

When Healing Is Not the Goal – Palliative Wound Care and SCALE

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Course Transcript

Welcome to Medline University and thank you for joining me today. I am Kim Kehoe and I will be presenting our program titled “When Healing is not the Goal...Palliative Wound Care and SCALE. For some of you, Palliative wound care is a relatively new focus. Palliative wound care requires a different mindset than traditional wound care, yet is based on the same fundamental scientific principles. Much credit goes to the leading researchers and authors on the topic of palliative wound care to include Karen Lou Kennedy-Evans, Oscar Alvarez, Diane Langemo, Sharon Baranowski, Gary Sibbold and Diane Krasner, 6 of the 18 experts on the topic who also formulated and published a consensus statement on Skin Changes at Life’s End, or SCALE, which we will discuss today.

These are the objectives that I have outlined for our program today. We will begin with a review of the focus of palliative care and palliative wound care. Then, we will describe and explore the 2009 SCALE final consensus statement. We will distinguish the difference between a pressure ulcer and a Kennedy Terminal Ulcer. Then, we will identify and explore the five P’s for determining appropriate intervention strategies for patients at the end of life. And finally, we will discuss prevention and treatment interventions for patients at life’s end.

Palliative care is focused on holistically supporting the individual for comfort rather than to cure or heal the wound, while improving the quality of living and dying. A 2002 National Consensus Project described palliative care as an organized and highly structured system of care focused on promoting the greatest comfort for and dignity of the patient that is best delivered by a multidisciplinary team and addresses education and support of the patient and family, management of chronic illnesses such as non-healable wounds, interventions to reduce or relieve symptoms and prevention of skin injuries and new wounds.

Chronic, non-healable wounds are indeed common. As many as 28% of the patients in nursing homes and hospice programs will experience a pressure ulcer. They may also experience arterial ulcers, malignant wounds and venous ulcerations.

Worldwide, individuals of all ages (from neonates to elders) and all socioeconomic groups develop chronic wounds. This is particularly true for people living with advanced disease state or end-stage chronic illnesses associated with arterial or venous insufficiency / edema (eg, diabetes mellitus, peripheral vascular disease), central and peripheral neurological disorders causing motor dysfunction and/or sensory deficits (eg, dementia, stroke, Parkinson's Disease, neurodegenerative disorders), cancers and other diseases leading to cachexia, immunocompromise, chronic infections or an impaired ability to heal. Even with the best of nursing care, these patients may develop chronic wounds.

Palliative wound care can be described as the merging of symptom management into advanced wound care.

A review of the literature by Langemo shares that the incidence and prevalence of wounds in persons at the end of life is largely unknown, but wounds are estimated to occur in at least one third of hospice patients. Few studies on the prevalence and incidence of wounds at end of life exist. According to Langemo, reported prevalence rates vary between 13% and 47%. At the end of life, healthcare professionals must help the patient and/or family decide whether the goals of wound care should focus on healing or palliation. Moving a patient from a curative to a palliative treatment plan rests on the reality, the truth, that the primary care provider has determined the wound is ultimately nonhealing and not undertreated, and that the patient and/or family has agreed to accept a palliative approach. Equally important is that we must document the goals of the treatment plan on the progress note. I just recently had the privilege of speaking with Karen Lou Kennedy-Evans and attended her presentation on Legal Issue in End of Life Ulcers, where she stated, with conviction, that healthcare professionals often fall short in the documentation of realistic goals related to risk factors, skin damage and wounds with individuals at the end of life. For example, “complete wound closure might not be a realistic goal” is an appropriate statement to document if it applies. Or another example may be “the wound may improve but complete healing is not expected”. These are examples that are noted in the American Medical Directors Association, also known as AMDA, Clinical Practice guidelines. Multiple factors place the individual at the end of life at risk for skin breakdown and impaired healing. Palliative care patients are very ill and particularly vulnerable to developing PU’s in their frail state.

Dr. Oscar Alvarez, Dir Research and Wound Care at Calvary Hospital, Bronx NY and founder and chairperson of the FRAIL program established in 1999, (a mnemonic, For Recognition of the Adult Immobilized Life), describes a “compassionate care model” that addresses the complications of immobility and developed palliative management guidelines for the spectrum of complications related to immobility. This care model includes a comprehensive assessment, addressing palliative care principles, such as physical, psychological, social, spiritual, and practical objectives, as well as individual patient needs. It further describes acceptance that complete wound closure and, in some cases, the prevention of new skin breakdown may not occur. The Healing Probability Assessment Tool consists of 20 parameters that provide the foundation for estimating the probability for any skin wound to successfully respond to aggressive local intervention that seeks to close the wound. The more items checked on the list, the less likely that the wound or wounds will achieve sustainable closure. Hence, the “probability” for healing will be informed by the score or number of factors checked on the tool and by using and communicating the findings of the tool, healthcare professionals and caregivers can realistically establish care goals. Patients and families should be involved and informed of the findings of increased risk for skin breakdown or non-healing probability along with an explanation of the specific factors identified to be placing the risk. By educating and explaining the very real probability, healthcare providers remove much of the stigma of “negligence” associated with skin breakdown and potentially avoid dissatisfaction on the part of the patient and family. Instead patients and family are ready to transition into a palliative plan of care that considers the patient’s personal goals for maximizing the quality of their remaining life.

