PRESSURE ULCER QUALITY IMPROVEMENT PROJECT

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BACKGROUND

Pressure ulcers are a common but arguably preventable problem in the hospital setting. Hospital-acquired pressure ulcers (HAPU) are the focus of national policy and patient safety initiatives in the U.S (Bergquist-Beringer et al., 2013). HAPU are associated with sepsis, higher in- hospital mortality, extended length of hospitalization and can negatively affect the patient's quality of life (Reddy et al., 2006).

Managing a single full-thickness pressure ulcer can reach as high as 70 thousand dollars, and the total cost for the treatment of pressure ulcers in the U.S. is estimated to be around 11 billion dollars per year (Reddy et al., 2006).

At one academic medical center, pressure ulcer prevalence data is submitted quarterly to the National Database of Nursing Quality Indicators for reporting and benchmarking. The aim of this quality improvement project was to pilot a tool that could be used to explore the relationship between the implementation of evidence-based prevention interventions and the development of HAPU.

OBJECTIVES

1. Evaluate the presence of evidence-based prevention interventions in the current hospital protocol for pressure ulcer prevention.
2. Develop and test a tool to assess nursing compliance with the documentation of evidence-based pressure ulcer prevention interventions.

METHODS

A review of the literature was conducted to identify evidence-based pressure ulcer prevention practices. The current hospital protocol was evaluated to determine the presence of these practices in the recommended interventions for prevention. Participation in the prevalence survey was used to observe the processes to assess and identify patients with HAPU. A tool was developed and piloted to further assess the documentation of the pressure ulcer prevention interventions in the electronic health record for the patients identified with HAPU in the observed survey. The findings of the audit were shared with the wound care experts to validate the ability of the tool to accurately capture the documentation of the recommended interventions. The tool was revised using the findings of the audit and expert opinion.

RESULTS

Table 1. Pressure Ulcer Prevention Measurement Tool looking at Interventions from the Braden Scale

PATIENT NUMBER: LOS: LOS FROM DISCOVERY DATE:		ADMISSION DATE (D=DAY)	D 1	D 2	D 3	D 4	D 4	DISCOVERY DATE	D 1	D 2	D 3
Skin Inspection	ADMISSION BRADEN WITHIN 2 HRS (Y/N)										
	ADMISSION BRADEN WITHIN 24 HRS (Y/N)										
	SENSORY PERCEPTION										
	PRESSURE ULCER PREVENTION PROTOCOL GUIDELINES										
	MOISTURE										
	ACTIVITY										
	MOBILITY										
	NUTRITION										
	FRICTION & SHEAR										
	BRADEN SCORE										
	RISK LEVEL										
	OTHER CLINICAL FACTORS PLACING PT AT RISK										

Table 2. Pressure Ulcer Prevention Measurement Tool looking at Pressure Ulcer Guidelines

GUIDELINES	PERSONAL CARE (Y/N) [T/C/ROUTINE CARE]	
	USE OF SPECIALITY BED (Y/N)	
	USE OF HEEL PRESSURE RELIEF (Y/N/ N/A)	
	MEPILEX PROPHYLAXIS (Y/N)	
	POSITIONING Q 2 HOURS (Y/N)	

Table 3. Measurement Tool looking at Nutrition and Pressure Ulcer Care Interventions

PATIENT NUMBER: 1 LOS: LOS FROM DISCOVERY DATE:		ADMISSION DATE
NUTRITION	NUTRITION (PO, NPO, GT, NGT, IVF)	
	NUTRITIONAL CONSULT (Y/N)	
	BMI	
PRESSURE ULCER/PRESSURE ULCER CARE	PU SITE [FLOWSHEET]	
	PU STAGE [Survey]	
	WOUND CARE (Y/N) [T/C/WOUNDS AND DRAINS]	
	WOUND CARE NURSE CONSULT (Y/N)	
	NAME OF SURVERY	
	SURGERY DATE	

CONCLUSION/DISCUSSION

The revised tool is currently being utilized to audit documentation of nursing compliance with evidence-based pressure ulcer prevention interventions at an academic medical center.

Increasing focus is being given to prevention of hospital acquired pressure ulcers from a patient safety and national policy standpoint; requiring data-driven initiatives. As one of the nursing quality indicators, pressure ulcer prevention entails exploring the effectiveness of nursing assessment and interventions. This project provides the ability to audit nursing documentation and the opportunity to analyze the nursing impact to prevention and/or development of hospital acquired pressure ulcers. Further study of the application of the tool is needed to conclude its effectiveness.

FUTURE DIRECTION

Continue the collection of nursing documentation of pressure ulcer risk assessment and prevention interventions quarterly.

References

Bergquist-Beringer, S., Dong, L., He, J., Dunton, N. 2013. Pressure ulcers and prevention among acute care hospitals in the United States, 39: 405-414.

Reddy M., Gill S.S., Rochon, P.A. 2006. Preventing pressure ulcers: A systematic review. JAMA, 296:974-84.

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