Unavoidable Pressure Ulcers
The Latest Evidence

Mary R Brennan, RN MBA CWON

Objective

Describe position statements related to unavoidable pressure ulcers

List the types of pressure ulcers that may be unavoidable

Controversies and Issues

Are some pressure ulcers avoidable?

Are our risk assessment tools adequate and inclusive for all types of patients?

What documentation is necessary?

Clinical Evidence to support prevention

Do we understand how incontinence affects the skin?

Definition of an unavoidable pressure ulcer

- An unavoidable pressure ulcer can develop even though the provider evaluated the individual's clinical condition and pressure ulcer risk factors; defined and implemented interventions consistent with individual needs, goals, and recognized standards of practice; monitored and evaluated the impact of the interventions; and revised the approaches as appropriate.

Long Term Care 483.25c/Ftag 314

- Unavoidable Pressure Ulcer – “Unavoidable” 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.

Acute Care

NPUAP position statement - “An unavoidable pressure injury is one that develops even though the provider has evaluated the patient’s clinical condition and pressure injury risk factors; defined and implemented interventions that are consistent with the patient’s needs and goals, and formulated with recognized standards of practice; monitored and evaluated the impact of interventions; and revised these approaches as appropriate.” [2]

NPUAP Consensus Panel Meeting 2010 – Points Raised [2]

Decision of unavoidable is usually made after the fact

Situations may arise where pressure cannot be relieved and perfusion cannot be improved/altered.

Role of turning and positioning when patient is hemodynamically unstable

Preventive care must be in place before this definition may be utilized

Medical devices may result in unavoidable pressure ulcers

End of life

Langemo and Brown

- Skin failure …. 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.
- May be categorized as acute, chronic, or end stage”

Skin Failure Working Definition

- 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.

Levine, J. www.npuap.org Accessed October 22, 2017

End of life

Skin changes and ulcerations may be mis-characterized and documented as pressure ulcers but may be related to skin failure.

Establish goals of care and involve patient and family

Skin Changes At Life's End:

Statement 1 " ..Physiologic changes that can occur as a result of the dying process can be unavoidable and may occur with the application of appropriate interventions that meet or exceed the standard of care."

Statement 6 -… "discussed risk factors, symptoms, and signs associated with SCALE, such a suboptimal nutrition and diminished perfusion." [9]

Kennedy Terminal Ulcer characteristics

It usually presents on the sacrum.
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.
It has a sudden onset.
The two statements you hear most are::
1 “Oh, my gosh, that was not there the other day.”
2 “I worked Friday, it was not there then, I was off the weekend and when I came back on Monday there it was.

www.kennedyterminalulcer.com Accessed October 1, 2017

Rapid onset of skin change characterized by bruising on various parts of the body

When seen on lower extremities may increase in a linear pattern and may present as a mirror image on the opposite limb

Usually no discomfort

Do not deteriorate to non viable tissue and continue to resemble bruising

Presents from hours to days till death

Trombley Brennan Terminal Tissue Injury

When presenting on the lower extremity a mirror image may occur on the other limb.

May present as irregular shape with a reddened wound edge. May be described a bruise without any discomfort felt by the patient.

Acute Skin Failure

"Acute skin failure (ASF) has been conceptually defined as a pressure-related injury concurrent with critical illness that manifests as a result of hemodynamic instability and/or major organ system compromise."

Risk Factors:

- Respiratory failure
- Mechanical ventilation more than 72 hours
- Liver failure
- Severe sepsis/septic shock

Delmore, Cox 2015

Medical Devices

2014 NPUAP Consensus Panel

Medical device related pressure ulcer may be deemed unavoidable when it is medically contraindicated to adjust or move the device, when a medical device prevents turning/repositioning of the patient, and when there is tissue edema or moisture under a device that could compromise tissue tolerance and increase the risk for pressure/shear forces.

Edsberg, Langemo, Baharestani et al., 2014


24
26


mm
cm
1
2
3
I.D.
Date

Medical Device Interventions

- BIPAP mask – bridge of the nose protection, documentation of assessments
- Nasal oxygen tubing – monitoring of ears, usage of silicone nasal oxygen tubing on frail elderly
- ET tube placement – plan to rotate tubing and was it followed
- Foley catheters – was a stabilizer utilized to reduce impact with movement
- Restraints – was site monitored and did one document and follow the policy for usage

