AMERICAN HEALTH CONSULTANTS®

Wound Care™

Your independent guide to wound management

Volume 4, Number 7 **Pages 73-84**

Inside

July 1999

Everyone talks about benchmarking, but few know what it means

True benchmarks are always data- and outcome-specific

Benchmarking: It's a hot buzzword in the industry, but few wound care providers really know what it means. **David R. Thomas**, MD, professor of geriatrics at St. Louis University School of Medicine and member of the National Pressure Ulcer Advisory Panel (NPUAP), says benchmarks are not goals, protocols, decision trees, or best practices — though all of these can be created using benchmarks.

"If you want to develop your own protocol in your own facility to treat a particular illness, then you're not doing anything but setting up some good medical standards," Thomas says. "You would not call that a benchmark, because you're not comparing your protocol to an external standard. In wound care, what we want is to compare one facility to another for cost, incidence of illness, prevalence, etc. That's where you get into problems, because if you are going to compare two populations, they have to be similar in ways that don't bias the comparison. If I compare my nursing home to your nursing home, it is meaningless to say that I have fewer pressure ulcers than you unless I have the same population."

Benchmarking: Comparing individuals to appropriate data

A true benchmark is always data- and quantitative outcome-specific. Benchmarking, then, is monitoring outcomes by comparing individuals to an appropriate set of data, Thomas says. "Here's a benchmark: The mortality rate for cardiovascular surgery in this country is less than 4%. Choosing a physician based on comparing his or her rate to 4% is using that benchmark," Thomas explains.

In order to establish benchmarks that would help nursing home personnel choose their best practices, benchmarkers must make adjustments for case-mix severity. Thomas notes that this kind of statistical adjustment is being done in all the Veterans Affairs (VA) long-term care facilities in the country, but it would be very difficult to do in nursing homes, which don't have the standardized database available to the VA. "Right now, if a clinic is curing 90% of venous stasis ulcers, you don't know whether this is good or bad, because you do not know what the national cure rate might be," Thomas says.

PUSH SCALE

Patient Name: _____ Patient ID #:_____

Ulcer Location:_____ Date: _____

Directions:
Observe and measure the pressure ulcer. Categorize the ulcer with respect to surface area, exudate and appearance and record in the column labeled "Ulcer Category." Multiply the ulcer category times the appropriate weight factor for each subscale and record in the column labeled "Weighted Sub-Score." Add the weighted sub-scores to obtain the total score. A comparison of total scores measured over time provides an indication of the improvement or deterioration in pressure ulcer healing.

Surface Area	**1** <0.3 cm^2	**2** 0.3-0.9 cm^2	**3** 1.0-1.9 cm^2	**4** 2.0-6.0 cm^2	**5** >5.0 cm^2	**Ulcer Category** (1-5)_____	**Weight Factor** ×2	**Weighted Sub-score**
Exudate	**1** 5¼	**2** ¼ to ½	**3** ½ to ¾	**4** >¾		**Ulcer Category** (1-4)_____	**Weight Factor** ×3	**Weighted Sub-score**
Appearance (predominant tissue)	**1** Epithelial Tissue	**2** Granulation Tissue	**3** Slough	**4** Necrotic Eschar		**Ulcer Category** (1-4)_____	**Weight Factor** ×3	**Weighted Sub-score**
							Total Score	

Surface Area: Measure the greatest length (head to toe) and the greatest width (side to side) using a centimeter ruler. Multiply these two measurements (length × width) to obtain an estimate of surface area in square centimeters (cm^2).
Caveat: Do not guess! Always use a centimeter ruler and always use the same method each time the ulcer is measured.

Exudate: Estimate of the portion of the pressure ulcer bed covered by drainage following removal of all dressings, but prior to any cleansing. Divide the ulcer into four imaginary quadrants, each representing about ¼ of the ulcer surface. Estimate the portion of the ulcer covered by exudate.

Appearance: Divide the pressure ulcer into four imaginary quadrants each representing about ¼ of the original ulcer surface. Estimate the portion or amount of each tissue type on the ulcer. Identify the predominant tissue type on the ulcer and record the predominant tissue type in the space provided.
Epithelial Tissue: New pink red skin that covers the original ulcer surface, growing in at the edges or in spots on the ulcer surface.
Granulation Tissue: Pink or beefy red tissue with a shiny, moist, granular appearance.
Necrotic Eschar: Black or brown tissue that adheres firmly to the wound bed or ulcer edges and may be either firmer or softer than surrounding skin.
Slough: Yellow or white tissue that adheres to the ulcer bed in strings or thick clumps.

