession is all about.

Donna Sardina, RN, MHA, WCC, CWCMS, DWC, OMS
Editor-in-Chief
Wound Care Advisor
Cofounder, Wound Care Education Institute
Plainfield, Illinois

Taking care of the caregiver—you
Frequent debridement improves wound healing

A study in *JAMA Dermatology* reports that frequent debridements speed wound healing. “The more frequent the debridement, the better the healing outcome,” concludes “Frequency of debridements and time to heal: A retrospective cohort study of 312,744 wounds.” The median number of debridements was two.

Most of the wounds in the 154,644 patients were diabetic foot ulcers, venous leg ulcers, and pressure ulcers. The study authors note that debridement is a “key process” in wound bed preparation and starting the healing process.

The findings are congruent with previous studies and are based on an analysis of the largest wound data set to date.

Too many mast cells can slow wound healing

Normally, mast cells promote wound healing, but when lymphedema is present, too many mast cells can delay healing, according to a study conducted in mice and published by the *Journal of Leukocyte Biology*.

An overabundance of mast cells leads to overproduction of interleukin-10, which can prevent certain white blood cells from reaching the wound, according to “Delayed wound healing due to increased interleukin-10 expression in mice with lymphatic dysfunction.”

“Improvement of lymphedema is important for treatment of skin ulcers,” says Makoto Sugaya, MD, PhD, a study coauthor. “It is not just fluid retention, but inflammatory cells and cytokines that cause delayed wound healing.”

Young-onset type 2 diabetes more harmful than type 1

Among patients with an onset of diabetes between ages 15 and 30, those with type 2 diabetes experience higher mortality, more diabetes-related complications, and more “unfavorable” cardiovascular risk factors than those with type 1, according to a study published by *Diabetes Care*.

“Long-term complications and mortality in young-onset diabetes: Type 2 diabetes is more hazardous and lethal than type 1 diabetes,” which analyzed 354 patients with type 2
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diabetes and 470 patients with type 1 diabetes, found that despite equivalent glycemic control and shorter disease duration, unfavorable cardiovascular risk factors were greater in the type 2 group, “even soon after diabetes onset.” Neuropathy and macrovascular complications were also higher.

**Study identifies how sacral wound dressings reduce ulcer risk**

“Enhancing pressure ulcer prevention using wound dressings: what are the modes of action?” studied how sacral wound dressings work to reduce risk of ulceration and found that their use can decrease the amplitude of shear stress and friction that reaches the skin of patients at risk for ulcers. The dressings can also “redirect these forces” to wider areas, which reduces mechanical load.

A study in *International Wound Journal* that bench tested nine commercially available dressings concludes that the dressings can redistribute pressure, which provides greater load redistribution.

**Activated protein C improves chronic lower leg ulcers**


The wound area in those who received APC was significantly reduced. Biopsies of the wound edges showed “reduced inflammatory cell infiltration and increased vascular proliferation” after APC treatment. Patients treated with APC also experienced significantly reduced stress scores, indicating an improvement in quality of life.

APC was applied twice weekly for 4 weeks, with the final follow-up at 20 weeks. A total of 6 patients received APC and 6 received a placebo.

The researchers conclude that the pilot study “suggests that APC is a safe topical agent for healing chronic lower leg ulcers in patients with diabetes and provides supporting evidence for a larger clinical trial.”

**Risk factors for orthopedic SSIs identified**

Diabetes, smoking, surgery longer than 3 hours, no antibiotic prophylaxis, and previous operations are all risk factors for surgical site infections (SSIs) after orthopedic surgery, finds a study published by the *American Journal of Infection Control*.

“Epidemiology and outcomes of surgical site infections following orthopedic surgery” studied 2,061 patients who underwent orthopedic surgery during a 2-year period. Of the 45 clinical SSIs, 33 had a positive culture; 68.6% of bacterial isolates were resistant to cefuroxime.
Self-reported physical functioning predicts mortality in patients with diabetes

Patients with diabetes who report poor physical functioning had a 39% higher death rate even after adjusting for age, sex, race/ethnicity, education, income, body mass index, smoking, and comorbidities, according to “Self-reported physical functioning and mortality among individuals with type 2 diabetes: insights from TRIAD.”

The researchers studied 7,894 patients (average age of 62 years at baseline) with type 2 diabetes in the Translating Research Into Action for Diabetes (TRIAD), a prospective observational study of diabetes care in managed care. Physical functioning was assessed with the Short Form Health Survey, and the National Death Index was searched for deaths over 10 years of follow-up.

They study in the Journal of Diabetes and Its Complications concludes that self-reported physical functioning “was a robust independent predictor of mortality and may be a useful benchmark for tailoring clinical care.”
Quality patient education is essential for comprehensive health care and will become reimbursable under health-care reform in 2014. However, it’s difficult to provide effective education when time for patient interactions is limited. You can enhance your instruction time—and make your teaching more memorable—by using the techniques of analogy and metaphor.

**Powerful tools**
Analogy and metaphor are figures of speech that have been used since the time of Aristotle and Plato. (See Comparing analogy and metaphor.) Why are they so powerful for patient education? Because analogy and metaphor can make abstract concepts real, helping patients understand why they are ill and how suggested changes will help correct underlying causes.

Analogy and metaphor create a form of cognitive “scaffolding” on which patients can hook new material to information they already understand. Educational theorist David Ausubel suggests that learners (such as patients) require frameworks into which new information can be assimilated. An analogy or metaphor can act as an anchoring concept or an organizer for providing such a framework.

Research supports that analogies and metaphors can improve communication with seriously ill patients, such as those with advanced cancer. Casarett and colleagues conducted a cross-sectional study of audio-recorded conversations between patients and physicians. The results demonstrated that analogies and metaphors improved patient understanding and communication.

**Using analogy and metaphor effectively**
How can analogy and metaphor be used in patient education? The uses are limited only by the clinician’s creativity.

A primary care practitioner uses analogy to discuss good self-care practices. She tells patients that persons with quality self-care
drive their bodies like Cadillacs while self-neglecters drive their bodies like jalopies.