Critical Care Units

Additional ICU Risk Factors

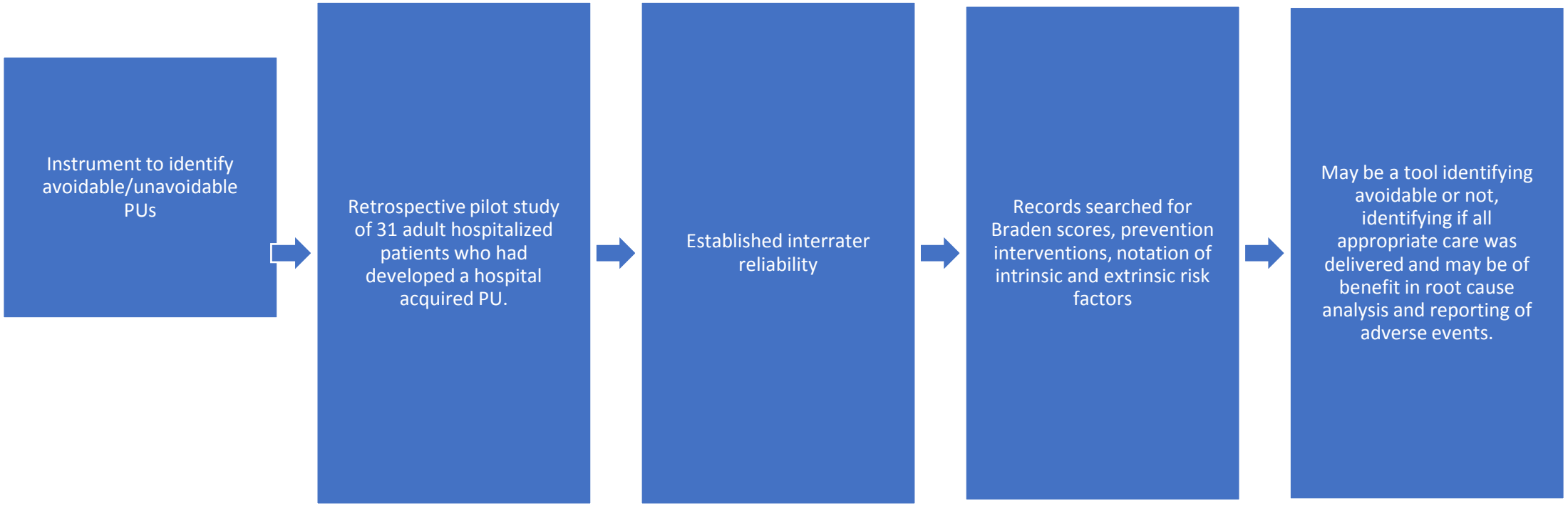
- Usage of pressors notably norepinephrine for periods of time
- Apache II scores 13 or higher
- Anemia
- Fecal Incontinence
- Length of stay
- Cardiovascular disease
- Age
- Exposure to friction/shear
- Underweight
- Hypotensive events during OR procedures

Contributory Factors voiced at VCU Summit [8]

- Malnutrition
- Aging
- Pressure and shear leading to loss of perfusion resulting in deep tissue damage
- Poor skin perfusion as in sepsis, shock , etc.
- Diseases increasing risk of skin reactions –liver disease, lupus, AIDS, etc.

- Kidney failure or fluid overload leading to dermal edema weakening dermal-epidermal junction
- Skin atrophy
- Dermal fibrosis (excessive scarring) with chronic inflammation

Indiana University Health Pressure Ulcer Prevention Inventory (PUPI) [3]



Litigation

Increase in pressure ulcer litigation across the country

HAPIs are viewed as “never events” in acute care hospitals

Records reviewed for meeting policies and standards of care

Ensure policy and procedures are updated on a regular basis.

Interventions

Was all equipment needed for prevention available for staff to access?

- Specialty mattresses/bed surfaces
- Chair cushions
- Heel protectors
- Incontinence products and supplies
- Nutritional supplements

Documentation Dilemmas- What to include

- Accurate and timely documentation is key
- Adherence to prevention protocols
- Consistency in care
- Addressing moisture, nutrition, mobility, and pain management
- Timely and complete skin and wound assessments
- Feedback to all disciplines
- Education with patient and family

Case Study

40 year old male shoveling snow. Found down in driveway and transported to nearest ED. Diagnosed with aortic dissection and transported to trauma center.

PMH hypertension. Not on meds and had not seen physician in 4 years

Morbidly obese.

Immediately transported to OR on arrival and on OR table for 12 hours.

Continued

Hemodynamically unstable for 36 hours. Remained on vent with central line. No feeds during this time. On bariatric low airloss surface

Turning and positioning were done quickly and as best as possible. O2 sats dropped when being turned

At 37 hours post-op stable for full assessment and deep tissue injury noted that deteriorated into a full thickness pressure injury.

Injury healed after 4 months of pressure injury care at home.

Was this unavoidable?

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