Palliative care patients with limited mobility and physical activity are at highest risk for developing pressure ulcers. Many wound care professionals agree that pressure ulcers occurring at the end of life

are often unavoidable and largely attributed to the individual's frail, compromised condition. A panel at the 2010 National Pressure Ulcer Advisory Panel (NPUAP) Consensus Conference on avoidable versus Unavoidable Pressure Ulcers unanimously agreed that not all pressure ulcers are avoidable, a determination supported in the literature. Therefore, it is unlikely to eradicate pressure ulcers in end-of-life patients owing to their many comorbid conditions and risk factors. The NPUAP conference attendees recognized that end-of life patients experience body organ system and homeostatic mechanism failure and as such, they are rendered unable to counter insults such as pressure, friction, and shear, making some pressure ulcers unavoidable.

Many healthcare providers are not familiar with what is known as the Kennedy Terminal Ulcer, or KTU. Credited with the first clinical description of skin organ compromise at life's end in modern literature is Karen Lou Kennedy-Evans. In 1983, while working at the Byron Health Center, then a 500-bed long-term care center, she started one of the first skin care programs. While collecting data, she became the first to discover a pressure ulcer that had certain characteristics that become evident shortly before death. This pressure ulcer is now known as the "Kennedy Terminal Ulcer", a pressure ulcer some people develop as they are dying. Kennedy reported that 56% of patients who died in an intermediate care setting developed pressure ulcers within the 6 weeks prior to their deaths. Also described as a "terminal ulcer", it can be shaped like a pear, butterfly or horseshoe. It can have the colors of red, yellow, black or purple. The borders of the ulcer are usually irregular and it has a sudden onset and appears suddenly when death is imminent (within 14–21 days). It is also interesting to learn that a similar condition was actually first described by Jean-Martin Charcot 112 years earlier in 1877. Charcot described a specific type of ulcer that is "butterfly in shape and occurring over the sacrum". Patients that developed these ulcers usually died shortly thereafter, hence he termed the ulcer Decubitus Ominosus.

Also referenced as "observational phenomena", a Kennedy Terminal Ulcer may start out as a blister or a Stage II PU and can rapidly progress to a Stage III or a Stage IV PU. In the beginning it can look much like an abrasion as if someone took the patient and drug his or her bottom along a black top driveway. It can become deeper and starts to turn colors. The colors can start out as a red/purple area then turn to yellow and then black. Here is an example of a butterfly shape.



Here is a Kennedy Terminal Ulcer to the left hip that worsens rapidly from February 11 to February 28, noting increased dimensions, periwound erythema and resulting black in color despite appropriate management and care.



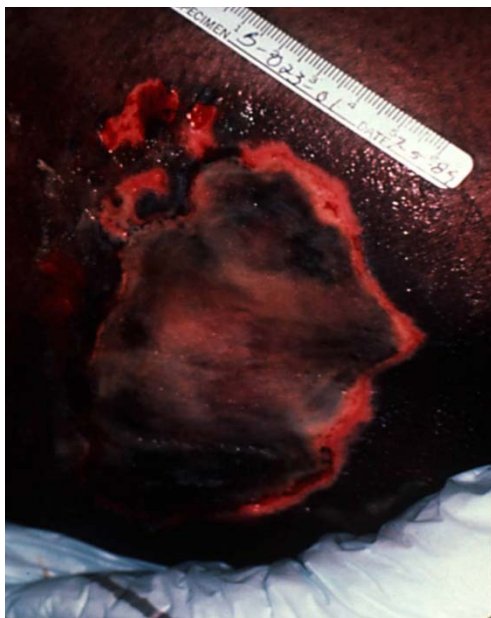
Similar in its observational characteristics, a suspected deep tissue injury or sDTI, may present as a purple or maroon localized area of discolored intact skin or blood filled blister due to damage of underlying soft tissue from pressure and/or shear. The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler than the other area. In 2007, the NPUAP released an updated staging system to improve clarity and accuracy. Keep in mind that accurate staging requires knowledge of the anatomy of the skin and deeper tissue layers, the ability to recognize these tissues, and the ability to differentiate among them. The staging system is designed for use with pressure-induced ulcers only and is a complex skill that can take time to develop.



With regard to the skin and skin failure; it is often overlooked and not included in patient/family education that the skin is the largest organ of the body and can and does fail along with the other organs. Skin failure, as a term, was coined in 2001 by Drs Spahn, Hobbs and Duncan. Multi Organ Death & Dysfunction Syndrome, is defined as “the presence of altered organ function in an acutely ill patient such that homeostasis cannot be maintained without an intervention. In 2006, Langemo updated the definition of skin failure as an acute episode where the skin and subcutaneous tissues die, or (become necrotic) due to hypoperfusion that occurs concurrent with severe dysfunction or failure of other organ systems.... as observed here in a light skin toned individual



and here in a dark skin toned individual.