Source: National Pressure Ulcer Advisory Panel, St. Louis; 1997.

George T. Rodeheaver, PhD, professor and director of plastic surgery research at the University of Virginia Medical School at Charlottesville, says while externally agreed-upon benchmarks are still largely absent in the wound care industry, clinicians tend to develop their own "internal benchmarks" based on their own experience and their expectations of wound healing. Though the initial "experience base" is probably that of one's mentors, every case provides more data from which the wound caregiver learns what a good or bad outcome is. "However, the only way we can have a reality check is for me to see what somebody else's benchmark is," Rodeheaver says. "That gives me a reference point to see if my personal benchmarks are acceptable, below standard, or above standard."

Rodeheaver says there must be agreement within the wound care industry regarding what should be measured. "In wound healing, benchmark outcomes normally stop at closure, but other outcomes, such as

(Continued on page 76)

Pressure Ulcer Healing Chart

(use a separate page for each pressure ulcer)

Patient Name: _____ Patient ID #:_____

Ulcer Location:_____ Date: _____

Directions: Observe and measure pressure ulcer wounds at regular intervals using the PUSH scale. Date and record PUSH weighted sub-scale and total scores on the Pressure Ulcer Healing Record below.

	PRESSURE ULCER HEALING RECORD													
DATE														
Surface Area														
Exudate														
Appearance														
Total														

Graph the PUSH total score on the Pressure Ulcer Healing Graph below.

PUSH Total Score	PRESSURE ULCER HEALING GRAPH													
34														
31														
29														
26														
23														
20														
17														
14														
11														
Healed 8														
Date:														

Source: National Pressure Ulcer Advisory Panel, St. Louis; 1997.

removal of odor and reduction of pain, are important in improving the status of the wound. It may not be that our total goal is to get wound closure, but that we get improvement in the status of the wound for the patient," Rodeheaver says.

Even agreeing on when a wound is healed is not as simple as it might sound. Rodeheaver points to the ongoing dialogue between members of the Wound Healing Society (WHS) and officials at the Food and Drug Administration (FDA) about defining when a wound is healed during trials for new products requiring FDA clearance. FDA policy is that every randomized trial must take wounds to closure. Rodeheaver doesn't necessarily agree.

"There are primary outcomes and secondary outcomes," he says. "The FDA is not particularly interested in improvements, rates of improvements, or partial healings — they want complete closure as the outcome." In clinical reality, chronic wounds take a long time to get complete closure, often more than 20 weeks. Rodeheaver says it is possible to use a wound healing trajectory that illustrates the rate of wound healing with the experimental agent compared to the standard of care, do the study for 10 weeks, and show the slope of the curve.

Wound scale tools — the benchmarker's best friend

One helpful item available to wound caregivers who want to measure healing outcomes is the Pressure Ulcer Scale for Healing (PUSH) tool, devised at the request of NPUAP. The key criteria in designing the instrument were simplicity of use in clinical settings, validity for measuring whether ulcers are improving, and sensitivity to changes in the ulcer between observations. It also had to be concise so that it could be incorporated into the Minimum Data Set assessment tool now mandated by Health Care Financing Administration for all long-term care facilities.[1] *(Editor's note: see the Wound Care Forum in the June 1999 issue of* Wound Care *for a discussion of minimum data sets.)*

"The PUSH tool gives a nice quantitative number for the status of the wound, and you can monitor that rate of change," Rodeheaver says. "Let's say you and I both have patients with wounds that have a score of 34. We can monitor how quickly we can get that reduced to a score of eight. If it takes me five weeks and it takes you one week, then I'm doing something wrong. Again, we can do it without going to complete healing — it's a matter of the decrease, of significant improvement in the status of the wound.

You can use your own facility's past performance as a benchmark. In order to benchmark your own performance, you must begin with accurate, complete data; introduce the new protocol you believe will alleviate the problem you have targeted; and then re-take the exact same data. "If you know what you did in the last six months, you can tell what you're going to do in the next six months if you make no changes," Thomas says. "When you introduce a new wound care protocol and track it over time, you'll have the reliable benchmark of your own past performance to use in establishing your best practice."

"If you can have benchmarking for complex disease states such as diabetes, congestive heart failure, [and] fractured hips, you can have it in wound care."

Kathi Thimsen Whitaker
Clinical affairs manager
Coloplast Corp.

