

#### Background

A pressure ulcer is an injury that affects the underlying tissue and skin and is primarily caused by prolonged pressure on the skin. During a clinical rotation at a small rural teaching hospital, pressure ulcers were prevalent in an estimated 80% of patients in the intensive care unit (ICU) during a three-week period. Approximately \$26.8 billion are spent every year in the United States treating pressure ulcers. The purpose of this quality improvement project is to provide staff education to ICU nurses in order to reduce and prevent the prevalence of pressure ulcers in patients. A thorough literature review was completed on 64 studies related to pressure ulcers that focused on causes, effects, costs, education, treatments, and preventative measures. An educational tool was developed that outlines interventions that targeted pressure ulcer prevention.

## **Purpose Statement**

The purpose of this quality improvement project is to educate nurses, nurse managers, and patient care associates in the ICU on interventions to prevent pressure ulcers.

## **Objectives**

After receiving education on pressure ulcer prevention with the teaching tool:

- There will be a decreased prevalence of pressure ulcers.
- The average cost spent on providing care for a pressure ulcer will decrease.
- Patients will have a decreased length of stay in the hospital.
- Staff will be able to demonstrate three measures to prevent pressure ulcers.
- Staff will be able to verbalize three risk factors to developing pressure ulcers.
- Staff will provide preventative teaching to each patient to help decrease the risk of pressure ulcers.

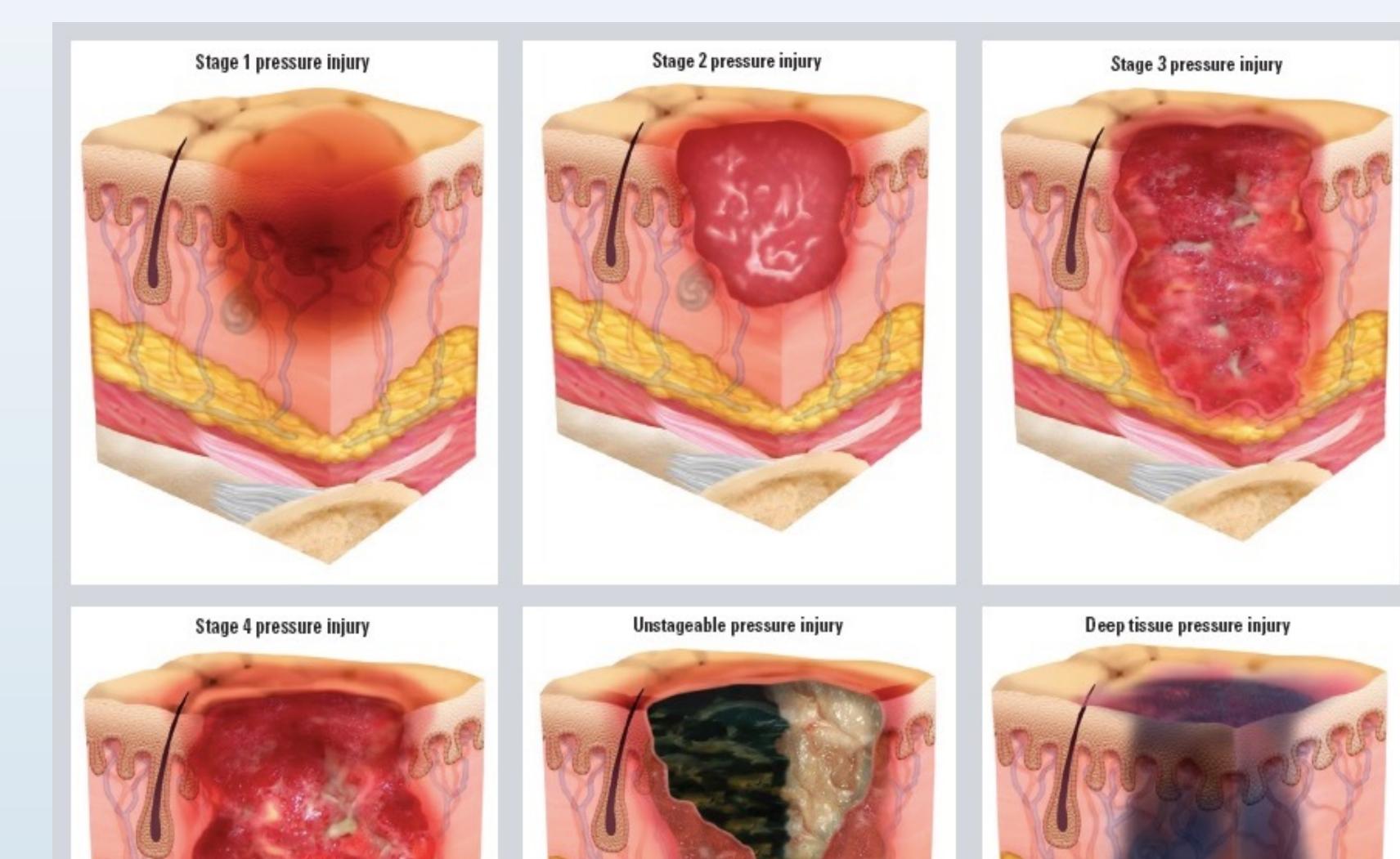
# Pressure Ulcer Prevention: A Quality Improvement Project Noah Blevins, Graci Borders, Brett Bentley, Carly Crutchfield, Rachel Dillon, Jacob Dyer, Haleigh Eldridge, & Taylor Emmons Mentors: Dr. Suzi White, RN, Faculty Mentor NURB 361: Introduction to Nursing Research