Are you familiar with the mnemonic SCALE? The Skin Changes At Life's End “SCALE” panel was united in 2008 to explore issues surrounding skin conditions associated with dying patients. These 18 thought leaders included nurses, physicians, legal experts and a medical writer who all had an interest in or clinical experience with skin conditions in dying patients. Included in the panel were Karen Lou Kennedy

and Dr. Diane Langemo, who proposed the concept of skin failure. After reviewing the existing literature on the topic and hearing presentations by selected panel members, the SCALE panel drafted preliminary consensus statements that were presented internationally at wound conferences, and were published and posted on the SCALE website.

The SCALE Final Consensus Statement was released on October 1, 2009 and reflects the current evidence and best practices surrounding Skin Changes At Life's End. There is clear agreement that more research is needed to enhance our understanding of the multiple and complex skin change phenomena that occur during the dying process. The 10 consensus statements provide practical and focused suggestions for clinical management and we are going to look at each statement beginning with #'s 1, 4 & 6 that speak to physiologic changes.

Statement 1 reads: Physiologic changes that occur as a result of the dying process may affect the skin and soft tissues and may manifest as observable (objective) changes in skin color, turgor, or integrity, or as subjective symptoms such as localized pain. These changes can be unavoidable and may occur with the application of appropriate interventions that meet or exceed the standard of care. When the dying process compromises the homeostatic mechanisms of the body, a number of vital organs may become compromised. The body may react by shunting blood away from the skin to these vital organs, resulting in decreased skin and soft tissue perfusion and a reduction of the normal cutaneous metabolic processes. Minor insults can lead to major complications such as skin hemorrhage, gangrene, infection, skin tears, and pressure ulcers that may be markers of SCALE.

Skin changes at life's end are a reflection of compromised skin with reduced soft tissue perfusion, decreased tolerance to external insults, and impaired removal of metabolic wastes. The authors share in more detail that when a patient experiences SCALE, tolerance to external insults, such as pressure, decreases to such an extent that it may become clinically and logistically impossible to prevent skin breakdown and the possible invasion of the skin by microorganisms. Compromised immune response may also play an important role, especially with advanced cancer patients and with the administration of corticosteroids and other immunosuppressant agents. Skin changes may develop at life's end despite optimal care, as it may be impossible to protect the skin from environmental insults in its compromised state. These changes are often related to other cofactors including aging, coexisting diseases, and drug adverse events. SCALE, by definition occurs at life's end, but skin compromise may not be limited to end of life situations; it may also occur with acute or chronic illnesses, and in the context of multiple organ failure that is not limited to the end of life.

However, the SCALE panel also recognizes that patients such as this that are Critically Ill with multi-organ failure, are especially susceptible to problems with skin integrity, including skin failure.



The first known study of its type conducted by Kim Curry and her colleagues at the University of Tampa, University of South Florida and Tampa General Hospital was conducted over an 18 month period of time to identify and describe characteristics of ICU patients with skin failure and to examine the relationships among patient demographics, nutritional status, laboratory parameters, the presence of other organ system failures, and use of mechanical devices, support surfaces, and vasopressive and sedative medications. A total of 29 patients with acute skin failure were identified. 100% with documented skin failure were diagnosed with failure of at least one other organ system. 90% had an albumin level of less than 3.5. In addition, generalized edema, ventilator use, age > 50 years, weight > 150 lbs, creatinine > 1.5, mean arterial pressure of 70, and /or the use of sedatives and /or analgesic medications were observed in 75% of patients with skin failure. Significant positive correlations were seen between several pairs of variables, including sepsis and renal failure, and the concurrent use of vasopressive agents. The authors concluded that nonskin organ system failure and skin failure can be expected to be observed at the same time.

Again, skin compromise may not be limited to end of life situations; it may occur with chronic illnesses such as Systemic lupus erythematosus, a long-term autoimmune disorder that may affect the skin, joints, kidneys, brain, and other organs. The body's immune system mistakenly attacks healthy tissue which leads to long-term (chronic) inflammation.



Skin compromise may also occur with acute illnesses and present such as this with purple or a maroon localized area of discolored intact skin which could be a sDTI or a KTU.



Evolution may include a thin blister.



The wound may further evolve and become covered by thin eschar.



Statement 6 speaks to risk factors, symptoms and signs associated with skin changes at life's end and may include weakness and progressive limitation of mobility, suboptimal nutrition including loss of

appetite, weight loss, cachexia and wasting low serum albumin and/or pre-albumin, and low hemoglobin as well as dehydration, impaired immune function, loss of skin integrity from any number of factors including equipment, devices, incontinence, chemical irritants, chronic exposure to body fluids, skin tears, pressure, shear, friction and infections. According to the authors, diminished tissue perfusion is the most significant risk factor for Skin Changes At Life's End and generally occurs in areas of the body with end arteries, such as the fingers, toes, ears, and nose.

These areas may exhibit early signs of vascular compromise and ultimate collapse, such as dusky erythema, mottled discoloration, local cooling, and eventually infarcts and gangrene. As the body faces a critical illness or disease state, a normal protective function may be to shunt a larger percentage of cardiac output from the skin to more vital internal organs, thus averting immediate death.