The ultimate goal of benchmarking is to determine the best practices for your wound care population. **Kathi Thimsen Whitaker**, RN, CETN, MSN, clinical affairs manager for Coloplast Corp. in Marietta, GA, says when she does a consult at a nursing home, she develops standards of care before taking initial measurements.

'It gets down to basic care issues'

At one such facility, Whitaker found residents were experiencing a large number of skin problems. Product inventory and practice analysis showed the facility was spending virtually nothing on skin care products. When more products were bought and used, skin breakdown and related problems were significantly reduced, giving Whitaker and the facility a new benchmark to use in improving care. "If you can have benchmarking for complex disease states such as diabetes, congestive heart failure, [and] fractured hips, you can have it in wound care," Whitaker says. "It gets down to basic care issues: hygiene, nutrition, hydration, management of elimination. There are comorbidity factors you have to process into the equation, but I believe it is achievable."

References

1. Thomas D, Rodeheaver G, Bartolucci A, et al. Pressure ulcer scale for healing: Derivation and validation of the PUSH tool. *Adv Wound Care* 1997; 10:96-101. ■

New clinical tool could be just what the doctor orders

When benchmarks and pathways converge

The first goal of benchmarking should be refocusing the attention of care providers, according to **Robert Kane**, MD.

"We spend a huge amount of time doing routine things," he says. "What you really want to do is move attention away from the routine things and on to the ones that are early indications of problems, so you can catch them before they become catastrophes." Kane, professor and director of clinical outcomes research at the University of Minnesota at Minneapolis and author of *Understanding Health Care Outcomes Research* (Gaithersburg, MD: Aspen; 1997) began benchmarking when he and his research group at the University of Utah originally developed a benchmarking system for nursing home care in the early 1970s.

Designed to allow nurses' aides to track the clinical course of patients, the system was based on a series of structured observations and used a manual in which nurses' aides could look up what to observe, how often to observe it, and the different levels of response when a pattern of change was observed.

"That was what we originally described as benchmarking," Kane recalls. "More recently, we talk about clinical guide paths, which are ways of tracking specific parameters for a given problem and predicting the expected path for that problem and using management by exception to intervene when the patient's course deviates from that path. Pathways tend to be written around dichotomous responses because you're working with a 'yes-no' decision tree. If it's 'yes,' you go one way; if 'no,' another. Benchmarks tend to be observations which vary, and what you are looking at are patterns of those observations over time. They're related, but different."

Benchmarks might differ for the same type of wound under different conditions, creating a need for multiple pathways that vary with the underlying condition of the patient. As Kane points out, "If you have a young, healthy patient recovering from a wound, you might need to make different observations than if the patient is old and frail and has multiple chronic conditions."

Kane says when people try to put together pathways based on research, they find that in most cases there is no hard evidence to support the decisions. His guide paths begin with the choice of one or two salient parameters for the problem, followed by systematic observation of those parameters. When the pattern that's been developed differs from the one expected, caregivers know to take action. "People get very nervous when there are 15 different versions of a pathway for the same problem, and it's particularly frustrating if different organizations or different payers require different pathways," he says.

At Dartmouth University in Hanover, NH, **Julie Mohr**, MSPH, and three of her colleagues have designed the Clinical Value Compass (CVC) model to facilitate the benchmarking process. Named to reflect its similarity to a directional compass, the CVC has the following four cardinal points: functional status, risk status, and well-being; costs; satisfaction with health care and perceived benefit; and clinical outcomes. The CVC approach assumes that if providers wish to manage and improve the services they provide, they must: measure the value of care for similar populations; analyze the internal delivery processes that contribute significantly to the current levels of measured outcomes and costs; test the changed delivery processes; and determine if the changes made led to better outcomes and lower costs.[1]

Mohr emphasizes that the process produces the results, so the only way to know what you need to change is to examine your own process. "You can compare your results to somebody else's, but unless you understand what it is you're doing in producing those results and you understand what the other person is doing to produce results, you don't know what to change. You can't just have a number as a goal you strive to reach and say, 'OK, we're going to do better,'" he explains.

Mohr says this helps you to be very specific when you begin a benchmarking relationship with others. "I think learning from each other should be a goal of benchmarking. You really need to be able to talk about what it is you do, what you're going to change and try. I think the whole point is not just to make yourself feel good that you have a good number, but to improve what you're doing."

