Investigating the Prevalence and Prevention of Emergency Department Hold Patients

Hospital-Acquired Pressure Injuries: Proposal

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Author Note

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Background:

"Pressure injuries are painful and put patients at risk for serious infections therefore, require greater use of costly health services and are potentially devastating to patients overall health. Hospital-acquired pressure injuries are preventable events that can result in increased length of stay and overall greater hospital cost (Edwards, 2021)." In the last 10-15 years adult patients presenting to the ED have been displaying more comorbidities, and ultimately greater risk for developing a pressure injury. Comorbidities such as immobility, incontinence, skin breakdown, inability to voice their needs, obesity, prior health conditions, and many more factors (Edwards, 2021). Because HAPIs can be prevented by assessing patients early in their hospital stay and implementing preventative interventions, preventative care must begin in emergency departments. Therefore, an emergency nurse plays a key position in preventing hospital acquired pressure injuries. Standardizing a process to assess patients' risk for developing a hospital-acquired pressure injury is essential for the emergency department (Faulkner, 2015). Although length of stay in the ED is difficult to manage, the implementation of evidence-based interventions and protocols to decrease the rate of pressure injuries in patients while holding in the ED can be achieved. Due to the lack of beds and staffing there are increasing ED length of stays for admitted patients. The Centers for Disease Control and Prevention (CDC) report that 56.2% of patients with a length of stay (LOS) in the ED greater than two hours were vulnerable to hospital-acquired pressure ulcers (Denby, 2010).

Studies noted that the lack of easily accessible skin care supplies was another factor in pressure ulcer incidence. Standardizing an assessment process and giving ED nurses and easy

access to the tools and supplies required for adequate assessment early inpatient hospital stay can make frontline prevention of skin injury or reality. The addition of in acute care nurse with experience and expertise in HAPI prevention would be beneficial to the emergency department. Protocols regarding positioning skin and wound care in the use of protective dressings can be easily implemented in high-risk patients by educating in motivating existing staff (Edwards, 2021). Interventions included in suggested guidelines suggest keeping the skin clean and dry, turning patients at least every two hours, using pressure-relieving devices, reducing friction and shearing, and ensuring adequate nutrition and hydration status (Denby, 2010).

PICO Question:

For mixed-acuity ED hold patients (P) does the implementation of a pressure injury prevention bundle in the ED (I) reduce the prevalence of hospital-acquired pressure injuries (HAPIs) (O) compared to mixed-acuity patients who do not hold in the ED (C).

- -Population: Mixed-acuity ED hold patients
- -Intervention: Pressure injury prevention bundle
- -Comparison: Mixed-acuity direct-bed patients
- -Outcome: Reduction in hospital-acquired pressure injuries (HAPIs)

Goals and Methodology:

Determine needs of the emergency department: The department is overwhelmed with a large patient census. Although as a CNL I am unable to independently fix the systemic problem of overcrowding in hospitals, specifically emergency departments, how am I able to help change broken processes within the system?

Gather Information: Collecting baseline data on current practices and protocols related to pressure injury prevention. Currently, The University of Louisville Hospital does not have an

Emergency Department Hold patient protocol related to admission order set completion requirements and assessments. Investigate mixed-acuity HAPI prevalence rates for both direct-bed patients and ED holds.

Research: A literature search was completed to investigate best evidence-based practice protocols related to implementing HAPI prevention protocols in the ED. Research was also collected regarding current practices of EDs, providing resources for intervention development.

Successful education of staff and project implementation: Programs can include shift starters, continuing education, and in-time implementation. Supplies may need to be provided to the department for hold patients. Emergency nurses are experts in rescuing and stabilizing critically ill patients but, after the patient is stabilized, focus needs to shift towards other risk factors that can predispose patients to other injuries. Emergency departments are a major source of hospital admissions, and only increasing within the last five years. Thus, the length of stay in emergency departments is only increasing, causing further strain on both patients health and nursing staff to maintain the health and safety of both critically ill and stable patients.

Increased Patient Outcomes: This project aims to improve quality of care, decrease length of stay, decrease hospital costs, and decrease patient risk. Improving patient outcomes is directly related to roles of a Clinical Nurse Leader.

Roles of the Clinical Nurse Leader:

Advocate: Clinical Nurse Leaders advocate for patients by preserving human dignity, promoting patient equality, and providing freedom from suffering.

Educator: Clinical Nurse Leaders are responsible for designing, evaluating, updating, and implementing new and current nursing education curriculum. Knowledge gaps were identified in both education of pressure injury prevention and documentation in electronic medical records.