Most of the skin has collateral vascular supply but distal locations such as the fingers, toes, ears, and nose have a single vascular route and are more susceptible to a critical decrease in tissue oxygenation due to vasoconstriction. Furthermore, the ability to tolerate pressure is limited in poorly perfused body areas. Additional literature reviews and clinical research are needed to more thoroughly comprehend and document all of the potential risk factors associated with Skin Changes At Life's End and their clinical manifestations.”



Statement 2 reads that the plan of care and patient response should be clearly documented and reflected in the medical record. Documentation should include the patient's comorbidities, pressure

ulcer risk factors, significant changes, and clinical interventions that are consistent with the patient's wishes and recognized guidelines for care. Facility policies and guidelines for record keeping should be followed and facilities should update these policies and guidelines as appropriate. The impact of the interventions should be assessed and revised as appropriate. Specific approaches to documentation of care should be consistent with professional, legal, and regulatory guidelines, and may involve narrative documentation, the use of flow sheets, or other documentation systems/tools. If a patient is to be treated as palliative, it should be stated in the medical record, ideally with a reference to a family/caregiver meeting, and that agreement was reached. Palliative care must be patient-centered, with skin and wound care being only a part of the total plan of care.

Statement 7 speaks to the importance of assessing the "whole" patient, paying special attention to bony prominences and areas with underlying cartilage. The skin or wound abnormality should be described exactly as assessed. In addition to the consensus statements there are also tables and a glossary that provide a list of dermatologic terms that may be useful when describing areas of concern as well as descriptive terms for lesions based on characteristics and size. Remember, unless patients and families are told otherwise, they generally assume that skin does not change or breakdown and that all wounds can and heal. Many patients and families may be hearing "reducing probability for healing" outcome for the first time and will need support in order to understand the limitations identified.

Here we see and note, Partial thickness loss of skin integrity noted to the left ear lobe and left outer ear and black, dry, necrotic eschar to the left great toe related to diminished tissue perfusion.

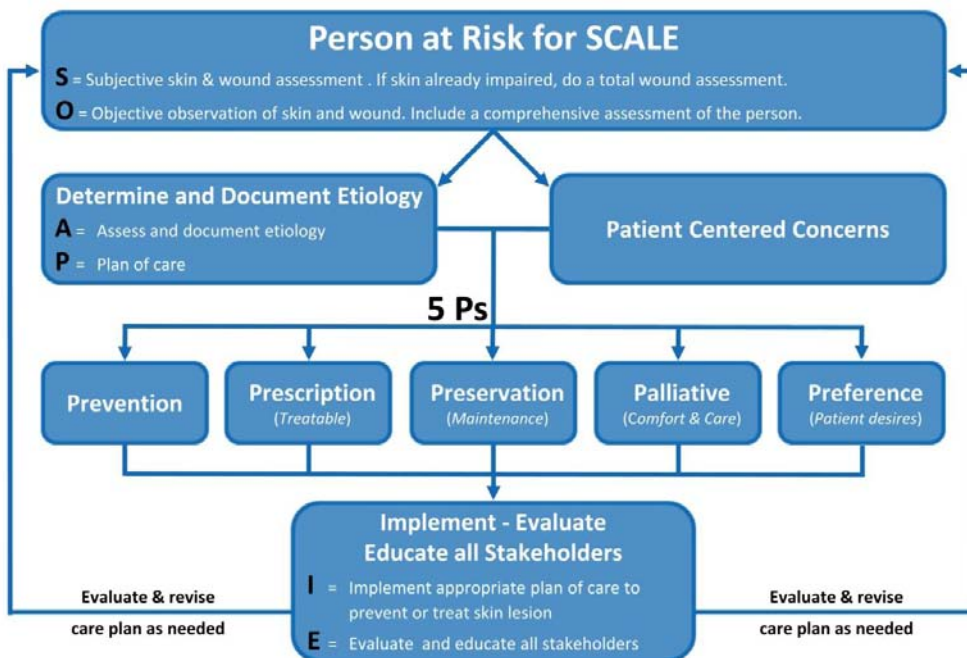


Consensus Statement #9 addresses intervention strategies based on what the SCALE panel calls the 5 Ps based on skin change etiology and the goals of care which may be Prevention whereby the plan of care needs to address excessive pressure, friction, shear, moisture, suboptimal nutrition, and immobilization, all notable risk factors for skin damage & pressure ulcer development. Prescription refers to the interventions for a treatable lesion. The goal of care may be healing and with appropriate treatment, improved outcomes can be achieved.

Preservation refers to situations where the opportunity for wound healing or improvement is limited, so maintenance of the wound in its present clinical state is the desired outcome or goal. A maintenance

wound may have the potential to heal, but there may be critical co-factors that may direct or support the goal of maintenance. For example, there may be limited access to care, or the patient may simply refuse treatment. Palliation refers to those situations in which the goal of treatment is comfort and care, not healing. A palliative or non-healable wound may deteriorate because of a general decline in the health of the patient as part of the dying process or because of hypoperfusion associated with non-correctable critical ischemia. And, Preference includes the desires and preferences of the patient and the patient's care circle.