When the American College of Nurse Midwives contacted Mohr to help benchmark nurse-midwifery care, they decided what to measure and looked at the process of midwifery care. "They knew intuitively that the care they provide is very good, and how it's different from obstetrical care, but they wanted to make sure that they could document that. They found they were often being compared to obstetricians, and the argument was, 'If you need a physician to be there in case

of medical emergency, then why do we need nurse midwives?' They had been collecting data at a national level and are now doing their pilot test of the benchmarking process." Mohr says this has been a very long and involved process. "It's taken awhile to figure out what they should measure and then refine that after they started collecting data. They had to be very specific, making sure everyone was measuring the same thing the same way."

To see illustrations of the Clinical Value Compass, access the Best Practices Web site, www.best4health.org.

Reference

1. Nelson E, Mohr J, Batalden P, et al. Improving health care: The Clinical Value Compass. *Jt Comm J Qual Improv* 1996; 22:243-255. ■

WOUND CARE FORUM

Question: "In my new job as assistant director of a long-term care facility, I will have to make wound care product choices for our residents. What product benchmarking studies should I consult, and how do I evaluate the resulting clinical outcomes?"

— Submitted by **Betsy Cleveland**, RN, Greenville, SC

Answer provided by **Samantha Morgan**, BSN, RN, CRRN, CCM, ET, director of rehabilitation services for Laurel Health Care Corp. in Westerville, OH:

A typical wound care product company manufactures everything from A to Z. This makes it enormously difficult to judge each one of these products and then make a determination. There's no big data out there. Benchmarking products is especially difficult because everything the patient faces environmentally and physically can affect the product's performance. Something as simple as a 1-degree change in body temperature makes a difference.

What happens instead of benchmarking is that a company hires a consultant and asks them to evaluate its products. That person doesn't do research on the products, but evaluates them based on their own clinical experience. The product may receive a great review because it's convenient, or offered at the best price the specialist has seen.

What you should do in order to select the best products for your facility is evaluate the population's specific needs, then set up criteria for products to fill them. For example, I would pick a hydrocolloid dressing based on how many cubic centimeters of drainage it absorbs and how long it holds up on the patient. Those two things would be my benchmarks, and from them I would develop my protocol for which dressings to choose. Some of the criteria we use in developing product protocols at Laurel are:

• **User-friendliness of product.** If it's a product only a wound specialist can apply, it's of no value to us. The products we choose must be able to work as well when applied by an LVN.

• **Effectiveness.** We review the companies' own research and select those products that appear most clinically effective if used appropriately.

• **Durability.** The products have to last as well as work.

We then set the treatment protocols, saying, for example, that if a wound is a stage three wound and if it contaminates more than one 4x4 every four hours, then it should be covered by a hydrocolloid dressing. We have in our protocol how it should be adhered to the skin, how it should be taped and checked. I expect that with any of the products we choose, we will have a healed wound within 12 weeks. If I don't see significant improvement within two weeks and continued improvement after that, the product is in trouble.

But here's the difficulty: As long as I'm managing the wound, or supervising the people who are delivering the care, my benchmarks will work. If I'm not in control of that, my benchmarks won't work, because how do I know that the dressing is being used appropriately? I have no guarantee the caregiver knows how to apply that dressing. We do inservices, we train and educate. We believe our protocols are much more effective than the random pattern of use we were doing before, but there's still a lot of margin for error.

How do you benchmark clinical outcomes? First you have to decide when the clinical outcome happens. For example, your benchmarks might be that in three weeks, the diameter and drainage of the wound would decrease by X amount and inflammation would be absent. You'd also want to look at serum albumin level and the different nutritional laboratory values. Yet in the days of the prospective payment system, very few people can afford to do frequent nutritional status studies on Medicare patients because there's no payment provision for that. So what we typically do is try to get baseline values while the patient is in the hospital before transfer to long-term care, then retest in 30 days. ■

Product POINTERS

Dressings for topical wound management

By **Liza Ovington**, PhD, CWS
President, Ovington & Associates
Fort Lauderdale, FL

There are many preclinical and clinical studies comparing wound management using semiocclusive dressings with wound management with conventional textile-based dressings such as gauze and petrolatum gauze. Typical outcomes show that semiocclusive dressings achieve improvements — including reduced costs, reduced pain, and reduced caregiver time — as compared with conventional dressing materials.

Literature review of randomized, controlled clinical studies of dressing products reveals there is no single type of semiocclusive dressing that performs better than another in any specific wound type. For example, the Agency for Health Care Policy and Research (AHCPR) guidelines for pressure ulcer treatment reviewed the wound healing literature from 1966 through 1992 and found no evidence of different healing outcomes in pressure ulcer treatment with different types of semiocclusive dressings. A recent update to these guidelines revealed no disputing data in the time period from 1992 to the present. The formal AHCPR recommendation is to "use clinical judgment to select a type of moist wound dressing suitable for the ulcer."

