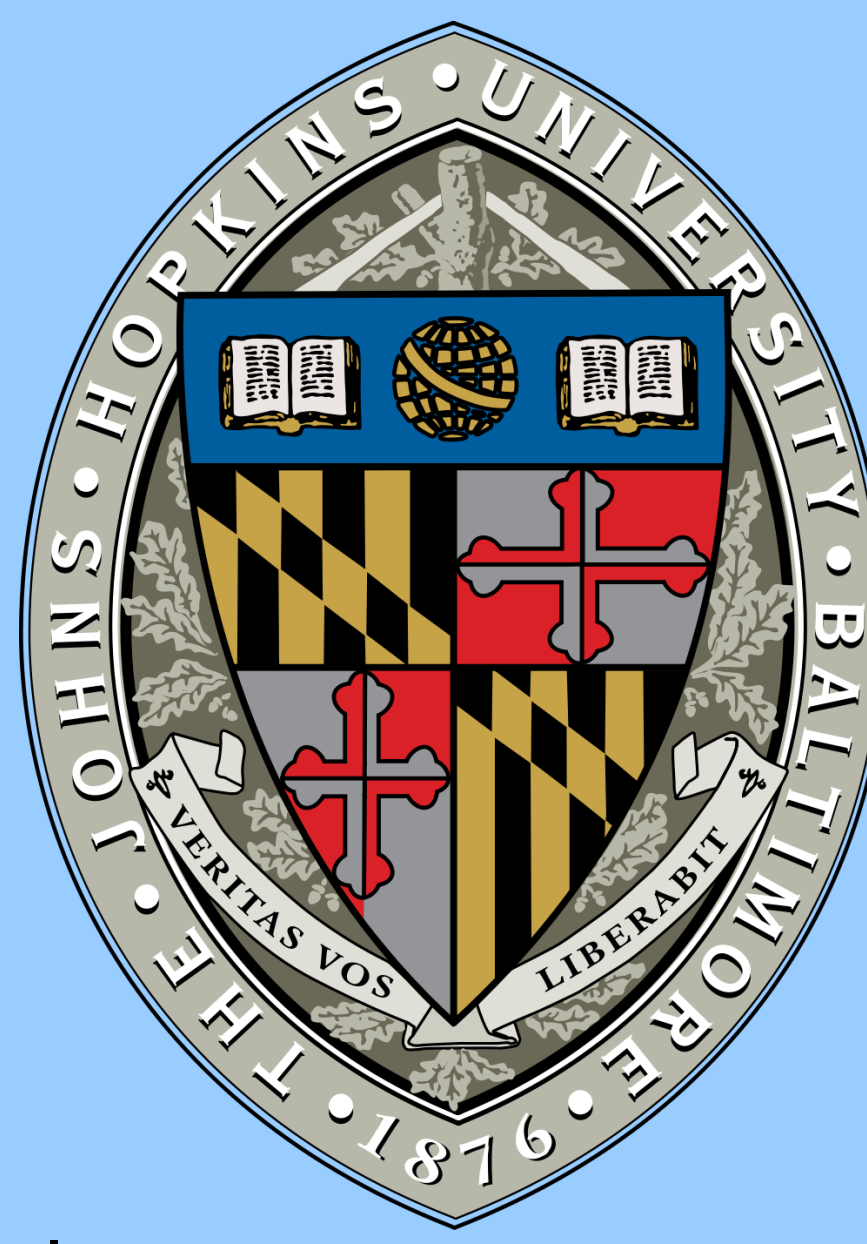


# Reducing Pressure Ulcers Across the Health Care System

Project Mentor: The Armstrong Institute for Patient Safety and Quality

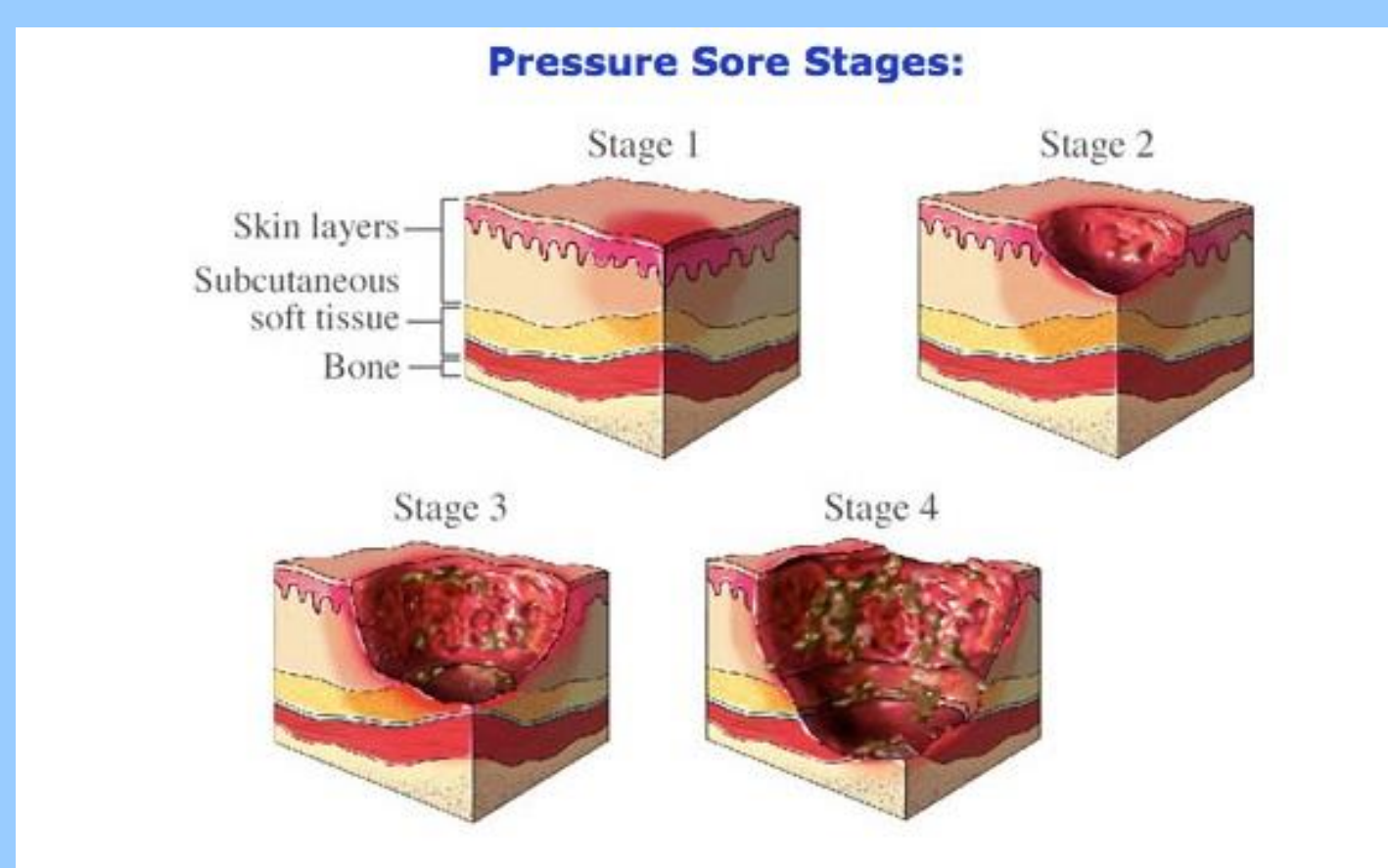
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## 1 Background

Each year, more than 2.5 million individuals will develop a pressure ulcer, some of which occur in the hospital setting. Hospital acquired pressure ulcers (HAPUs) not only require additional, complex care, they also increase the patient's length of stay, decrease his or her quality of life, increase hospital costs, and expose the care setting to potential liability.

As part of efforts to "eliminate preventable harm to patients and achieve the best patient outcomes at the lowest cost possible" the Armstrong Institute for Patient Safety and Quality has formed a coalition to investigate methods to reduce the incidence of HAPUs. JHHS currently employs risk assessment and prevention strategies to reduce HAPU incidence; however, they are still occurring. This project aims to identify reasons for occurrence despite efforts to prevent HAPUs, the extent of incidence, potential methods JHHS can adopt to decrease incidence, and the role of nurses in HAPU prevention.