Even bad life circumstances can be used educationally. A psychiatric colleague uses the metaphor of a toaster: Acute illness is like a toaster. You put something in (the patient) and it comes out better than it was before (in terms of resilience). An oncology specialist colleague discusses the role of heredity (genetic predisposition) and environment in cancer development: Genes load the gun; environment pulls the trigger.

A metaphor for chronic wound healing is the light switch: The prolonged inflammatory process of delayed healing is similar to a light switch stuck in the “on” position. Interventions, such as debridement and other advanced modalities, aim at switching the light (inflammation) off. Another colleague specializing in GI disorders likens constipation to “not taking the garbage out enough.”

In a relatively recent systematic review of effective teaching strategies and methods of delivery for patient education, the analysis of published research studies found that the best patient education strategies were culturally appropriate, patient specific, and structured. Analogy and metaphor can address all three characteristics if well planned.

The literature also suggests that humor (used appropriately) can augment the use of analogy and metaphor and allow teachers to HAM it up for better learning. Humorous analogies or metaphors that are relevant to patients’ interests offer maximum effectiveness. The vividness and active engagement that typify funny metaphors and analogies have the capability to instruct in ways beyond words alone. Laughter and humor may allow the patient to experience a “refreshing pause” cognitively and help “ha-ha” become “aha!”

Metaphors and analogies can describe the education or learning process itself. The clinical educator helps the patient “plant seeds,” “peel away the layers,” or “switch on a light bulb.” The educator can capture boring, lifeless lecture material and “bring it to life.” This outcome is particularly helpful in more abstract areas, such as mental health issues and science concepts.

**Optimal outcomes**

Understanding quality patient education is important for optimal patient outcomes. Techniques such as analogy and metaphor can help patients learn more effectively and create a positive, relaxed learning environment. More importantly, metaphor and analogy appeal to multiple learning senses and can instruct in ways eclipsing the limits of words.

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**Comparing analogy and metaphor**

**Analogy** is a figure of speech that draws attention to a likeness in order to argue that other attributes of the comparison are similar. It involves comparing two different things with some similarities. When a clinician tells a patient that this treatment may make him feel like he’s been kicked by a horse, the provider has used analogy.

**Metaphor** is a figure of speech that suggests a person or thing is something else based on some similarity between the two. The approach allows transfer of ideas from one concept to another. Though metaphor and analogy are often used interchangeably, they differ. Analogy focuses on the expression of similarities while metaphor depicts association between two dissimilar phenomena. When someone says violence is a societal cancer, he or she is using metaphor. When using analogy, a clinician may say violence attacks a community like cancer cells attack the human body.
Selected references


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Janice M. Beitz is professor of nursing at Rutgers University School of Nursing in Camden, New Jersey.
Preventing pressure ulcers starts on admission

By Jeri Lundgren, BSN, RN, PHN, CWS, CWCN

The first 24 hours after a patient’s admission are critical in preventing pressure ulcer development or preventing an existing ulcer from worsening. A skin inspection, risk assessment, and temporary care plan should all be implemented during this time frame. Essentially, it’s the burden of the care setting to prove to insurers, regulators, and attorneys the pressure ulcer was present on admission and interventions were put into place to avoid worsening of the condition. Of course, patients also benefit from having their condition identified and treated promptly.

Taking a close look
Newly admitted patients must undergo a thorough skin inspection within 24 hours of admission. Many times, a wound care nurse is designated to perform this task. Although wound care nurses bring great expertise, their lack of availability can sometimes delay assessment. To avoid delay, all nurses must be capable of completing a skin inspection and accurately documenting their findings. A wound care nurse can educate nurses in skin inspection and documenting skin concerns.

Assessing risk and planning care
Performing a risk assessment within the first 24 hours ensures interventions are put in place to prevent skin breakdown and promote healing. That’s done as part of developing a temporary care plan. The care plan should contain interventions designed to minimize, stabilize, or remove identified risk factors. The interventions need to be put in place as soon after admission as possible.

Whenever possible, try to identify risk factors and/or wounds before the patient’s admission to ensure interventions are in place before the patient arrives.

Even if the care setting allows several days to complete a care plan, a temporary care plan for prevention of skin breakdown is strongly recommended within the first 24 hours. At a minimum, the temporary care plan should address the following:

- support surface for the bed and the wheelchair/sitting surface
- individualized turning and repositioning schedules for patients and helping patients to be as mobile and active as possible
- incontinence management, if needed
- keeping the skin clean and dry
- keeping the heels elevated off the bed
- addressing nutritional/hydration concerns for wound healing, dietary referral
- referrals to therapy, as appropriate
- daily inspection of the skin by nonlicensed staff and weekly skin inspections by licensed staff
- risk assessment per policy.
If the patient has a wound, the temporary care plan should also include:
• applying topical treatment, as ordered
• monitoring the patient for signs and symptoms of infection
• reporting any decline or changes to the primary care provider and family designee
• completing a comprehensive assessment of the wound at least weekly.

If nurses are uncomfortable with developing a care plan based on the risk assessment, it might be helpful for a manager or wound care expert to develop a “cheat sheet” with potential interventions that correlate with the individual risk factors identified. Once the temporary care plan is developed, it should be communicated to the nurses, nursing assistants, and others on the interdisciplinary team.

Meeting your goal
Your goal as a clinician is to prevent the development of a pressure ulcer and ensure proper interventions are in place to promote healing in pressure ulcers present on admission. If you complete a skin assessment and risk inspection and then develop and communicate a care plan within the first 24 hours of admission, you should be successful in achieving that goal.

Jeri Lundgren is director of clinical services at Pathway Health in Minnesota. She has been specializing in wound prevention and management since 1990.
Improving outcomes with noncontact low-frequency ultrasound

This tool can enhance clinical outcomes and reduce costs in acute-care settings.