The controversy relating to dressing utilization centers on this last phrase. Marrying clinical judgment to selection of a moist wound dressing suitable to a wound requires a healthy working knowledge of the product as well as the wound. This product knowledge is not so easily assimilated. Topical wound management products continue to steadily proliferate, presenting a virtual jungle of choices for the health care professional. In order to avoid becoming entangled in the overgrowth, it becomes vital to see the forest rather than the trees.

It was once enough to be familiar with a limited number of material categories or species of dressings such as films, foams, hydrocolloids, and alginates. Now, with innovations in material categories such as hydrofibers, hydropolymers, and emulsions; clever marketing strategies ("alternatives to alginates," "cures for hydrocolloid headaches," and "one product does it all"); and the evolution of pharmaceutical and bioengineered products such as growth factors and skin substitutes, it is necessary to look beyond the form of the product and toward the function of the product.

Utilization of wound management products should be approached from the standpoint of product function and performance parameters needed/desired in promoting optimal healing. What does the wound require? What does the product do? What does it not do? Over what range of conditions does it perform? Is what it does what you need? Where is the evidence that it does it effectively?

Functions of an optimal dressing for wound management are multiple, depending on the nature and status of the wound in question. These functions may include:

- exudate management;
- conformability;
- adherence;
- pain control;
- odor control;
- cost-effectiveness;
- safety;
- healing;

Performance Classification of Dressing Types

	Performance Parameter			
Product Examples	**Absorber Hydrater Protector**	**Adhesive Nonadhesive**	**Depth Superficial**	**Barrier Non-Barrier**
Kaltostat Alginate	A	NonAdh	D/S	NonB
Allevyn Adhesive Foam	A	Adh	S	B
Vigilon Sheet Hydrogel	H/P	NonAdh	S	NonB
Bioclusive Film	H/P	Adh	S	B

- debridement;
- microbial barrier;
- antimicrobial activity;
- pressure distribution;
- compression;
- wound visibility;
- convenience;
- quality of life improvement for patient.

If one sets out to rate the performance of the existing dressing categories and materials in each of these functional areas, it could prove unwieldy. However, if certain assumptions are made, the list of functions may be pared down.

The first assumption is that the primary etiology of the wound being treated is addressed. The second is that the wound being treated has an adequate blood supply. The third is that all semiocclusive dressings are ostensibly safe and will foster healing if used appropriately and according to directions. Finally, it may be assumed that many functional benefits related to improving healing are consequences of a physiologically moist local environment (pain reduction, increased healing rate, autolytic debridement). In order to create and maintain a physiologically moist environment (as opposed to a dry or wet environment), the selected dressing must absorb in the case of excessive wound exudate, hydrate in the case of a dry wound, or protect/maintain in the case of an already moist wound.

Dressings initially could be rated as absorbing, hydrating, or protecting with regard to their function. Dressings could secondarily be rated as being adhesive or nonadhesive, indicating the need for a secondary dressing for attachment. Further, dressings could be rated as suitable for depth/contours or for superficial wounds regarding their ability to conform to the wound volume or to a challenging anatomical location. It also may be of interest to the clinician whether the dressing offers a physical barrier to liquids or bacteria, in terms of infection control and patient convenience.

A table accompanying this article gives examples of a four-point performance description of some common dressing forms or materials. **(See table, p. 79.)** Specific branded products are used for illustration because certain performance parameters such as adhesion may depend on the specific brand. If wound dressings were uniformly classified according to such a performance-based scheme, the task of understanding when to use what product might become simpler, despite new product names, innovative materials, and the sheer volume of available products. Assessment of the wound bed, drainage levels, periwound skin, and location would then guide the clinician to specific desired dressing functions. ■

New manual can steer you through Y2K

With the year 2000 deadline fast approaching, hospitals, other health care providers, and the medical device industry are scrambling to complete a process that in many cases was started too late. What may have once been a logistical issue is burgeoning into an overwhelming problem, compounded by scarcity of time, rising costs, and a lack of programming resources and expertise.

The health care industry has found itself under increased pressure as the realization dawns that it is behind the curve in preparing for Y2K. According to a recent Modern Healthcare/PricewaterhouseCoopers survey, the biggest Y2K-related worry among 69% of health care providers is that patients will be "affected due to faulty monitoring gear," followed by concern over "inaccurate lab tests and pharmacy orders" (36%), problems with patient records (34%), and worries about billing and paychecks.

