Summary of commonalities from Panel Presentations-

Untangling the Terminology: Unavoidable Pressure Injuries, Terminal Ulcers, & Skin Failure

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Faculty, Excelsior College School of Nursing
Disclosure - Dr. Ayello is a:

- 1999 NPUAP President and Board of Director alumni
- Original member of the SCALE panel
- Consultant to CMS

Dr. Ayello has/is a consultant to CMS on various wound & skin initiatives including quality technical panels, IRF-PAI pressure ulcer items, Tag F 314, LTCH CARE Data Set, and MDS 3.0 Section M Skin Conditions (LTC, IRF-PAI, LTCH). Slides and opinions expressed are Dr. Ayello’s and not official CMS statements.

Consult with official CMS documents for compliance.

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SESSION OBJECTIVES

Participants will summarize commonalities from panel presentations by:

- Defining the concepts of terminal pressure injuries, skin changes at life’s end, skin failure and unavoidable pressure injuries
- Stating the evidence for each concept
- Discussing challenges in describing and using the terminology of these pressure injuries

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How many concepts are there?

- Several terms to describe these clinical skin observations
  - Kennedy Terminal Ulcer (KTU)
  - Skin Changes at Life’s End (SCALE)
  - Trombley-Brennan Terminal Tissue Injury (TB-TTI)
  - Skin Failure
What is the relationship among these concepts?

How are these related to pressure injuries?

Are any of these unavoidable?
Skin changes in dying patients:
- KTU
- TB-TTI
- SCALE (includes KTU, TB-TTI, PI)

Skin Changes in patients: critically ill or may not be dying

Skin Failure (unavoidable PI?)

Green oval = unavoidable
CMS F 314

§ 483.25(c) Pressure Sores

“Based on the comprehensive Assessment of a resident, the facility must ensure that--

(1) A resident who enters the facility without pressure sores does not develop pressure sores unless the individual’s clinical condition demonstrates that they were unavoidable*; and

(2) A resident having pressure sores receives necessary treatment and services to promote healing, prevent infection and prevent new sores from developing.”

* BOLD and increased font size by Ayello for emphasis
Avoidable or Unavoidable?

“Means that the Resident developed a pressure ulcer

and the Facility did **not** do one or more of the following:

- Evaluate the resident’s clinical condition and pressure ulcer risk factors
- Define and implement interventions that are consistent with resident needs, resident goals and recognized standards of practice
- Monitor and evaluate the impact of the interventions or
- Revise the interventions as appropriate

Even though the Facility **had**:

- Evaluated the resident’s clinical condition and pressure ulcer risk factors
- Defined and implemented interventions that are consistent with resident needs, goals and recognized standards of practice
- Monitored and evaluated the impact of the interventions and
- Revised the approaches as appropriate”

Avoidable  CMS  Unavoidable

Source: F Tag 314 November 2004
## Definitions: Unavoidable Pressure Injuries

**NPUAP & WOCN**

“Can develop even though the **Provider:**

- Evaluated the **individual’s clinical condition** and pressure ulcer risk factors
- Defined and implemented interventions that are consistent with **individual** needs, goals and recognized standards of practice
- Monitored and evaluated the impact of the interventions and
- Revised the interventions as appropriate”

**CMS**

“Means that the **Resident** developed a pressure ulcer even though the **Facility** had:

- Evaluated the **resident’s clinical condition** and pressure ulcer risk factors
- Defined and implemented interventions that are consistent with **resident** needs, goals and recognized standards of practice
- Monitored and evaluated the impact of the interventions and
- Revised the approaches as appropriate”

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Black JM, Edsberg LE, Baharestani MM et al. Pressure ulcers: avoidable or unavoidable? Results of the National Pressure Ulcer Advisory Panel consensus conference. OWM. 2011;57(2): 24-37


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What the literature says about Unavoidable pressure injury (PI)

- Definition exists-CMS, NPUAP
  - a process

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluated both person’s:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Clinical condition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• PI risk factors</td>
<td></td>
<td></td>
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<tr>
<td>Defined and implemented interventions that are consistent with person’s:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• needs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• goals</td>
<td></td>
<td></td>
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<tr>
<td>• and recognized standards of care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitored impact of interventions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluated impact of interventions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revised approaches as appropriate</td>
<td></td>
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</table>