By Ronnel Alumia, BSN, RN, WCC, CWCN, OMS

Achieving excellent wound care outcomes can be challenging, given the growing number of high-risk patients admitted to healthcare facilities today. Many of these patients have comorbidities, such as obesity, diabetes, renal disease, smoking, chronic obstructive pulmonary disease, and poor nutritional status. These conditions reduce wound-healing ability.

At the same time patient acuity has been rising, reimbursement for some types of care has been declining. For certain hospital-acquired conditions, such as stage III or IV pressure ulcers and certain surgical-site infections, reimbursement has been eliminated. Thus, clinicians can’t choose products based solely on their proven ability to obtain a good clinical outcome; they also must consider economic factors. Noncontact low-frequency ultrasound (NLFU) can help improve clinical outcomes and provide cost savings.

Ultrasound: Simple but effective

NLFU delivers sound waves to tissues through a saline mist. Unlike most wound care treatments, whose effects are limited to the surface, NLFU penetrates into and below the wound bed to reach previously inaccessible tissues. (See A glimpse of NLFU in action.)

Ultrasound energy produces biophysical effects from mechanical stimulation of cells, promoting wound healing. A mechanical vibration, ultrasound is transmitted at a frequency above the upper limit of human hearing—20 kHz. The most common form of therapeutic ultrasound...
uses devices that operate in the 1- to 3-MHz range to treat various musculoskeletal disorders with a thermal effect. Diagnostic ultrasound, in contrast, operates in a high-frequency (20 to 40 MHz) range. It has a wide number of uses, from fetal monitoring to echocardiography.

In contrast, NLFU delivers low-frequency (40 kHz), low-intensity (0.2 to 0.6 W/cm²) ultrasound energy to the wound bed with no thermal effect. With most ultrasound therapy, a gel serves as a conduit to deliver sound waves to tissues. However, NLFU uses a saline mist, which eliminates contact with tissue and thus is painless.

NLFU can be performed by nurses with special training. The patient usually undergoes the procedure at the bedside three to five times per week, with the machine preset to a certain number of minutes based on wound measurement (length x width). Typically, the course of therapy ends when the desired outcome is achieved or the patient is discharged or transferred out of the facility.

The science of NLFU

The micromechanical forces produced by ultrasound energy at a cellular and molecular level have a wide range of effects on the wound-healing process, including reduction of bacteria within and below the wound bed. Unlike other body cells, bacteria have a rigid cell membrane; repeated pressing of sound waves can disrupt the bacterial membrane, causing cell death. (See NLFU: The science behind the solution.)

Laboratory tests show NLFU reduces a wide range of bacteria, including some of the hardest to treat, such as methicillin-resistant *Staphylococcus aureus* (MRSA), vancomycin-resistant enterococci (VRE), and *Acinetobacter baumannii*. In a clinical study of patients who had stage III pressure ulcers with high levels of bacteria, punch biopsies were used to determine baseline and posttreatment bacterial counts. Results showed significant reduction in *S. aureus* (93.9%), *A. baumannii* (94%), and *Escherichia coli* (100%) after six NLFU treatments over a 2-week period. In live animal studies, NLFU disrupted the bacterial biofilm after just three treatments. (See NLFU and the healing process.)

Sustained inflammation is a common barrier to healing. NLFU reduced pro-inflammatory cytokines in two studies—one involving patients with chronic diabetic foot ulcers and the other involving patients with nonhealing venous leg ulcers. This reduction correlated to reduced wound areas in these previously nonhealing wounds. In one of these studies, researchers reported a decrease in MMP-9, a matrix metalloproteinase that breaks down new granulation tissue and delays healing.

Studies also show NLFU increases va-
sodilation, stimulates vascular endothelial growth factor and angiogenesis, promotes early release of growth factors, and provides greater amounts of high-quality collagen. The overall result of these cellular effects is accelerated healing.

Clinical outcomes
Use of NLFU is supported by clinical data, including a meta-analysis, three randomized-control trials, 11 peer-reviewed studies, and multiple case series. A 2011 meta-analysis compiled data from eight published studies reporting the effect of NLFU on wound size and healing rates in 444 patients with various chronic wounds. It found 85% wound-area reduction in a mean of 7 weeks, wound-volume reduction of 80% at a mean of 12 weeks, and 42% complete wound closure at 12 weeks. By comparison, a meta-analysis of standard-of-care treatment found only 24% complete wound closure at 12 weeks. Thus, NLFU achieves almost twice the healing of the standard treatment.

Besides consistently speeding healing...
of open wounds, NLFU is an effective early treatment for suspected deep-tissue injuries (sDTI). In a study of 127 sDTIs treated with standard of care alone (63) or standard of care with NLFU (64), only 22% of standard-of-care-alone sDTIs resolved without opening or progressed only to a stage II pressure ulcer, compared to 80% in the NLFU arm. At my hospital, we found similar results in our patient population using NLFU to resolve sDTIs before they became full-thickness wounds. (See Clinical outcomes and cost savings from NLFU.)

NLFU has been used in wound care settings across the country for several years. Increasingly, it’s being used in acute-care settings as clinicians are grasping its substantial clinical and economic benefits. This technology can help healthcare providers meet both clinical and economic outcome goals. NLFU is rapidly becoming the new standard for early sDTI intervention.

Selected references


Ronnel Alumia is a wound care and ostomy nurse at Acuity Specialty Hospital of New Jersey in Atlantic City.
Imagine your physician has just told you that your rectal pain and bleeding are caused by invasive colon cancer and you need prompt surgery. She then informs you that surgery will reroute your feces to an opening on your abdominal wall. You will be taught how to manage your new stoma by using specially made ostomy pouches, but will be able to lead a normal life.

Like most people, you’d probably be in shock after hearing this. More than 700,000 people in the United States are living with ostomies. Every year, at least 100,000 ostomy surgeries are done, preceded by a conversation much like the one above. So how do patients recover from the shock of learning about their pending surgery—and then return to a full life?

Although each patient goes through the process differently, interviews and studies of patients reveal several common reactions—concerns about a negative body image, anxiety over whether they’ll be able to care for the stoma, and worries over how the stoma will affect their relationships. (See Ostomy shock: How patients react.)