To help explain the process of translating this recommendation into practice the SCALE Final Consensus Statement panel shares this excellent chart to use the 5 P's or the 5P enabler in combination with the SOAPIE mnemonic. Realistic outcomes can be derived from appropriate SOAPIE processes with the 5Ps becoming the guide to the realistic outcomes for each individual. Beginning with S, the Subjective skin & wound assessment: The person at the end of life needs to be assessed by history, including an assessment of the risk for developing a skin change or pressure ulcer (Braden Scale or other valid and reliable risk assessment scale). O is the Objective observation of skin & wound status and a comprehensive assessment of the "whole" person. A is our assessment and documentation to include etiology and P is the Plan of care: A care plan should be developed that includes a decision on skin care considering the 5Ps, Prevention, Prescription, Preservation, Palliative or Preference. This plan of care should also consider input and wishes from the patient and the patient's care circle. I is for Implementation of the appropriate plan of care to prevent or to treat and E is for the education and evaluation of all stakeholders to include the interprofessional team, the patient and their care circle. We must also remember that the interventions must be aimed at treating the cause and at patient-centered concerns (pain, quality of life) before addressing the components of local wound care consistent with the patient's goals and wishes.



Realistic outcomes can be derived from appropriate SOAPIE process with the 5Ps becoming the guide to the realistic outcomes for each individual. Here is just another view of the SOAPIE Process

S	Subjective S & W assessment	Take a detailed history, complete a risk assessment such as Braden or other reliable risk assessment scale
O	Objective observation S & W	Physical exam to identify skin changes and existing wounds and pressure ulcers
A	Assess etiology	Assess the general condition of the patient
P	Plan of care	Develop a plan using the 5 P's as a guide
I	Implement plan	Consider available resources and pt's /care circle wishes
E	Evaluate & educate	Update patient and care circle as health status changes

The SCALE Statement 3 shares that patient centered concerns should be addressed including pain and activities of daily living. A comprehensive, individualized plan of care should not only address the patient's skin changes and comorbidities, but any patient concerns that impact quality of life including psychological and emotional issues. Research suggests that for wound patients, health-related quality of life is especially impacted by pain, change in body image, odors and mobility issues. It is not uncommon for these factors to have an effect on aspects of daily living, nutrition, mobility, psychological factors, sleep patterns and socialization.^{4,5} Addressing these patient-centered concerns optimizes activities of daily living and enhance a patient's dignity."

Statement 8 "There are very definite descriptive terms for skin changes that can be used to facilitate communication between healthcare professionals. Until more is known about Skin Changes At Life's End, subjective symptoms need to be reported and objective skin changes described. This will allow for identification and characterization of potential end of life skin changes.

An accurate diagnosis can lead to decisions about the area of concern and whether it is related to end of life care and/or other factors. The diagnosis will help determine appropriate treatment and establish realistic outcomes for skin changes. For pressure ulcers, it is important to determine if the ulcer may be

(i) healable within an individual's life expectancy, (ii) maintained, or (iii) non-healable or palliative.⁹ The treatment plan will depend on an accurate diagnosis, the individual's life expectancy and wishes, family members' expectations, institutional policies, and the availability of an interprofessional team to optimize care.¹² Remember that patient status can change and appropriate reassessments with determination of likely outcomes may be necessary.

It is important to remember that a maintenance or non-healable wound classification does not necessarily equate to withholding treatment. For example, the patient may benefit with improved quality of life from surgical debridement and/or the use of advanced support surfaces.”

the and pt and family may voice they are OK with palliation but when the skin begins to demonstrate it is difficult for them to deal with visible changes.

Words hospice and palliative care may evoke feelings of concern in patients and family members. Some may consider this approach as “throwing in the towel” or “giving up hope” and other may feel a provider (physician, nurse , home care agency or NH) may be abandoning them because there wounds wont heal-they are a hopeless case.

Statement 5 states that expectations around the patient's end of life goals and concerns should be communicated among the members of the interprofessional team and the patient's care circle. The discussion should include the potential for SCALE including other skin changes, skin breakdown and pressure ulcers. Communication with the interprofessional team and the patient's circle of care should be documented. The education plan should include realistic expectations surrounding end of life issues with input from the patient if possible. Communication of what to expect during end of life is important and this should include changes in skin integrity. With the recognition that skin conditions are sometimes a normal part of the dying process a normal, there is less potential for assigning blame, and a greater understanding that skin organ compromise may be an unavoidable part of the dying process. And Statement 10 shares that patients and concerned individuals should be educated regarding SCALE and the plan of care. So, again, with that said, education needs to be directed not only to the patient but also the patient's circle of care and documentation of the education is recommended. If adherence to the plan of care cannot be achieved, this should be documented in the medical record (including the reasons), and alternative plans proposed if available and feasible.

