Abstract
An expert panel was established to formulate a consensus statement on Skin Changes At Life’s End (SCALE). The panel consists of 18 internationally recognized key opinion leaders including clinicians, caregivers, medical researchers, legal experts, academicians, a medical writer and leaders of professional organizations. The inaugural forum was held on April 4-6, 2008 in Chicago, IL, and was made possible by an unrestricted educational grant from Gaymar Industries, Inc. The panel discussed the nature of SCALE, including the proposed concepts of the Kennedy Terminal Ulcer (KTU) and skin failure along with other end of life skin changes. The final consensus document and statements were edited and reviewed by the panel after the meeting. The document and statements were initially externally reviewed by 49 international distinguished reviewers. A modified Delphi process was used to determine the final statements and 52 international distinguished reviewers reached consensus on the final statements.

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.

Specific areas requiring research and consensus include: 1) the identification of critical etiological and pathophysiological factors involved in SCALE, 2) clinical and diagnostic criteria for describing conditions identified with SCALE, and 3) recommendations for evidence-informed pathways of care.

The statements from this consensus document are designed to facilitate the implementation of knowledge-transfer-into-practice techniques for quality patient outcomes. This implementation process should include interprofessional teams (clinicians, lay people and policy makers) concerned with the care of individuals at life’s end to adequately address the medical, social, legal, and financial ramifications of SCALE.

The content of this document is based on the results of a two-day round table discussion held on April 4-6, 2008 in Chicago, IL, and was made possible by an unrestricted educational grant from Gaymar Industries, Inc. Additional input was received from international panels of 49 and 52 distinguished reviewers using a modified Delphi Method process. The information contained herein does not necessarily represent the opinions of all panel members, distinguished reviewers, or Gaymar Industries, Inc.

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SCALE Expert Panel Members

Co-Chairpersons:
R. Gary Sibbald, BSc, MD, FRCPC (Med, Derm), MACP, FAAD, MEd, FAPWCA University of Toronto, Toronto, Canada, gary.sibbald@utoronto.ca
Diane L. Krasner, PhD, RN, CWCN, CWS, BCLNC, FAAN, Wound & Skin Care Consultant, York, PA, USA, dlkrasner@aol.com

Corresponding Author: 212 East Market Street, York, PA 17403 USA

Medical Writer:
James Lutz, MS, CCRA, Lutz Consulting, LLC, Medical Writing Services, Buellton, CA, USA, jlutzmail@aol.com

Panel Facilitator:
Cynthia Sylvia, MSc, MA, RN, CWOCN, Gaymar Industries, Inc., Orchard Park, NY, USA, csylvia@gaymar.com

Additional Panel Members:
Oscar Alvarez, PhD, CCT, FAPWCA, Center for Curative and Palliative Wound Care, Calvary Hospital, Bronx, NY, USA, oalvarez@calvaryhospital.org
Elizabeth A. Ayello, PhD, RN, ACNS-BC, ETN, FAPWCA, FAAN, Excelsior College School of Nursing, USA, elizabeth@ayello.com
Sharon Baranoski, MSN, RN, CWOCN, APN, DAPWCA, FAAN, Wound Care Dynamics, Inc., Shorewood, IL, USA, nrsebear@aol.com
William J. Ennis, DO, MBA, FACOS, University of Illinois, Palos Heights, IL, USA, w.ennis@comcast.net
Nancy Ann Faller, RN, MSN, PhD, ETN, CS, Carlisle, PA, USA, nafaller@aol.com
Jane Hall, Medical Malpractice Defense Attorney, Huie, Fernambucq & Stewart, LLP, Birmingham, AL, USA, jgh@hfslip.com
Rick E. Hall, BA, RN, CWCN, Helping Hands Wound Care, Wichita, KS, USA, mnsurse66@yahoo.com
Karen Lou Kennedy-Evans, RN, CS, FNP, KL Kennedy, LLC, Tucson, AZ, USA, ktulcer@aol.com
Diane Langemo, PhD, RN, FAAN, Langemo & Assoc, Grand Forks, ND, USA, dianelangemo@aol.com
Joy Schank, RN, MSN, ANP, CWOCN, Schank Companies, Himrod, NY, USA, joyschank@yahoo.com
Thomas P. Stewart, PhD, Gaymar Industries, Inc., Orchard Park, NY & S.U.N.Y. at Buffalo, USA, tstewart@gaymar.com
Nancy A. Stotts, RN, CNS, EdD, FAAN, University of California, San Francisco, San Francisco, CA, USA, nancy.stotts@nursing.ucsf.edu
David R. Thomas, MD, FACP, AGSF, GSAF, CMD, St. Louis University, St. Louis, MO, USA, thomasdr@slu.edu
Dot Weir, RN, CWON, CWS, Osceola Regional Medical Center, Kissimmee, FL, USA, dorothy.weir@hcahealthcare.com
Panel Statements

Statement 1: 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.

Statement 2: The plan of care and patient response should be clearly documented and reflected in the entire medical record. Charting by exception is an appropriate method of documentation.

Statement 3: Patient centered concerns should be addressed including pain and activities of daily living.

Statement 4: Skin changes at life’s end are a reflection of compromised skin (reduced soft tissue perfusion, decreased tolerance to external insults, and impaired removal of metabolic wastes).

Statement 5: 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 circle of care. The discussion should include the potential for SCALE including other skin changes, skin breakdown and pressure ulcers.

Statement 6: Risk factors symptoms and signs associated with SCALE have not been fully elucidated, but may include:

- Weakness and progressive limitation of mobility.
- Suboptimal nutrition including loss of appetite, weight loss, cachexia and wasting, low serum albumin/pre-albumin, and low hemoglobin as well as dehydration.
- Diminished tissue perfusion, impaired skin oxygenation, decreased local skin temperature, mottled discoloration, and skin necrosis.
- Loss of skin integrity from any of a number of factors including equipment or devices, incontinence, chemical irritants, chronic exposure to body fluids, skin tears, pressure, shear, friction, and infections.
- Impaired immune function.

Statement 7: A total skin assessment should be performed regularly and document all areas of concern consistent with the wishes and condition of the patient. Pay special attention to bony prominences and skin areas with underlying cartilage. Areas of special concern include the sacrum, coccyx, ischial tuberosities, trochanters, scapulae, occiput, heels, digits, nose and ears. Describe the skin or wound abnormality exactly as assessed.

Statement 8: Consultation with a qualified health care professional is recommended for any skin changes associated with increased pain, signs of infection, skin breakdown (when the goal may be healing), and whenever the patient’s circle of care expresses a significant concern.

Statement 9: The probable skin change etiology and goals of care should be determined. Consider the 5 Ps for determining appropriate intervention strategies:

- Prevention
- Prescription (may heal with appropriate treatment)
- Preservation (maintenance without deterioration)
- Palliation (provide comfort and care)
- Preference (patient desires)

Statement 10: Patients and concerned individuals should be educated regarding SCALE and the plan of care.