**Psychological adaptation**

According to the United Ostomy Associations of America (UOAA), patients who’ve had ostomy surgery tend to follow a similar path of adjusting their life skills, based on the consequences of their specific surgery. Typically, they go through the four recovery phases below. However, these phases aren’t as cut and dried as they might seem. Patients adjust at their own individual rates. Some may experience the phases in a different order, may skip a phase, or may regress and pass through one or more phases multiple times.

- **Shock or panic.** This phase occurs immediately after learning of the need for an ostomy, or right after surgery in some cases. Patients seem distracted and anxious, unable to focus on or participate in teaching and demonstration sessions. They have trouble retaining information (including patient teaching)
Ostomy shock: How patients react

After learning they’ll need an ostomy, many patients have the following thoughts and feelings.

- **Shock.** Is this really happening to me?
- **Disgust.** I’m repulsed by this imposed change to my bowel (or bladder) function. I don’t want to empty or otherwise manage the feces (or urine) in my pouch several times a day.
- **Depression.** I’ll never be able to live a normal life. Maybe I should just give up.
- **Fear.** Will the surgeon be able to remove all the cancer or diseased areas of my bowel? What will my prognosis be after surgery?
- **Anxiety.** How will I be able to socialize with others? What if they detect a smell? What if my pouch leaks? Will strangers avoid me if they find out about my stoma? Will people I already know reject me? Will I ever be able to be sexually active again? How will I return to work and care for my family with this drastic change in my functioning?

during this phase, which commonly lasts days to weeks.

- **Defense, retreat, or denial.** The patient practices avoidance techniques, may refuse to participate in stoma care, and may exhibit defensive behaviors. This phase may last weeks to months.
- **Acknowledgement.** During this phase, the patient starts to accept the reality of living with a stoma. As this phase begins, some patients may exhibit lack of interest, sadness, hopelessness, and anxiety. Some are angry and blame others for their condition.
- **Adaptation and resolution.** Anger and grief decrease and patients learn to cope with their circumstances constructively. This phase may take up to 2 years to achieve.

Whichever recovery phase they’re in, ostomy patients can gain solace by knowing others in their situation are going through the same recovery process. Direct them to www.ostomy.org/supportgroups.shtml for help finding a support group (if desired). Tell them about helpful videos; for example, “Living with an Ostomy” from UOAA features patients talking about their experience.

Some patients may wish to express their feelings through painting, drawing, writing, or other art forms. For some, a referral to a psychologist or therapist may be warranted.

How clinicians can help

Studies show a patient’s return to full functioning after ostomy surgery depends on the quality and consistency of patient teaching. The need for effective patient education makes us acutely aware that teaching isn’t simply about reciting facts. To provide effective teaching, first determine where your patient is in the recovery process by gauging his or her emotional needs. For instance, a patient who’s angry and in denial isn’t ready to learn the details of stoma management. During the adaptation and resolution process, clinicians must maintain a supportive and understanding approach to help the patient accept body changes and regain the previous quality of life. Maintaining a compassionate approach makes this easier.

Compassion counts

The role of the ostomy specialist is to provide patient teaching, coupled with good clinical skills and compassion. For some patients, your ability to convey compassion may be more important than any other aspect of the care you provide. The following story illustrates this point.

A home health patient had been married for 49 years and was looking forward to his 50th wedding anniversary. But then he was hospitalized for a bowel obstruction due to colon cancer, and had to have an ileostomy. His diagnosis was terminal. His wife chose to care for him at home with
the help of a local hospice organization. Within a few days, both were at wit’s end because of his continuous severe pain. Also, they couldn’t maintain the seal on the pouching system, and effluent leakage had severely denuded his entire abdomen. The regular hospice nurse was empathetic, but couldn’t maintain the pouch seal for more than 2 or 3 hours. The nurse’s agency contacted an ostomy management nurse specialist, who used her clinical expertise to relieve the pouching problem and resolve the pain.

The ostomy nurse used her compassion to resolve the next issue: The patient had two things on his “bucket list.” He wanted to travel to his son’s home to visit one last time, and he wanted to be present for his 50th anniversary celebration. His wife hired a driver for the road trip, and the ostomy nurse helped by mapping out the trip route and making arrangements for trained ostomy nurses along the way to be available in case their services were needed. She packed individual pouching supplies and included detailed pouch-change instructions in writing.

The patient and his wife had a successful road trip with the help of nurses along their route. They returned home to a beautiful anniversary celebration. Both were happy. He was at home with his wife—the love of his life for 50 years. Several days later, he died in his sleep. He expressed thanks for the expertise that had helped relieve her husband’s pain in his last days. But she said the “above and beyond” actions the ostomy nurse had taken in arranging for their road trip had made the biggest difference to them as they approached their final goodbyes.

Long-term care needs

Ostomy patients continue to need professional care for many years. Patients are concerned about food, clothing, and ostomy appliances, which can lead to a consistent need for specially trained clinicians to help them cope with the challenge of living with an ostomy. Even when patients reach the adaptation phase and have accepted this challenge, difficulties may occur. At any point, they may need to adjust and adapt to a specific concern. When they do, trained ostomy professionals must be available to provide skilled evaluation and education. In fact, patients with stomas (and their family members) require care throughout the life span.

Patients with stomas may need assistance, counseling, training, and care at any time—to help them cope with a new or recurring problem or to maintain an optimistic view and learn how to make needed adjustments. The Ostomate Bill of Rights from UOAA states: “The ostomate shall have post-hospital follow-up and lifelong supervision.” If you’re among those who care for ostomates, make sure that life-long supervision includes a generous portion of compassion.