As the Y2K problem moves far beyond a solely technological issue, American Health Consultants, publisher of *Wound Care*, has published the *Hospital Manager's Y2K Crisis Manual*, a compilation of resources for nontechnical hospital managers. This 150-page reference manual includes information in nontechnical language on the problems your facility could face, the potential fixes, and the possible consequences, including:

- Will your computers and software work in 2000?
- What does Y2K mean for patient care?
- What will happen to your medical devices?
- How can you make sure your vendors are Y2K-compliant?
- Are you at legal risk due to Y2K?
- Are you prepared if Y2K delays HCFA payments?

Jan. 1, 2000, is not a moving target. Either your computer systems, medical devices, and suppliers can handle the date change and maintain business as usual, or they can't — in which case your entire organization may face serious problems. *The Hospital Manager's Y2K Crisis Manual* is available now for $149. For more information on the *Hospital Manager's Y2K Crisis Manual*, contact American Health Consultants' customer service department at (800) 688-2421 or www.ahcpub.com. ■

A benchmark for wound care changes form

First Certified Wound Specialist exam set for October

The American Academy of Wound Management (AAWM) in North Bay Village, FL, a national, nonprofit certifying board for wound specialists, has scheduled its first certification by examination during the 14th annual Clinical Symposium on Wound Care, to be held Oct. 4 in Denver.

The examination replaces the certification-by-portfolio method the organization used in the past. Qualified applicants for certification who pass the examination will earn the designation of Certified Wound Specialist (CWS), which they may use following their names. Multidisciplinary questions will cover the following topics related to wound management: general knowledge, anatomy, pathophysiology, diagnosis, therapeutics, and psychosocial issues. Liza Ovington, PhD, CWS, president of Ovington & Associates in Fort Lauderdale, FL, is coordinating the examination.

Board certification is available for physicians, nurses, therapists, researchers, and other health care professionals involved in wound care. AAWM offers three levels of certification: diplomate, which may be achieved by health care professionals with a doctoral degree from an accredited university and two years of clinical or research experience in wound care; fellow, for those with a master's degree in related health disciplines and two years of clinical or research experience in wound care; and clinical associate, for health professionals with five years of clinical or research experience and/or a bachelor's degree in a related health discipline.

AAWM, a full voting member of the National Organization for Competency Assurance, developed its certification program to:

• Identify a standard of knowledge essential for developing a comprehensive wound management program.

• Recognize competence of candidates who meet the eligibility requirements for board certification.

• Advance cooperation and resource exchange among the various disciplines and organizations involved in the treatment of patients with chronic wounds.

• Encourage continued professional growth and development of individuals in wound management.

• Establish a code of ethics, responsibility, and high professional standards for all certified individuals.

Certification benefits include a certificate registered by AAWM, a listing in and a copy of the National Registry of Board Certified Wound Specialists, a subscription to the quarterly publication of AAWM, discounts on continuing medical education programs, and an opportunity to help shape the future of wound care delivery.

A membership category is available for those who are professionally involved in wound care but do not meet the wound specialist eligibility requirements for certification. Students and residents in health-related disciplines with a special interest in wound care are encouraged to become members. Associate members must have an associate's degree and must have been actively working in wound care for a minimum of one year. International membership is available to health care providers or professionals involved with wound care outside the United States and its territories.

For more information, contact the American Academy of Wound Management, 1720 Kennedy Causeway, Suite 109, North Bay Village, FL 33141. Telephone: (305) 866-9592. Fax: (305) 868-0905. E-mail: woundnet @aol.com. ■

The Wound Calendar

• **"New Advances in Wound Healing,"** presented by Marketa Limova, MD, will be presented at the H & H Dermatology Seminar, Aug. 11-15, Aspen, CO. Sponsored by the Skin Disease Foundation. Telephone: (312) 988-7700.

• **"Optimum Wound Management: A Cost-Effective, Comprehensive Approach"** seminars, presented by Bonnie Sparks-DeFriese, PT, CWS, will be held on:

Aug. 14-15, Dallas
Aug. 28-29, Chicago
Sept. 11-12, Sarasota, FL
Sept. 25-26, Denver
Oct. 9-10, Atlanta
Oct. 22-23, Jackson, MS

Contact: Illume, 15505 E. 590th Road, Inola, OK 74036. Telephone: (918) 543-6933. Fax: (918) 543-3334. Web site: www.illume-ed.com.