With regard to skin, prevention and wound care treatment interventions for patient's at life's end, the goals vary little from one another, aside from the goal of healing. Pressure ulcer risk assessment can be obtained using the Braden risk assessment form or other validated risk assessment tools. However, many experts suggest that every palliative care patient should be considered at high risk for PU development. A comprehensive assessment of the patient nearing end of life, including physical and psychosocial health and overall quality of life, is essential to establish realistic goals. In addition to current skin issues or wounds, we need to assess and obtain a history of past skin breakdown and recently closed wounds.

Our goal is intact skin. Prevention should be the most important part of a comprehensive skin program.

We must look at prevention as a treatment to keep the skin healthy! It is the largest organ of the body; why is it that it takes less notice than that of the heart, lungs, kidneys.

In general, recommendations for maintaining skin integrity include gentle cleansing with a pH sensitive cleanser followed by application of a high quality moisturizer & a non-occlusive skin protectant. Complete topical skin care choices today also offer ingredients that deliver nutrients such as amino acids, antioxidants and vitamins to the cells.

OK, Lets now take a look at how we manage the skin! We start w/ the basics paying close attention to this dynamic organ of the body. The first step we usually begin with is cleansing the skin. Avoid cleansing the body with soap, which has an alkaline pH and can strip the skin of the acid mantle increasing the risk of dryness, irritation and breakdown. Use pH balanced cleansing products. Some patients may require additional cleansing products to address odor. Ensure that bathing frequency is individualized

Moisture from incontinence, perspiration and wound drainage can macerate skin and make it more prone to breakdown. The perineal region is especially at risk due to assault from urine or feces. • Soap and water can be very drying and strip the acid mantle from the skin. It also requires frequent rinsing • Commercial cleansers have a pH balance and offer no-rinse varieties that are step savers • Cleansing wipes and shampoo caps that are pH balanced are also available.

To understand healthy skin, it is important to know what transepidermal water loss is.

It is normal for the body to transpire moisture; approx 1 liter /day Skin care products should, therefore, be designed to prevent excessive TEWL and should be breathable optimizing moisturization. Newer technology, that being nutrient based skin creams, now provides us with the concept of nourishment of the skin to enhance the function and restoration of the skin vs. many of the lotion based products which are primarily water based products. Achieved externally with products and internally with hydration. Not all patients are dehydrated but most elderly patients have a fluid volume deficit.

Moisturization of the body

- Lotions, creams and ointments
- Ensuring adequate hydration with fluid programs
- Avoid vigorous massage in applying the products, as it may damage already compromised capillaries
- The normal loss of water through the skin, approximately 1 liter per day
- Product applied to the skin should be designed to prevent excessive TEWL
- Ideally products should not occlude the skin, occlusive products do not allow the skin to breathe and will clog pores, increasing risk of maceration

In an article authored by Cynthia Fleck published in 2005 she shares that Pruritus, or itching, can result from the disease process (ie, cancer) or from treatment or reactions to medications. Examples of disease states that can lead to itching include lymphomas, renal disease, leukemia, and hepatic (liver) disease. Strategies to address the discomfort of pruritus include: ■ Providing an environment with a humidity above 40% ■ Utilizing soap-free and surfactant free skin cleansers ■ Employing the use of high-quality moisturizers with ingredients like dimethicone ■ Moisturizing the patient's skin within 5 minutes of bathing ■ Applying cold compresses ■ Increasing fluid intake to maintain hydration and Avoiding alcohol

and caffeine. If the aforementioned symptom management is inadequate, consider the addition of pharmacologic agents, such as antihistamines, corticosteroids, tranquilizers, and topical therapies.

Again, many of the traditional choices for protection have been petrolatum based and while they do protect, they are not breathable and limit TEWL. Not do they offer the concept of “nourishing” the skin. These advanced skin care choices now offer what we call “endermic” nutrition providing nutrients, amino acids, vitamins and antioxidants to enhance skin health.

When the skin needs extra protection from incontinence, periwound maceration, wound, stoma, fistula, abscess site drainage or leaking, partial –thickness wounds, and denudation, barriers provide the answers. What are the primary barriers and when are they used? Ointments and creams that contain petrolatum are inexpensive and readily available but need to be applied frequently as they melt off and was away quickly. They are also less breathable and sit on top of the skin, and inhibit the absorbency of the brief, under pads and dressings. Creams are newer technologies that contain ingredients that provide penetrate the skin and provide superior barrier protection and are breathable.

When do we step up to the 2nd generation protectants and barriers? Ideal for normal to broken down skin. For protection against moisture, itching and minor irritation. Indicated for the relief of discomfort assoc with IAD caused by wetness, urine and/or stool and other macerated skin conditions. When there is significant dermatitis such as Weepy/ edematous limbs.

Primary Skin sealants or liquid skin protection offer choices to protect intact skin from adhesives, friction and moisture such as incontinence. They may also benefit management of partial thickness skin damage such as denuded or macerated skin, skin tears and healing or newly healed wounds.

A new class of liquid skin protection has recently become available known as cyanoacrylates. These cyanoacrylate molecules polymerize and bond to the skin’s surface integrating with the epidermis until the epidermal cells naturally slough away, providing higher strength and higher resistance to wash off than other film barriers. Contrary to some barrier films and skin preps, no solvents are used (there is no evaporation) and 100% of the product remains on the skin providing for higher strength and higher resistance to wash off than other film barriers.