Selected references


Gail Hebert is a clinical Instructor with the Wound Care Education Institute in Plainfield, Illinois. Rosalyn Jordan is senior director of Clinical Services at RecoverCare, LLC, in Louisville, Kentucky.
What you need to know about collagen wound dressings

By Nancy Morgan, RN, BSN, MBA, WOC, WCC, DWC, OMS

Description
Collagen, the protein that gives the skin its tensile strength, plays a key role in each phase of wound healing. It attracts cells, such as fibroblasts and keratinocytes, to the wound, which encourages debridement, angiogenesis, and reepithelialization. In addition, collagen provides a natural scaffold or substrate for new tissue growth.

Collagen dressings stimulate new tissue growth and encourage the deposition and organization of newly formed collagen fibers and granulation tissue in the wound bed. These dressings chemically bind to matrix metalloproteinases (MMPs) found in the extracellular fluid of wounds. MMPs normally attack and break down collagen, so it’s thought that wound dressings containing collagen give MMPs an alternative collagen source, leaving the body’s natural collagen available for normal wound healing.

Indications
Examples of wounds that may benefit from a collagen dressing include:
- partial- and full-thickness wounds
- wounds with minimal to heavy exudate
- skin grafts and skin donation sites
- second-degree burns
- granulating or necrotic wounds
- chronic nonhealing wounds (to jump-start wounds that are stalled in the inflammatory phase by reducing mediators of inflammation).

Contraindications
Don’t use collagen dressings in the following circumstances:
- third-degree burns
- patient sensitivity to bovine (cattle), porcine (swine), or avian (bird) products
- wounds covered in dry eschar.

How to apply
Some collagen products will require a secondary cover dressing. Application technique varies based upon manufacturer recommendations.

Frequency of dressing changes
The frequency of dressing changes varies depending on the brand, but ranges from daily to every 7 days.
Collagen provides a natural scaffold or substrate for new tissue growth.

**Formulations**
A variety of topical formulations of collagen are available, such as freeze-dried sheets, pastes, pads, powder, and gels. Some dressings include alginates or even antimicrobial additives. The collagen source varies—bovine, porcine, or avian.

**Examples**
BGC Matrix®, BIOSTEP® Collagen Matrix; Catrix® Wound Dressing; CellerateRX® Gel or Powder; ColActive® Plus; Excellagen®; FIBRACOL® Plus; Promogran Prisma® Matrix; Puracol® Plus; Stimulen™ Collagen Gel, Lotion, Powder, or Sheets; Triple Helix Collagen Dressing

The HCPCS (Healthcare Common Procedure Coding System) codes for collagen dressings are A6021-A6024.

Nancy Morgan, cofounder of the Wound Care Education Institute, combines her expertise as a Certified Wound Care Nurse with an extensive background in wound care education and program development as a nurse entrepreneur. Read her blog, "Wound Care Swagger."

Information in Apple Bites is courtesy of the Wound Care Education Institute (WCEI), copyright 2013.

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A new job can be stimulating, but it can also be stressful. Not only will you have new responsibilities, but you’ll also have a new setting, new leaders, and new colleagues. And the quicker you can figure out who’s who and what’s what—without stepping on anyone’s toes—the better off you’ll be.

But establishing positive relationships while performing your new job well can be tricky. And early missteps can have a lasting effect on your working relationships and your effectiveness. That’s why I recommend using the four tactics below, starting on day one.

Be positive and prepared for orientation
Most healthcare settings have established orientation processes. You may have to attend an orientation class, work with a mentor, complete an orientation checklist, and read required materials, such as policies and procedures. Orientation can seem mechanical because it’s the same for everyone and may be similar to orientations you’ve gone through at other jobs. But you must project a positive attitude because during orientation you will meet your new leaders and colleagues. And first impressions do matter.

Plan to come to orientation well rested, even if you’re used to working nights and must attend a 7:30 a.m. class. Being well rested gives you more energy for eye contact and positive conversation with your new colleagues. Introducing yourself with a pleasant smile and a firm handshake are important unwritten expectations in healthcare. They tell people that you care and you’re ready to work in your new position.

Early in the orientation process, you will likely see areas ripe for improvement. Taking the time to complete evaluation forms is one way to begin expressing yourself and your opinions.

Build goodwill
Most clinicians are hard-working, devoted employees, who often feel unrewarded. Bringing candies or a light snack to share on your first day of orientation can open opportunities for conversation and give your colleagues a sense that you care. Of course, you should ask your supervisor or review the healthcare setting’s policy before offering such treats.

You can also win over your colleagues by simply doing the job you were hired to do as well as you can. You may feel that asking questions places a burden on your new colleagues. But questions show that you care about getting things right the first time.

Usually, showing respect and common courtesy helps you build goodwill, too. Sometimes, though, no matter what you do, you will be working with people who are unreceptive or difficult by nature. Breaking down their defenses may be easier than you think. Start by asking their opinion about a process or procedure. Giving prickly people the respect they
think they deserve is one way of disarming them. Acknowledge their experience and skills when seeking their assistance. Most people want to be recognized for what they know and what they contribute.

**Listen to gossip**

When you are new, pay attention to the grapevine but don’t participate in it. Listening to gossip can help you understand an organization’s culture, key events in its past, and the idiosyncrasies of coworkers. It can also help you avoid awkward situations. Suppose the coworker you thought was difficult by nature is dealing with a major family illness or loss. Knowing about the situation can prevent you from causing embarrassment and hurt feelings.

One method for obtaining such information without appearing to pry is to ask an approachable colleague who seems to be “plugged in.” Ask simple questions about processes. For example, you might ask, “How does Jane like to receive report at the change of shift?” Chances are good that knowledgeable coworkers will pepper their responses with personal and useful information. Your coworker might reply, “Keep report short. Since her divorce, Jane seems to want the ‘cut-to-the-chase’ version.” With this approach, you get the information you need without looking as though you are angling for it.

**Let your light shine**

Initially, you will want to impress your coworkers by telling them how much you know and by sharing all your great ideas for improvement. Face it: No one really wants to hear, “At the last place I worked, we did (fill in the blank), and it worked great!” Resist the impulse. Such statements can sound threatening to established employees. The staff members may think they’re doing pretty well already—or at least well enough that they don’t need advice from someone who just walked in the door.