Interdisciplinary collaboration was necessary for implementation of the pressure injury prevention (PIP) bundle as it was reinforced by wound care nurses, resource nurses, nurse managers, assistant nurse managers, daily briefings, PIP rounds, charge nurses, preceptors, and educators. Educating staff about complications from a single pressure injury fostered commitment to the use of the PIP bundle (Rivera, 2020).

Risk Anticipators: As risk anticipators, nurses will identify the existing gaps that can affect or disorient the quality of care available to the targeted patients. That being said, CNLs and professionals within the nursing profession should embrace the concepts associated with risk anticipation. Approximately 2.5 million people in the United States develop a pressure injury in acute care facilities every year. Hospital-acquired pressure injuries account for a significant financial burden to the healthcare system. Investigations show that a HAPI could cost hospitals \$10,708 per patient, total approximately \$26.8 billion in the US per year, as reported by case number. The US Centers for Medicaid and Medicare Services has reduced reimbursements for hospital-acquired conditions, thus causing more strain on independent organizations (Padula, 2019).

Change Model:

Lewin's Change Theory: There are three stages of the Lewin's Change Theory (Lewin's, 2021):

1. Unfreezing: Overcome resistance to change old pattern. Current pattern in the ULH ED is not to complete skin assessments on hold patients within a designated time period. There is currently no ED skin assessment protocol.

- 2. Change: Movement with implementation of project. Develop and educate staff and unlicensed assistive personnel on the importance and changes that are necessary to prevent HAPIs in ED hold patients.
- 3. Refreeze: New change is habitual. Through repetition and reteaching the proposed implementations will become habit to ED staff. With the collaboration of medicine, nursing, and quality, patient outcomes are expected to improve.

Outcomes:

It is anticipated that after successful development and implementation of the HAPI prevention bundle in the ULH ED, the prevalence of HAPIs will decrease. As mentioned previously, costs for the hospital will thus decrease, length of stay will decrease, patient outcomes and satisfaction will improve, and furthermore; quality of care is significantly improved.

References

- Denby, A., & Rowlands, A. (2010). Stop them at the door: should a pressure ulcer prevention protocol be implemented in the emergency department? *Journal of Wound, Ostomy, and Continence Nursing: Official Publication of The Wound, Ostomy and Continence Nurses Society*, 37(1), 35–38.
 - https://doi-org.echo.louisville.edu/10.1097/WON.0b013e3181c68b4b
- Edwards, A., Sitanggang, N., Wolff, K., Role, J., Cardona, T., Sanchez, M., & Radovich, P. (2021). Pressure Injury Prevention in Patients with Prolonged ED Stays Prior to Admission. *American Journal of Nursing*, *121*(2), 46–52.
- Faulkner, S., Dowse, C., Pope, H., & Kingdon-Wells, C. (2015). The emergency department's response to pressure ulcer crisis. *Wounds UK*, 11(2), 20–25.
- Lewin's change theory. Nursing Theory. (2020, July 19). Retrieved November 1, 2021, from https://nursing-theory.org/theories-and-models/lewin-change-theory.php
- Naccarato, M. K., & Kelechi, T. (2011). Pressure Ulcer Prevention in the Emergency Department. *Advanced Emergency Nursing Journal*, *33*(2), 155–162. https://doi-org.echo.louisville.edu/10.1097/TME.0b013e3182157743
- Padula, W. V., & Delarmente, B. A. (2019). The national cost of hospital-acquired pressure injuries in the United States. *International Wound Journal*, *16*(3), 634–640. https://doi-org.echo.louisville.edu/10.1111/iwj.13071
- Rivera, J., Donohoe, E., Deady-Rooney, M., Douglas, M., & Samaniego, N. (2020).

 Implementing a pressure injury prevention bundle to decrease hospital-acquired pressure injuries in an adult critical care unit: An evidence-based, pilot initiative. *Wound*Management & Prevention, 66(10), 20–28. https://doi:10.25270/wmp.2020.10.2229

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- Santamaria, N., Creehan, S., Fletcher, J., & Gefen, A. (2019). Preventing pressure injuries in the emergency department: Current evidence and practice considerations. *International Wound Journal*, 16(3), 746-752. https://doi-org.echo.louisville.edu/10.1111/iwj.13092
- Tschannen, D., & Anderson, C. (2020). The pressure injury predictive model: A framework for hospital-acquired pressure injuries. *Journal of Clinical Nursing*.

https://doi-org.echo.louisville.edu/10.1111/jocn.15171