Pain and discomfort may be associated with prevention as well as treatment of a wound, even for individuals at the end of life. Initial and routine pain assessment, as well as pain treatment, is recommended.

Pain is the 5th vital sign and pain mgmt must be a major focus with any patient with a wound. According to Diane Krasner’s research it has been reported that 45-80% of patients in LTC have pain that is under treated due to fear of overmedicating. It should not hurt to change a dressing or to do wound care and when determined, consider a referral to pain mgmt.

Pain and wound pain can be minimized by maintaining a moist wound bed, selecting and using dressings that can remain in place for days, covering the wound, repositioning, providing medication as needed and encouraging imagery and time outs if needed.

Many chronic wounds, especially critically colonized and infected wounds, produce large amounts of exudate. Wound exudate can be caustic and therefore painful to the periwound tissue. Exudate can be managed using dressings with adequate moisture-retention ability and by using a skin protectant or barrier cream to the periwound skin to prevent maceration. The dressing regimen should be chosen based on the wound's drainage level. Dressings developed to handle moderate to large amounts of exudate include some hydrocolloids, glycerin based hydrogel sheets, alginates, alginates and carboxymethylcellulose (CMC) combinations, foams, polyacrylates, and cellulose. The goal should be to minimize dressing changes while providing for adequate drainage absorption. This will help optimize the patient's social interaction and activity level and is an important objective for palliative nonhealing wounds.

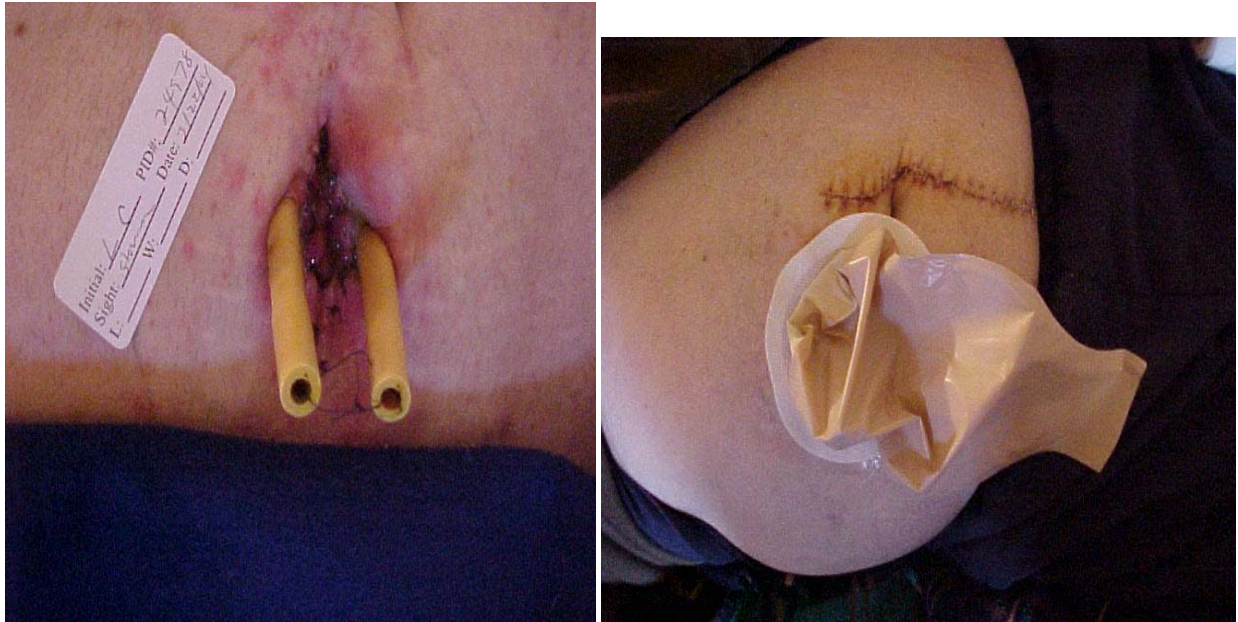
Here is an example of an individual status post pneumonectomy with rib resection that presented with highly exudating wounds that responded well with the use of foam dressings, daily



initial consultation and 7 days after moisture retention foam dressings



And here are examples of wounds that may benefit from something more than physical dressings alone. One might consider pouching with a supportive topical product such as a liquid skin protectant.



Control of wound odor is imperative for individuals with malodorous wounds as wound odor can be embarrassing and lead to isolation and poor quality of life. It is important to treat the cause of the odor and the odor itself. Strategies include identifying the cause of the odor and working to eliminate it. Cleansing these wounds with antimicrobial wound cleansers containing safe ingredients like benzylkonium chloride (BZK) and identifying wounds with high bioburden and treating them with safe, pain-free antimicrobial topical dressings are appropriate interventions. Also available are polyacrylate dressings and super absorbent dressings that offer polymer technology to bind microorganisms and lock them within the polymers. Treating the cause is more effective than simply spraying an odor eliminator.