A better tactic is to identify the influential people in your area and find a reason to work with them. (Hint: A clinician who is quoted by other clinicians is an influential person.) Gain the trust of influential people by being professional, competent, and pleasant. Keep in mind that it will take time for these people to get to know and trust you.

Clinicians tend to follow the opinions of only a few people in the work setting, regardless of experience or clinical evidence. And gaining the trust of those few influential people can provide opportunities to create a buzz around your thoughts and ideas.

**Valuable experience**

You were hired because someone in authority thinks you have what it takes to do the job. But to do your new job well, you also need to develop positive relationships, so you fit in quickly and gain valuable experience for wherever your career takes you.

**Selected references**


Mortell N. Adjusting to your new job. Lab Anim (NY). 2007 Sep;36(8):46

Gregory S. Kopp is a staff nurse in the medical ICU at Alaska VA Medical System in Anchorage.
Dealing with difficult people

Find out how to cope with the clams, volcanos, snipers, and chronic complainers in your midst.

By Rose O. Sherman, EdD, RN, NEA-BC, FAAN

Unfortunately, most clinicians can’t avoid having to work with difficult people. However we can learn how to be more effective in these situations, keeping in mind that learning to work with difficult people is both an art and a science.

How difficult people differ from the rest of us
We can all be difficult at times, but some people are difficult more often. They demonstrate such behaviors as arguing a point over and over, choosing their own self-interest over what’s best for the team, talking rather than listening, and showing disrespect. These behaviors can become habits. In most cases, difficult people have received feedback about their behavior at some time, but they haven’t made a consistent change. (See Is she a bully or a difficult person?)

Difficult personality types
Leadership consultant Louellen Essex identifies four types of difficult personalities. You can probably identify the personality types of some of the difficult people you deal with from the list below.

• The Volcano is abrupt, intimidating, domineering, arrogant, and prone to making personal attacks. Using an extremely aggressive approach to get what he or she wants, the Volcano may behave like an adult having a temper tantrum. Volcanos don’t mind making a scene in a public place.

• The Sniper is highly skilled in passive-aggressive behavior. He or she takes potshots and engages in nonplayful teasing. Snipers are mean spirited and work to sabotage their leaders and colleagues.

• The Chronic Complainer is whiny, finds fault in every situation, and accuses and blames others for problems. Self-righteous, Chronic Complainers see it as their responsibility to complain to set things right—but rarely bring solutions to the problems they complain about.

• The Clam is disengaged and unresponsive, closing down when you try to have a conversation. He or she avoids answering direct questions and doesn’t participate as a team member.

Changing your response
You may not be able to change a difficult person’s behavior, but you can change how you respond to it. By learning to disengage effectively, you can avoid getting hooked into the difficult-behavior cycle.

When responding to a difficult person, you have several choices—doing nothing, walking away, changing your attitude, or changing your behavior. Doing nothing may not be the best choice because over time it can lead you to become increasingly frustrated. Walking away may not be an option if you need to work closely with the person. Changing your attitude and learning to view the behavior differently can be liberating.

Ultimately, though, changing your behavior is the most effective approach be-
cause the difficult person then has to learn different ways of dealing with you.

**Tips for coping with difficult people**

Below are some great tips from life coach and speaker Stephanie Staples.

- **Don’t try to change the difficult person.** Generally, difficult people have well-established behavior patterns. Any behavioral change will come only if they take accountability for it. You can point out the undesirable behavior, but it’s not your responsibility to change it.

- **Don’t take it personally.** Their behaviors reflect where they are personally, not anything you might have said or done. They may be ill or tired, or they may have extreme emotional problems. When you see an explosive reaction to a minor situation, you can be sure the person is experiencing strong underlying emotions.

- **Set boundaries.** Let the difficult person know you’ll respect him or her, but expect to be treated with respect in return. Don’t tolerate yelling or heated conversations in public places. If necessary, tell the person you need to remove yourself from the situation, or wait until the person is able to have a discussion without an angry reaction.

- **Acknowledge the person’s feelings.** You may not agree with the person’s viewpoint, but you can acknowledge that he or she appears angry or unhappy. With a chronic complainer, you’ll need to move from the complaint to problem solving.

- **Try empathy.** Recognize that it must be difficult to be stuck in a place of negativity or anger. Empathy can sometimes help deescalate an explosive situation. Difficult people sometimes just want to

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**Is she a bully or a difficult person?**

To establish or maintain a healthy work environment for everyone, you may need to ask yourself whether a particular person is difficult or a bully. Some difficult people are bullies. Their behavior crosses the zone into horizontal violence and can’t be tolerated. Horizontal violence (also called lateral violence) is an act of aggression perpetrated by one colleague toward another. Although horizontal violence usually takes the form of verbal or emotional abuse, it can also include physical abuse; it may be subtle or overt. Repeated acts of horizontal violence against another are considered bullying.

Unlike difficult people, who tend to behave the same way with everyone, bullies are likely to target certain people. Karen Stanley, who has studied lateral violence, reports that in her research, 65% of the nurses she surveyed observed these behaviors in coworkers often or sometimes, and 18% acknowledged they perpetrated these behaviors themselves.

**Bullying behaviors**

To maintain a no-bullying work culture, clinicians should analyze their unit culture, watching closely for verbal and nonverbal cues. It can be challenging to distinguish horizontal violence from the behavior of a difficult person. Common bullying behavior includes:

- talking behind one’s back instead of resolving conflicts directly
- making belittling comments or criticizing colleagues in front of others
- not sharing important information with a colleague
- isolating or “freezing out” a colleague from group activities
- making snide or abrupt remarks
- refusing to be available when a colleague needs assistance
- sabotaging others in a way that deliberately sets up the victim up for a negative situation
- raising eyebrows or making faces in response a colleague’s comments
- failing to respect a colleague’s privacy
- breaking confidences.
be heard but don’t have the skills to communicate that in a more appropriate way.

- **Hold your ground.** Teach others how to treat you. Don’t open the door to challenges. With snipers, you may need to expose their behavior publicly to other team members.