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- Need research- to determine which PI are unavoidable
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Changes at Life’s End (SCALE (2008))</td>
<td>“Physiological changes that occur as a results 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 a as localized pain.” p. 226</td>
</tr>
<tr>
<td>Trombley Brennan (TB-TTI) (2010 )</td>
<td>Spontaneously appearing skin alterations (rapid evolution, speed of enlargement and progression, appearance in areas of little to no pressure such as skins, thighs, and mirror imaging found in patients at the end of life.</td>
</tr>
</tbody>
</table>
### Definitions – Skin Failure

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Failure Langemo &amp; Brown (2006)</td>
<td>“An event in which the skin and underlying tissue die due to hypoperfusion that occurs concurrent with severe dysfunction or failure of other organ systems”. p. 208</td>
</tr>
</tbody>
</table>
|                             | **3 Types**  
|                             | Acute  
|                             | Chronic  
|                             | End Stage  |
| Skin Failure Levine (2016)  | “Skin failure is the state in which tissue tolerance is so compromised that cells can no longer survive in zones of physiological impairment that includes hypoxia, local mechanical stresses, impaired delivery of nutrients, and buildup of toxic metabolic byproducts. This includes pressure injuries, wounds that occur at life’s end and in the setting of multi-system organ failure.” |
### What’s the evidence base?

<table>
<thead>
<tr>
<th>Evidence Base</th>
<th></th>
</tr>
</thead>
</table>
| **KTU (1989)** | 1 retrospective study after clinical observation of these skin changes  
Case review in LTC from 1983-1988  
(51 patients who died)  
| **SCALE (2008)** | Modified 3 phase Delphi process used  
10 Consensus Statements originally drafted by 18 key opinion leaders; then reviewed by 49 international reviewers (2008)  
52 international reviewers reached consensus on the 10 final statements. (2010)  
| **TB-TTI (2010 )** | 2 descriptive studies after clinical observation of these skin changes  
Retrospective chart reviews from 10 bed Palliative care unit  
N=22 (2010)  
N= 80 (2012)  
# What’s the evidence base?

<table>
<thead>
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<tr>
<td><strong>Skin Failure</strong></td>
</tr>
<tr>
<td>Expert opinion based on systematic literature review from 1984 to 2005 - 7 articles were identified and clinical observation</td>
</tr>
<tr>
<td>3 Types: Acute</td>
</tr>
<tr>
<td>Chronic</td>
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<tr>
<td>End Stage</td>
</tr>
<tr>
<td><strong>Skin Failure</strong></td>
</tr>
<tr>
<td>Levine (2016)</td>
</tr>
<tr>
<td>Expert opinion based on literature review and clinical observation</td>
</tr>
<tr>
<td>“A clinical syndrome”</td>
</tr>
<tr>
<td>Levine JM. Unavoidable pressure injuries, terminal ulceration and skin failure; in search of a unifying classification system. ASWC. In press.</td>
</tr>
</tbody>
</table>
## What the literature says:

<table>
<thead>
<tr>
<th>Skin changes in dying persons</th>
<th>Skin Failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree that this is a real clinical phenomena</td>
<td>Agree that this is a real clinical phenomena</td>
</tr>
<tr>
<td>Need to agree on a universal term/diagnostic criteria</td>
<td>Need to agree on a universal term/diagnostic criteria</td>
</tr>
<tr>
<td>Understanding of pathophysiology incomplete</td>
<td>Understanding of pathophysiology incomplete</td>
</tr>
</tbody>
</table>
• Alvarez O, Brindle CT, Langemo D, Kennedy-Evans, KL, Krasner DL, Brennan MR, Levine JM. The VCU Pressure Ulcer Summit. The search for a clearer understanding and more precise clinical definition of the unavoidable pressure injury. JWOCN. 2016; 43(5);455-463.


• Olshansky K. Organ failure, hypoperfusion, and pressure ulcers are not the same as skin failure: a case for a new definition. ASCW. 2016; 29(11):150.


• Whitworth JA. Should eponyms be abandoned? Yes. BMJ. 2007; 335:425.


• Yastrub DJ. Pressure or pathology: distinguishing pressure ulcers from the Kennedy terminal ulcer. JWOCN. 2010.37:249-50.
SESSION OBJECTIVES

Participants have summarized commonalities from panel presentations by:

• Defining the concepts of terminal pressure injuries, skin changes at life’s end, skin failure and unavoidable pressure injuries
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Audience Participation

Time for Questions

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