• **"Taking Charge of Wound Management"** seminars will be held on:

Aug. 23, Nashville, TN
Sept. 20, Charleston, SC

Contact: Donna Morgan, Professional Rehabilitation, Easley, SC. Telephone: (800) 447-2059.

• **The 1999 Joint European Tissue Repair Society/Wound Healing Society Meeting** will be held on Aug. 24 -28, Lyon, France. Contact: Alexis Desmouliere, GREF, Université Victor Segalen Bordeaux 2, 146 Rue Léo-Siagnant, 33076 Bordeaux, France. Telephone: +33-557-571-771. Fax: +33-556-14-077.

• **Wound Care Specialty Course** will be held Sept. 6-25, Charleston, SC. Sponsored by the Medical University of South Carolina College of Nursing, 99 Jonathan Lucas St., Charleston, SC 29425. Telephone: (843) 792-2651. Fax: (843) 792-3680. E-mail: kellerhals@musc.edu.

• **2nd Joint Conference on Infection Control** will be held on Sept. 9-11, Queensland, Australia. Sponsored by the Practitioners Association of Queensland and the Queensland Wound Care Association. Telephone: +61-0-7-3369-0477. E-mail: wic99@im.com.au.

• **3rd Annual Wound Care Congress for Rehabilitation Professionals** will be held Sept. 19-22 in Las Vegas. Telephone: (318) 869-3322. Web site: www.woundcareinternational.com.

• **Second European Pressure Ulcer Advisory Panel Open Meeting** will be held Sept. 20-22 in Oxford, UK. Telephone: +44-0-1865-2228233.

• **14th Annual Clinical Symposium on Wound Care** will be held Sept. 30-Oct. 4 in Denver. Sponsored by Springhouse Corp. and *Advances in Wound Care*. Telephone: (888) 898-3323. Web site: www.woundcarenet.com.

• **"Clinical Management of Problem Wounds Symposium IV,"** directed by Paul J. Sheffield, PhD, and Richard D. Heimbach, MD, PhD, will be held Oct. 1-2, San Antonio. Telephone: (210) 614-3688.

• **21st Annual Wound Management Workshop** will be held Oct. 13-16, San Diego. Sponsored by the University of California San Diego School of Medicine. Telephone: (619) 467-9010. E-mail: Mtgs@ix.netcom.com.

• **8th Annual Wound Care Symposium** will be held Oct. 15-17, Williamsburg, VA. Sponsored by The Wound Healing Center, Medical College of Virginia and the Mid-Atlantic Region of WOCN. Telephone: (800) 413-2872 or (804) 828-3640. Credit offered: CME, CEU, AAFP.

• **"WOCN-2000: New Age, New Medicine, New Care"** will be held Oct. 22-24 in Wilkes-Barre, PA. Sponsored by the Northeast Region of WOCN. E-mail: sbtaylor@ot.com.

• **"Current Concepts in Wound Healing"** for physical and occupational therapists, assistants, nurses, physicians, facility administrators, and other professionals involved in wound care will be presented by Wound Care Associates on Oct. 23-24 in Kingsport, TN. Telephone: (414) 245-6812. Fax: (414) 245-6912. E-mail: feedar@woundcareresources.com. Web site: www.woundcareresources.com. ■

Composite Cultured Skin is in clinical trials on donor site wounds

Ortec International, a New York-based tissue engineering company involved in the development of proprietary and patented technology to stimulate the repair and regeneration of human tissues, has patented a biologically active wound dressing, Composite Cultured Skin (CCS), consisting of a bioengineered bovine collagen matrix seeded with epidermal and dermal cells. CCS is in clinical trials for treatment of donor site wounds and venous skin ulcers and has completed a clinical trial using CCS for treatment of chronic dermal skin ulcers in epidermolysis bullosa patients.

Ortec says CCS also may have wide commercial applications for the treatment of burns, as well as diabetic and venous skin ulcers. The results of an eight-patient pilot trial conducted on burn patients at the Columbia Augusta (GA) Medical Center were presented at the American Burn Association (ABA) by Joseph Still, MD, director of the burn center at Columbia Augusta.

Results showed that CCS closed the donor site wounds in all eight patients treated an average of 9.5 days earlier than did the control dressing. Donor site wounds are created when healthy skin is taken from

an undamaged part of the patient's body and transplanted onto an existing wound site, thereby creating an additional wound at the donor site. These procedures are called autografts. Treatment of donor site wounds has particular application to burn victims and reconstructive surgery patients.