- **Use fewer words.** With difficult people, less conversation may be more effective. Use short, concise messages to drive your point home, and set a time limit on how long you’ll engage in the discussion. Avoid using the word “attitude” because the person will view this as subjective. Instead, focus on the behavior.

Although these tips aren’t guaranteed to work every time, you’ll find them helpful in many situations. Remember—in the end, the only behavior you can truly control is your own.

**Selected references**


Rose O. Sherman is an associate professor of nursing and director of the Nursing Leadership Institute at the Christine E. Lynn College of Nursing at Florida Atlantic University in Boca Raton. You can read her blog at www.emergingrnleader.com.
Pressure ulcers take a hefty toll in both human and economic terms. They can lengthen patient stays, cause pain and suffering, and increase care costs. The average estimated cost of treating a pressure ulcer is $50,000; this amount may include specialty beds, wound care supplies, nutritional support, and increased staff time to care for wounds. What’s more, national patient safety organizations and insurance payers have deemed pressure ulcers avoidable medical errors and no longer reimburse the cost of caring for pressure ulcers that develop during hospitalization.

The National Pressure Ulcer Advisory Panel defines a pressure ulcer as a localized injury to the skin, underlying tissue, or both, which usually arises over a bony prominence as a result of pressure or pressure combined with shear. Research suggests various contributing factors, including smoking, obesity, reduced sensation, and advanced age. The unique contribution of each factor remains unclear.

The authors of this article are wound ostomy continence (WOC) nurses at Indiana University Health Ball Memorial Hospital, a 350-bed teaching hospital in Muncie, Indiana. We track and document pressure-ulcer statistics on a monthly basis. When pressure-ulcer rates approach or exceed national benchmarks, we’re responsible for investigating the root causes of the increase and designing and deploying strategies to strengthen preventive practices. In this article, we share our most recent approach.

An unexpected call to action
In March 2011, our hospital-wide monthly pressure-ulcer count jumped from its usual range of four to six cases to 26 cases—well above averages from the National Database of Nursing Quality Indicators® for our comparative hospital group. Uncertain what caused this sudden increase, we nonetheless knew we had to take dramatic and rapid action. After all, the ulcer count had increased suddenly despite the educa-
tion we’d provided clinicians about skin-care products, interventions, and yearly skin and wound fairs.

We researched possible associated factors and all available preventive programs, starting with the hospital’s current skin-product vendors. We’d been using effective products and underpads—but had we thoroughly educated all involved staff on other preventive strategies? We then brainstormed new options with a broad group of stakeholders, including our chief nursing officer. We included unit-based skin-care champions in discussions to gain their perspectives. We also identified major factors to address:

- Optimal use of exceptional products
- Education for all nursing personnel
- How to integrate evidence-based strategies into practice.

We found our hospital qualified for educational support from a vendor because we were already using two of its products (the skin-care line and underpads). The vendor would supply us with educational materials, guide the rollout of a more comprehensive prevention program, and evaluate our anticipated cost savings. Once we made this decision, we met with the vendor, managers, and educators to devise a schedule for each unit and a time frame to complete education on the new program.

**New pressure-ulcer prevention program**

Goals of our pressure-ulcer prevention (PUP) program were to reduce pressure ulcers through nurse education, product optimization, integration of best practices for all nurses, and measurement of clinical and economic outcomes. The key was to reach all nurses and nurse technicians. The previously adopted skin-care line (which we kept) included wicking underpads and five skin products with specific guidelines for use with certain populations.

Unit-based skin-care champions conducted trials of the PUP program, with oversight by WOC nurses. Our facility has approximately 22 skin-care resource nurses—one or two from each unit that tested the program. This pilot test yielded information to determine feasibility and cost effectiveness. With the time, resources, and expenses required, would this program work for us? We decided the answer was yes.

**Implementing the program**

House-wide implementation began with educational sessions for registered nurses (RNs) and certified nurse technicians (CNTs). Each care provider studied an educational workbook designed for his or her professional role, and completed a pretest and posttest. Scores ranged from low to medium on the pretest and from upper medium to high on the posttest. Staff received 4 hours of paid time for the pretest, workbook completion, and posttest. Nursing personnel singled out the easy-to-read format and detailed illustrations as the book’s particular strengths. (See **Key teaching points for nurses**.)

Providing role-specific education for unlicensed personnel was a new approach for us—one we believed would prove crucial to our eventual success. We started the
new program and education on two to three units at a time, beginning with the units that had the highest pressure-ulcer rates. We met with managers and educators, formulated a unit-specific plan, and implemented the PUP. To follow up, WOC nurses visited every nursing unit and held small-group and one-on-one conversations with staff. One unit required all CNTs to spend 4 hours with us to receive more one-on-one education. CNTs reported that these sessions empowered them and showed them that the hospital valued their role in patient care.

We required each staff member to demonstrate proper use of skin-care products (nourishing cream and protective cream), strategies to prevent heel ulcers (protective boots or pillows positioned lengthwise), proper turning techniques (use of two pillows rather than one, along with 30-degree turns), and use of appropriate barrier creams (zinc oxide vs. dimethicone) and wicking underpads. During our time on the units, we developed relationships with direct-care nurses and CNTs and made ourselves accessible for questions or concerns.

Unit-based skin-care champions were instrumental in informing, inspiring, auditing, and coaching their peers in integrating these new practices. Each unit’s data were shared frequently with stakeholders at all organizational levels, and unit leaders were held accountable for action plans.

Tracking the results
After the PUP was implemented, we tracked pressure-ulcer rates diligently for 12 months. About midway through the program, five units went 5 months without pressure ulcers. We suspected a competition might be going on; the staff on those units seemed to be racing to see which unit could go the longest without a pressure ulcer. Every few months, we put reminders in the nursing newsletter and had managers remind staff about turning, keeping patients’ heels off the bed, and using barrier creams and wicking underpads.