## **Pressure Ulcer Staging Definitions**

#### **Definitions of the six stages of pressure ulcers are:**

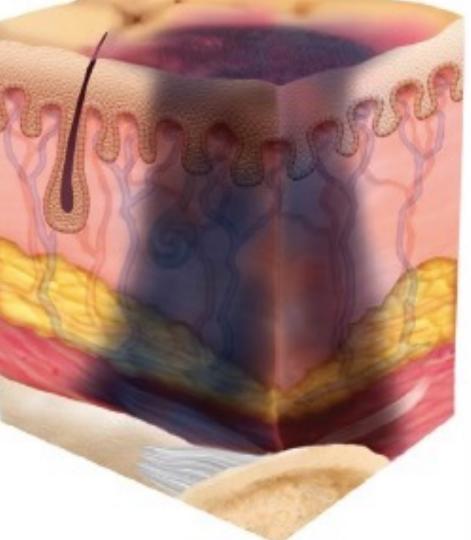
- **Stage I:** Intact skin with a localized area of Nonblanchable erythema.
- Stage II: Partial thickness loss of skin with exposed dermis. No adipose tissue, granulation tissue, slough, or eschar present.
- Stage III: Full thickness loss of skin in which adipose tissue is visible in the ulcer and granulation tissue and epibole are often present. Slough and eschar may be visible. Undermining and tunneling may occur.
- **Stage IV:** Full thickness skin and tissue loss with exposed fascia, muscle, tendons, ligaments, cartilage, or bone is visible in the ulcer. Slough and eschar may be visible. Epibole, undermining, and/or tunneling may occur.
- **Unstageable:** The extent of tissue damage within the ulcer cannot be confirmed because it is obscured by slough or eschar.
- **Deep Tissue Pressure Injury:** Intact or nonintact skin with a localized are of persistent nonblanchable deep red, maroon, or purple discoloration or epidermal separation revealing a dark wound bed or blood-filled blister.

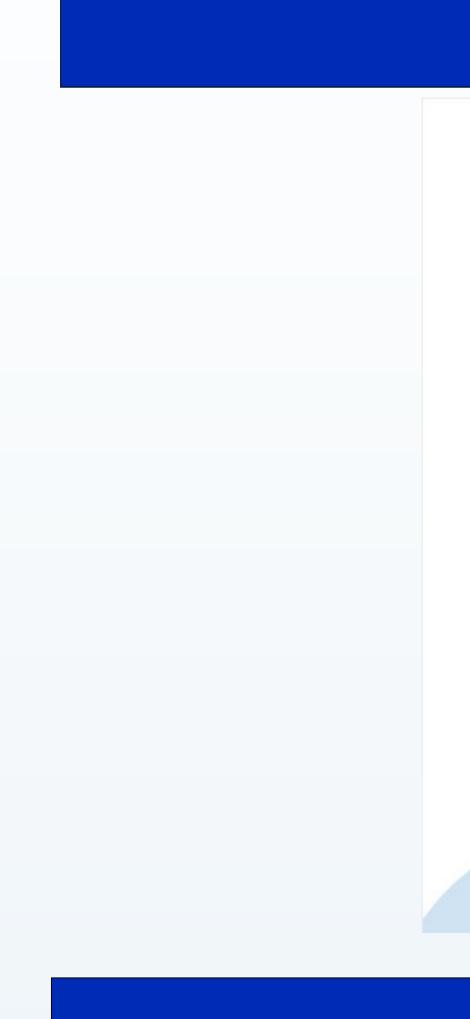
## **Stages of Pressure Ulcers**



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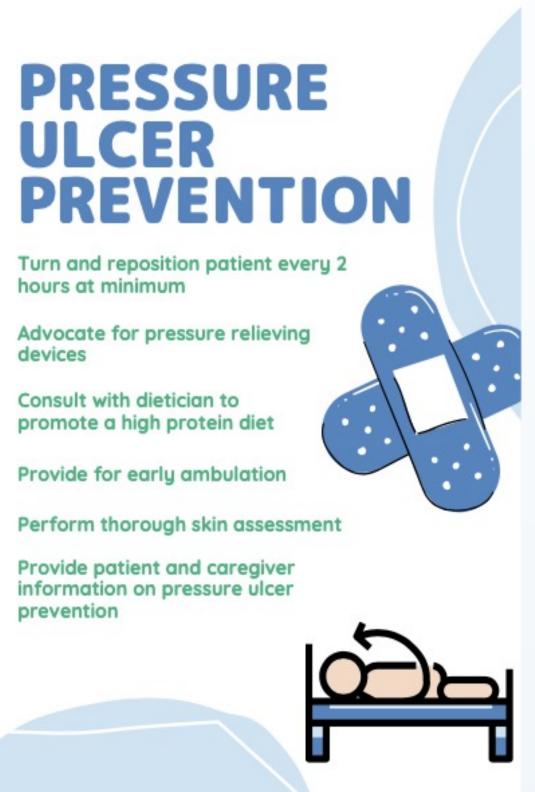


The implementation of the previous interventions listed will decrease the prevalence of pressure ulcers and will overall improve patient outcomes and nursing care. Patients will see improvement in overall health. Patients will have decreased hospital stays, have an improved body image, have lower hospital costs, will have increased satisfaction with hospital care, have lower pain levels, and will be less likely to develop potential complications. Nurses will have a lower workload, have decreased stress levels, lower incidence of burnout and care fatigue. Nurses will overall have better patient outcomes related to the ability to provide better care. This will improve nurses' mental health by feeling more confident, accomplished, and fulfilled with the nursing care they provided.

org.msu.idm.oclc.org/10.1111/iwj.13071 wounds/pressure-injuries/



#### **Teaching Tool**



## Implications

#### References

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