Braden QD Scale Use by Nurses for Pressure Risk Screening

Mary Kinsey, BSN, RN, CWON
Mindy Carroll, BSN, RN, CCRN
Myrna S. Garcia, MSN, RN, NI-BC, CPHQ

Background

Accurately scoring critical care patients is important for identifying those at risk for pressure injury (PI) development, as PI incidence is higher in the critical care setting and early implementation of preventative measures is crucial. During direct observations, discrepancies were identified between critical care nurses and wound care trained nurses in the interpretation of the Braden QD Scale elements and final scoring.

Project Aims

The purpose of this quality improvement project was to improve the accuracy and interpretation of the Braden QD Scale risk assessment tool by pediatric critical care nurses in the prevention of PI.

Methods

- IHI Model for Improvement was used
- Pre-selected patient scenarios with various risks
- Real-time education to all critical care nurses, and administering surveys

Wound care trained nurses:

- Obtained insight to the nurses' thought process of the application of the scale
- Provided individualized and immediate education based on the specific patient scenario

Surveys:

- Gathered the value nurses placed on the Braden QD Scale
- Its effect on their clinical practice

Braden QD Scale

				Score
Intensity and Duration of Pressure				
Mobility The ability to independently change & control body position	**0. No Limitation** Makes major and frequent changes in body or extremity position independently.	**1. Limited** Makes slight and infrequent changes in body or extremity position **OR** unable to reposition self independently (includes infants too young to roll over).	**2. Completely Immobile** Does not make even slight changes in body or extremity position independently.	
Sensory Perception The ability to respond meaningfully, in a developmentally appropriate way, to pressure-related discomfort	**0. No Impairment** Responsive **and** has no sensory deficits which limit ability to feel or communicate discomfort.	**1. Limited** Cannot always communicate pressure-related discomfort **OR** has some sensory deficits that limit ability to feel pressure-related discomfort.	**2. Completely Limited** Unresponsive due to diminished level of consciousness or sedation **OR** sensory deficits limit ability to feel pressure-related discomfort over most of body surface.	
Tolerance of the Skin and Supporting Structure				
Friction & Shear *Friction:* occurs when skin moves against support surfaces *Shear:* occurs when skin & adjacent bony surface slide across one another	**0. No Problem** Has sufficient strength to completely lift self up during a move. Maintains good body position in bed/chair at all times. Able to completely lift patient during a position change.	**1. Potential Problem** Requires **some** assistance in moving. Occasionally slides down in bed/chair, requiring repositioning. During repositioning, skin often slides against surface.	**2. Problem** Requires **full** assistance in moving. Frequently slides down and requires repositioning. Complete lifting without skin sliding against surface is impossible **OR** spasticity, contractures, itching or agitation leads to almost constant friction.	
Nutrition *Usual* diet for age – assess pattern over the most recent 3 consecutive days	**0. Adequate** Diet for age providing **adequate** calories **&** protein to support metabolism and growth.	**1. Limited** Diet for age providing **inadequate** calories **OR inadequate** protein to support metabolism and growth **OR** receiving supplemental nutrition any part of the day.	**2. Poor** Diet for age providing **inadequate** calories **and** protein to support metabolism and growth.	
Tissue Perfusion & Oxygenation	**0. Adequate** Normotensive for age, **&** oxygen saturation ≥ 95%, **&** normal hemoglobin, **&** capillary refill ≤ 2 seconds.	**1. Potential Problem** Normotensive for age **with** oxygen saturation <95%, **OR** hemoglobin <10 g/dl, **OR** capillary refill > 2 seconds.	**2. Compromised** Hypotensive for age **OR** hemodynamically unstable with position changes.	
Medical Devices				
Number of Medical Devices	Score 1 point for each medical device* up to 8 (Score 8 points maximum) *Any diagnostic or therapeutic device that is currently attached to or traverses the patient's skin or mucous membrane.			
Repositionability/ Skin Protection	**0. No Medical Devices**	**1. Potential Problem** All medical devices can be repositioned **OR** the skin under each device is protected.	**2. Problem** Any one or more medical device(s) cannot be repositioned **OR** the skin under each device is not protected.	
			Total (≥ 13 considered at risk)	

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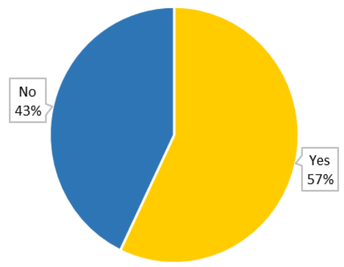
Results

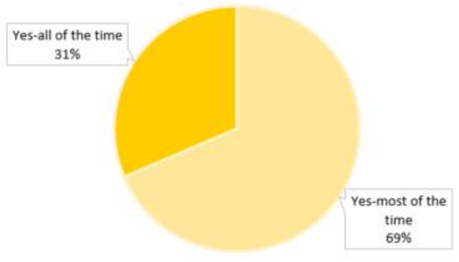
12%

Only 12% of scores matched those of the wound care trained nurses despite 100% of nurses feeling they were proactively taking PI prevention measures.

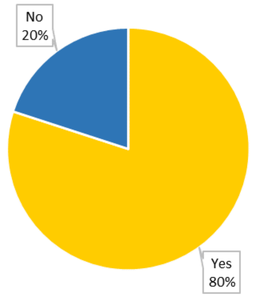
When you do the Braden QD Scale, do you feel prompted to make changes to your patient care?



When you do the Braden QD Scale, do you feel that you are already taking preventative measures?



Do you feel that the Braden QD Scale is a significant indicator of pressure risk?



Discussion

There is need for standardized education in interpreting the Braden QD Scale by routine training, mandatory annual reviews, and enhanced onboarding modules. 80% of nurses saw the Braden QD Scale as a significant indicator of PI risk prior to education.

Research is needed to explore if less ambiguity in the score elements improves standardization, reducing variability of responses. Another potential area of investigation is leveraging technology for optimal EHR display of score elements.

Nurses tended to score each element at the first applicable option rather than reading through all options to identify the most applicable one. In a paper format, the nurses stopped at the first applicable left option (reading from left-to-right) and in the electronic health record (EHR), at the first applicable top option (top-to-bottom).

References

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