When we learned of a particularly bad pressure ulcer, we performed a root cause analysis (RCA) to determine the cause, and discussed stage I and II ulcers one-on-one with the involved staff members to find the cause. The RCA became an invaluable tool for focusing on contributing factors. Nursing report cards with pressure-ulcer rates were reported monthly to all units. Ultimately, we discovered that failure to use a proper barrier cream and assess beneath mechanical devices (such as tubing) was a major contribution to pressure ulcers.

We celebrated with the units that reduced their ulcer rates the most or made it to zero ulcers, with unit managers and WOC nurses providing pizza and other treats. Recognition by our chief nursing officer and chief executive officer was a welcome surprise.

Evidence-based outcomes
Over the next 12 months, hospital-wide nosocomial pressure ulcers fell by up to 23 ulcers per month. Ten of 10 units consistently outperformed national benchmarks quarterly. Particularly notable (with use of the new product line) was an immediate decrease in incontinence-associated dermatitis, which contributes to pressure ulcers.

By April 2012, our facility had accumulated savings of $2,720,340 and our monthly hospital-wide pressure ulcer count was down to four. The PUP program proved to be so effective that all new RNs and CNT hirees now are required to complete the program and shadow WOC nurses for 4 hours of edu-
By using strategic PUP products along with education and interactive training tools, our facility significantly reduced hospital-acquired pressure ulcers, increased the knowledge base of our professional staff and nurse technicians, and saw significant cost savings. We’re still using the PUP program today to help keep our pressure-ulcer rate low.

Selected references


The authors work at Indiana University Health Ball Memorial Hospital in Muncie. Tamera L. Brown is a wound ostomy clinical nurse specialist. Jessica Kitterman is a wound ostomy nurse.
Here are some resources of value to your practice.

**National Guideline Clearinghouse**

The National Guideline Clearinghouse, supported by the Agency for Healthcare Research and Quality, summarizes many guidelines of interest to wound care, ostomy, and lymphedema clinicians. Here are some examples:

- Guideline for management of wounds in patients with lower-extremity neuropathic disease
- Pressure ulcer prevention and treatment protocol
- Lower limb peripheral arterial disease: diagnosis and management
- Screening for intimate partner violence and abuse of elderly and vulnerable adults: U.S. Preventive Services Task Force recommendation statement.

You can search for guidelines and compare more than one guideline.

**Patient Safety Primers**

You can access Patient Safety Primers from the Agency for Healthcare Research and Quality (AHRQ). Each primer defines a topic, offers background information, and highlights relevant content from AHRQ. Here is a sample of available resources:

- **Checklists.** Although simple in structure, the humble checklist can be a powerful tool for improving patient safety.
- **Disruptive and unprofessional behavior.** This primer includes ideas for preventing this type of destructive behavior.
- **Handoffs and signouts.** Although geared toward hospitals, many of the principles in this primer can be applied to other settings, such as long-term care.

**Access more primers.**

**Diabetic foot screen**

Download a copy of *Inlow’s 60-Second Diabetic Foot Screen*, posted by the Canadian Association of Wound Care. The tool can help screen persons with diabetes to prevent or treat diabetes-related foot ulcers and/or limb-threatening complications.

The study “Reliability and predictive validity of Inlow’s 60-Second Diabetic Foot Screen Tool” reported that the tool has “excellent” inter-rater and intra-rater reliability, and provided preliminary information about the tool’s validity.
During the recent Wild on Wounds conference, we presented the winners of the annual WCC Outstanding Achievement and Scholarship Awards. The presentation was held on September 12 at a cocktail and hors d'oeuvres reception to honor the winners. The 2013 winners are:

- **Outstanding Work in Diabetic Wounds**: Jessica Kuznia, DPT, WCC, DWC, OMS
- **Outstanding Research in Wound Care**: Connie Johnson, BSN, RN, WCC, LLE, OMS, DAPWCA
- **Outstanding WCC of the Year**: Ava Marie Chavez, RN, WCC
- **WCC Scholarship Award**: Angela Rumery, LPN. The scholarship award, which is funded through an educational grant from RecoverCare, was given this year in memory of our beloved friend and longtime NAWCO Board member, Sue Adlesick, who passed away this spring.

Special thanks go to Janie Hollenbach, RN, WCC, OMS, DAPWCA, FACCWS, for all her hard work in coordinating this event. If you’re interested in hosting a local WCC 1-day seminar and WCC affiliate meeting in your area, please contact Fred Berg at 877-922-6292, ext. 706, or e-mail fberg@nawcccb.org.

Our second WCC 1-day seminar and WCC affiliate meeting on September 24 were great successes. The conference was well attended by local wound care clinicians and WCCs. Dozens of local representatives from industry-leading manufacturers and service companies were on hand to share their new products and services with the attendees. The conference speakers included two professionals from the Wound Care Education Institute (WCEI): Nancy Morgan, RN, BSN, MBA, WOC, WCC, DWC, OMS, president and cofounder of WCEI, and Gail Hebert, RN, BSN, MS, CWCPN, WCC, DWC, OMS, instructor and speaker for WCEI. After the seminar, local WCCs who attended the seminar held a networking meeting to help strengthen awareness of wound care, while striving to improve outcomes, and to form a local affiliate group.

NAWCO introduced the new printing services to all attendees at the Wild on Wounds conference. We had samples at our booth for review, and hundreds of WCCs placed orders.

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Note: You must hold current WCC, DWC®, LLE®, or OMS certification to print materials. NAWCO will verify certification status of all orders. Individuals who don’t hold a current NAWCO certification may not order on this site.

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When you order custom printing or clothing, a portion of the proceeds will be used for a new scholarship fund for certificants who need financial assistance for recertification.

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**New and recertified certificants**

Below are WCC, DWC, and OMS certificants who were certified or recertified in June and July 2013.

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Body language can tell you all sorts of things. Like someone is having a stroke.

F - FACE DROOPING
S - SPEECH DIFFICULTY
A - ARM WEAKNESS
T - TIME TO CALL 911

Know the sudden signs. Spot a stroke F.A.S.T.

strokeassociation.org