



Pressure Ulcer Prevention in the Operating Room: Process and Outcomes Evaluation

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Abstract

This project describes efforts to reduce and eliminate pressure ulcers (PU) in the operating room (OR). Specifically addressed is work being conducted at Penn State Hershey Medical Center that is part of a collaborative effort to evaluate the Munro PU Risk Assessment Scale. A two-step process is being implemented that includes:

1. Identification of perioperative patients at risk for PU development using the Munro Risk Assessment Scale.
2. Systematic review and evaluation of relevant literature on perioperative PU development and risk assessment.



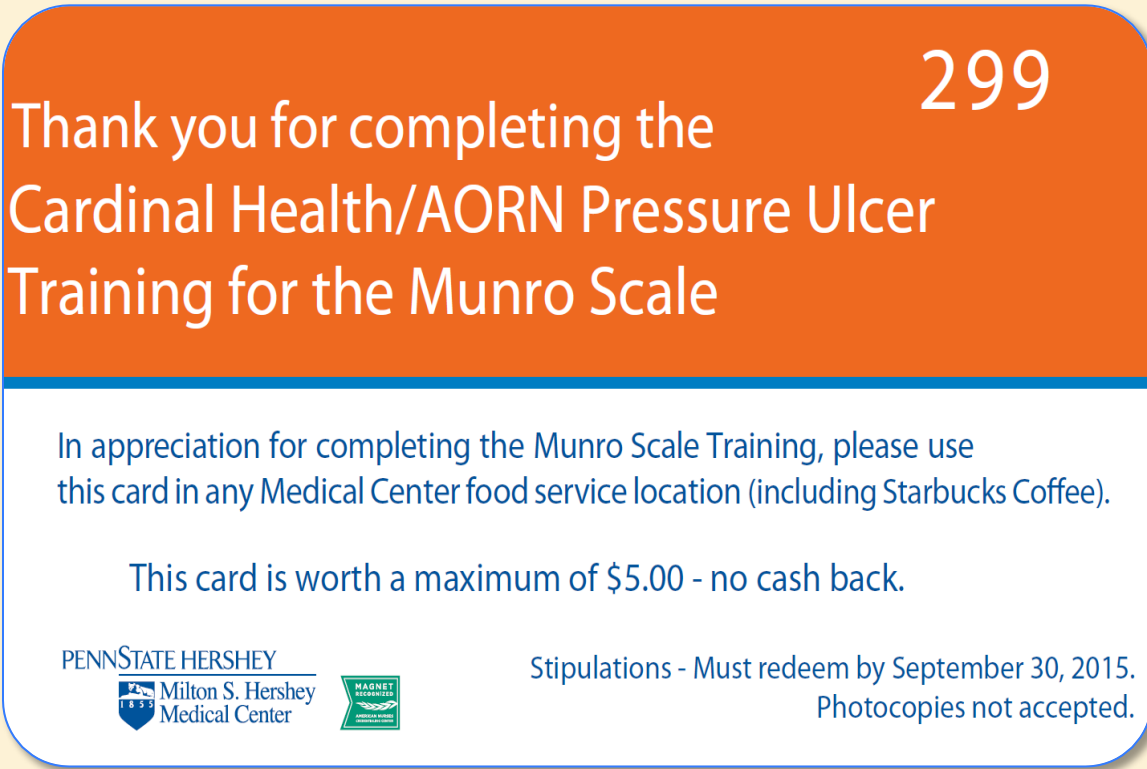
Project Team with Cassandra Munro Developer of the Risk Assessment Tool

Evaluation Methods and Results: Munro PU Risk Assessment Scale

Education Linked to Learning Management System



Offered Voucher for Participation in Education



Results from an 8-week Evaluation by Perioperative Nurses Using the Munro PU Risk Assessment Scale

Distribution Date	Eligible Patient Cases	Forms Returned % (n)	Mean and (SD) for Items Completed <small>Based on 30 data elements</small>
Aug 4, 2015	62	76 (47)	20.1 (7.4)
Aug 11, 2015	51	51 (26)	18.8 (8.1)
Aug 18, 2015	65	68 (44)	21.9(7.2)
Aug 25, 2015	61	67 (41)	26.1 (5.3)
Sep 1, 2015	66	65 (43)	23.6 (6.3)
Sep 15, 2015	56	61 (34)	23.9 (7.4)
Sep 22, 2015	63	62 (39)	21.2 (7.5)
Sep 29, 2015	55	73 (40)	22.9 (6.8)
Date Missing	-	-- (13)	16.1 (5.2)
Total	479	68 (327)	22.1 (7.3)

Process for Systematic Review

PICO Question: What are the interventions to reduce or prevent pressure ulcers in the OR?

Population: Perioperative patients, preoperative, intraoperative, postoperative;
Intervention: Pressure ulcer prevention;
Comparison: Any element of PU prevention in perioperative patients (i.e., prevention during surgical procedures, techniques to prevent development in the OR);
Outcomes: Reduction, elimination, prevention of PU development

Created 4 Review Teams (2 per Team)

- Completed independent review of titles for assigned articles;
- Answered **YES / NO**
 - Is PU prevention addressed?
 - Is the setting Perioperative?
 - Is the article in English?
- Each Team compared decisions:
 - Citations receiving YES by both, advanced to Phase 2;
 - Citations receiving NO by both, excluded;
 - Disagreements resolved by discussion.

Literature Search Results

- 950 potentially relevant citations identified
- 188 duplicates removed
- 791 records retrieved for evaluation
- 597 records excluded
- 194 full text articles assessed for eligibility
- 152 included for final analysis

Lessons Learned

Staff engagement is key for success. Most want to know how the information they provided will contribute to a better tool for PU prevention in the Perioperative setting.

- Data collection needs to be as easy as possible and not disrupt the normal workflow.
- Education via live in-service, with online education reinforced education and allowed training for more staff.
- Implementation of a new program should avoid holidays and end of summer schedules.
- Use of the Munro Scale may not be appropriate for short surgical procedures(e.g. Cataract).

Next Steps

- Continue Systematic Review Work
- Implement clinical practice changes for PU prevention in the OR based on review of best available evidence.

References

American Journal of Nursing. (2014). Systematic Reviews, Step by Step. Series of Six Articles, 114(Issues 3-8).
 Munro, C. S. (2010). The development of a pressure ulcer risk-assessment scale for perioperative patients. Journal of the Association of Operating Room Nurses, 92(3), 272-287.