We all recognize that maximizing nutrition is an integral part of the comprehensive prevention program and in certain patient populations we may need to step up our plan of care and perhaps be creative! We need to consult with our experts such as RD's to evaluate and prepare individualized treatment plans to enhance the nutritional status of those identified at risk for malnutrition. As end of life approaches, the individual may consume little in the way of fluids and food. The NPUAP guidelines note that, while it is important to address nutrition and hydration needs compatible with the individual's condition and wishes, adequate nutritional support often is not attainable. Providing several small meals per day and nutritional protein supplements when ulcer healing is the goal are sound suggestions.

The term fungating is used to reflect a wound originating from a malignant, ulcerating, proliferative or mixed, growth process. In the ulcerating growth process, a crater-like wound develops; when the growth is primarily proliferative, a nodular "fungus" or cauliflower appearing lesion develops. The fungating tumor wound bed is ulcerated and has a bacterially contaminated surface. The breast is the most frequent location, although tumors also can occur on the head, neck, and in an area of melanoma.

Given the location of these tumors and the fact that the tissue is friable and bleeds easily, providing care can be challenging.

Here is an example of a fungating wound to the posterior neck



Goals of treatment for fungating wounds center on symptom control, comfort and quality of life maintenance to the extent possible. When debridement is necessary, a nonsurgical approach such as an autolytic, polyacrylate or enzymatic choice is recommended to minimize bleeding and what is referred to as “seeding” of malignant cells. Bleeding and trauma can also be minimized by using non-adherent, atraumatic dressings such as contact layers and super absorbent polymer dressings. These multi layer non-adherent wound covers are combined with highly absorptive polymers that act as a super absorbent core. They also have the ability to absorb and lock in high volumes of exudate.

The non-adherent and gentle wound contact layer prevents the dressing from sticking to the wound and periwound skin. Dry dressings should be avoided as they can contribute to bleeding on removal.

Radiation therapy can also result in skin and tissue damage and can occur during, immediately, after, or after an extended time after the radiation therapy. Radiation skin damage can be superficial as evidenced by the Oncology Nurses Society Classification for Skin Reaction, Score 1 on the left and Score 6 on the right.



Here you can note the scale from 0-6 for the ONS classification for Skin Reaction related to Radiation therapy.

- 0 - Normal skin within a radiation field
- 1 - Faint or dull erythema, follicular reactions
- 2 - Bright erythema
- 3 - Dry desquamation
- 4 - Small to moderate wet desquamation
- 5 - Confluent moist desquamation
- 6 - Ulcerations, hemorrhage or necrosis

Preventable interventions and treatment of radiation skin damage and radiation wounds is similar to other skin prevention and wound treatment guidelines. All tissue within the field of radiation should be protected. Skin moisturizers and protectants can be used to enhance skin health. A topical hydrogel may be helpful to donate wound bed moisture for dry desquamation. If the desquamation is moist and/or draining, a non-adherent hydrogel sheet, foam or a super-absorbent polymer dressing may all be sound choices.

What is DIMES and what do DIMES have to do with wound care? The DIME concept was developed by Gary Sibbald, Kevin Yoo and Elizabeth Ayello as a framework for planning and implementing an effective treatment care plan for chronic wounds while saving money and using valuable resources wisely. DIMES offers us a logical way to address each step in the process of assessing and treating wounds. The components of DIMES address Debridement, Infection and inflammation, moisture balance, the edge and environment as well as support products, services and education in our wound healing bank.

D	Debridement	The removal of nonviable tissue
I	Infection/Inflammation	Addressing bioburden and inflammation within the wound
M	Moisture Balance	Achieving and maintaining moisture balance in and around the wound
E	Edge/Environment	Treating stalled wounds where epithelium fails to migrate
S	Supportive Products, Services and Education	Appropriate support promotes optimal outcomes

D-I-M

D = Debridement

- Is there necrotic tissue? If yes, remove it.

I = Infection/Inflammation

- Is there an undiagnosed infection or prolonged inflammation?

M = Moisture balance

- Is there too much or too little moisture?
- What else can be done to promote faster wound edge migration after local wound care has been done?

E = Edge

Are the edges rolled? Has the wound been the same size for weeks?

S = Supportive products, services & education

Formal patient, family and caregiver education in skin care and pu prevention are critical to reduce the incidence of pu's in any care setting. Education should be offered to all involved with patient care and educational materials for patient and family should be at an appropriate reading level and evaluated to demonstrate quality of care across care settings.

The skin is the body's largest organ and like any other organ is subject to a loss of integrity. It has an increased risk for injury due to both internal and external insults. The panel concluded that: our current comprehension of skin changes that can occur at life's end is limited; that SCALE process is insidious and difficult to prospectively determine; additional research and expert consensus is necessary; and contrary to popular myth, not all pressure ulcers are avoidable.

Thank you for joining me today to enhance your learning related to skin and wound care related to "When the Goal is not Healing... SCALE. I also want to extend thanks to all of the many dedicated clinicians, researchers and authors who have provided and extended this valuable education information so we may better optimize the care that we provide to our patients.