CCS clearly promotes wound healing in select deep second- and superficial third-degree burns, without the need for autograft, Still says, and "has shown almost 100% re-epithelialization in 11 days after application on donor sites, demonstrating the potential to significantly accelerate wound closure in this patient population, which means we can re-operate shortly thereafter using the patient's own skin. I believe CCS has the potential to significantly increase the survival rate of severely burned patients and play a significant role in the burn arena."

The company has submitted the results of this pilot study to the FDA, and, based on these results, has requested permission to begin a pivotal trial using CCS in donor sites. The proposed study would involve following 75 patients for six months, with a primary end point of comparing the time to wound closure using CCS vs. the standard of care, and secondary end points measuring scarring, pain, rate of infection, time to recropping, and any adverse events. After the requisite follow-up, a pre-market application will be filed with the FDA.

For further information on Composite Cultured Skin, contact: Ortec International, 3960 Broadway, New York, NY 10032. Telephone: (212) 740-6999. Fax: (212) 740-6963. ▼

Wound Product Sourcebook now available

The *Wound Product Sourcebook* contains information for every type of wound care product, ranging from dressings and skin care to support surfaces and training programs. Edited by Glenda J. Motta, BSN, MPH, ET, it is arranged in an easy-to-read format that includes product description, sizing, specifications, and manufacturer. It also lists products by trade names and gives toll-free telephone numbers for manufacturers.

The 1999 edition is now available for $69.95 from Green Mountain Wellness Publishers, P.O. Box 554, Hinesburg, VT 05461. The Wound Product Sourcebook also may be ordered on-line at www.woundsource.com.

The sourcebook staff process submissions for product and professional resource listings throughout the year and immediately post them on their Web site. To submit listings for inclusion in the *Wound Product Sourcebook* and WPS on-line, please contact the publisher at (802) 862-1265 and request a forms packet. ▼

Wound care software available from KCI

Kinetic Concepts, Inc. (KCI), a San Antonio-based company that develops and markets therapeutic healing systems for problems associated with patient immobility, now is also marketing a comprehensive wound management software program called Odyssey. The company says the program will track:

Wound Care (ISSN 1098-643X) is published monthly by American Health Consultants®, 3525 Piedmont Road, Building Six, Suite 400, Atlanta, GA 30305. Telephone: (404) 262-7436. Periodical postage paid at Atlanta, GA 30304. POSTMASTER: Send address changes to **Wound Care**, P.O. Box 740059, Atlanta, GA 30374.

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outcome of prevention and treatment modalities for wounds; compliance with the standard of care/protocols for the prevention and treatment of wounds; progression of the wound toward healing; and the use of surfaces, topical treatments, and other interventions. The program, which is available for $295 per year, also helps standardize documentation, tracks costs, and, with a sufficiently large database, allows a facility to predict treatment outcomes and create clinical critical paths based on the data entered about wounds treated in the facility. A 30-day evaluation disk is available for program trial.

For further information on Odyssey, contact: KCI, 8023 Vantage Drive, San Antonio, TX 78230. Telephone: (210) 524-9000. ▼

AHCPR provides free guidelines on Internet

The Agency for Healthcare Policy and Research (AHCPR) offers a free Internet database of clinical practice guidelines. The American Medical Association and the American Association of Health Plans worked with AHCPR in developing a clearinghouse that offers evidence-based guidelines presented with standardized abstracts and tables.

For more information, contact AHCPR at 2101 E. Jefferson St., Rockville, MD 20852. Telephone: (301) 594-6662. Web site: www.guideline.gov. ▼

Find your best practices and national guidelines on the Web

The Best Practices Network (BPN), an interactive Web site directed by Mary Kingston, RN, MN, provides an opportunity for health care professionals to share information about their projects and best practices. The Web site, the use of which is free, allows health care professionals to put their evolving project ideas on-line and participate in discussion boards for clinical practice, professional practice, documentation, and system issues.

The Everyday Innovations section of BPN's Web site includes tools that can be downloaded and used, including the project guide and application kit, which is designed to improve health care delivery.

For more information, contact BPN at its Web site, www.best4health.org., or call (800) 899-2226. ■

CE objectives

After reading each issue of *Wound Care*, the health care provider will be able to:

- identify management, clinical, education, and financial issues relevant to wound care;
- describe how those issues affect wound care providers and patients;
- describe practical ways to solve problems commonly encountered by care providers in their daily activities. ■