Four stages of a pressure ulcer. Retrieved from: [http://www.hamill-law.com/bedsore\\_s\\_decubitus\\_ulcers.html](http://www.hamill-law.com/bedsore_s_decubitus_ulcers.html)

## 2 Methods

The scope of this project has evolved over its lifecycle. Final objectives included:

1. identify the scope of pressure ulcer incidence at various points-in-time at JHHS
2. complete a compilation of best practices for HAPU prevention, and
3. assess the potential "inevitability" of pressure ulcer development in certain patients.

Objectives were met through:

- Literature Review of evidence-based best practices of pressure ulcer prevention,
- Literature review of the nurse's role in and perception of pressure ulcer prevention,
- Creation of a crosswalk of HAPU definitions and standards by national organizations and governmental agencies, and
- Audit of the JHH Pressure Ulcer Incidence Survey, December 2013.

## 3 Results

In December 2013, a pressure ulcer audit was conducted for all in-patient settings at JHH, except for psychiatry units. The breakdown of patients with pressure ulcers is below.

Total Patients Surveyed	Reported Unique Patients with HAPUs	Validated* Unique Patients with HAPUs * by WCON
742	33	23

These 23 validated patients had 35 pressure ulcers, 32 of which were documented in POE.

The December 2013 audit resulted in the following lessons identified by two nurses from Johns Hopkins Hospital, Carla Aquino, RN, MSN, and Nancy Sujeta, RN.

OPPORTUNITIES
Nurses require more training on correct identification and staging of pressure ulcers and on differentiating pressure ulcers from pressure areas.
The current electronic charting system does not provide nurses with all of the opportunities they require to adequately document pressure ulcer assessments and interventions.
The majority of pressure ulcers (75%) at JHH in December 2013 were posteriorly located. JHH must focus on prevention of posterior pressure ulcers as well as care for stage 1 and 2 HAPUs.
The majority of deep tissue injuries were surgery and device-related. However, data available on the issue was limited, and more data should be collected to focus on surgical and device-related HAPUs.
RISK ASSESSMENT
Risk Assessment of HAPUs has been consistent. 100% of Braden Scale Risk Assessments were completed within 24 hours of admission.
Two patients with a determined minimal risk for pressure ulcer development prior to discovery date developed device-related pressure ulcers.

Based on the results of the December 2013 audit, the Armstrong Institute-JHHS Pressure Ulcer Prevention Subcommittee recommended additional staff training and education to include:

1. staging differentiation,
2. best practices of pressure ulcer prevention, and
3. more complete documentation of pressure ulcer assessment and intervention.

## 4 Conclusions

HAPU prevention is complex.

- Inconsistent documentation by different nurses on the same patient suggests inadequate risk assessment of pressure ulcer development and a need for standardized nurse training.
- Pressure ulcer development can be inevitable, no matter the prevention interventions used.
- A patient's immobility is the biggest predictor of HAPU development (Black, et al. 2014). Pressure relief is the most successful intervention (Berlowitz, 2014).
- Some nurses consider a patient's motivation to recover an important factor in prevention, which is not currently captured in HAPU risk assessments. Most nurses use their own judgment rather than risk assessment tools to assess risk. (Samuriwo, 2014).
- As a whole, nurses' pressure ulcer risk assessment and their willingness or ability to implement preventative measures are not standardized and should be better supported.

HAPU prevention guidelines should not replace nurses' critical thinking skills. Rather, prevention should be incorporated into the nurse's standard of practice, and nurses should be supported in their work through adequate staffing, evidence-based training, education, and management's understanding that not all pressure ulcers are preventable.

## 5 Future Directions

In the future, this project can be expanded upon in the following ways:

- Meeting with JHHS nurses and wound care specialists to review JHHS hospital protocols and ensure alignment with standardized evidence-based best practice,
- Discussions around the role of the nurse in pressure ulcer prevention, how nurses can be better supported, and for which care measures each provider is responsible, and
- Creation of an evidence-based toolkit on pressure ulcer prevention for hospital units.

## 6 References

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