

# Improving Pressure Ulcer Outcomes at a Hospice Facility: A Quality Improvement Project

Deborah Miller, MSN, FNP-C & Sommer George, MSN, FNP-C

## Purpose

- ❖ The overarching purpose of this evidence-based project is to implement a non-research Quality Improvement (QI) project at the selected hospice facility to improve PU outcomes.
- ❖ The goal of this project is to increase nurses' knowledge of pressure ulcer (PU) management. This aligns with the Institute of Medicine's (IOM's) six aims of quality healthcare: safe, efficient, timely, equitable, effective, and patient centered (IOM, 2001).
- ❖ The assumption is that the increase in nurses' knowledge will translate to high quality PU wound care.
- ❖ High quality wound management should also result in secondary benefits for the selected facility and patient population.
- ❖ According to Popovich, Tohm, and Hurd (2010) quality wound management, unequivocally, is one of the most cost-effective measures a healthcare facility can adopt to improve patients' safety and quality of life, and reduce and re-allocate funds to other key areas.

## Background

### Significance

- ❖ Pressure ulcers (PUs) represent a major challenge to patients, caregivers, and the health care system
- ❖ In the United States (U.S.), a yearly estimate of 5-7 million individuals are affected by pressure ulcers resulting in caregiver stress, diminished productivity, loss of employment, and decreased quality of life (Frykberg & Banks, 2015)
- ❖ About 60,000 patients die as a direct result of a PUs each year (Agency for Healthcare Research and Quality [AHRQ], 2014)
- ❖ Annual costs associated with PU management exceed more than 30 billion dollars (Christman, 2010)

### Prevalence

- ❖ Conditions predisposing patients to PU development include decreased mobility, incontinence, and nutritional deficiencies
- ❖ These conditions are common among patients with advanced disease stages, such as those in hospice care settings
- ❖ The prevalence of PUs among hospice patients is approximately 33% (Langemo, 2012)
- ❖ The prevalence of patients with PUs at Suncoast Hospice is 13% (S. Rice, personal communication, January 11, 2016)

### PUs at Suncoast Hospice and Relevance of DNP Project

- ❖ Although the selected facility's PU prevalence rate is significantly below the national prevalence, leadership's assumption is that staff is not compliant with the facility's wound care guideline and protocol (C. Emmett, personal communication, December 15, 2015)
- ❖ Several factors contribute to staff non-compliance with protocols and guidelines, including lack of knowledge and unfamiliarity with established protocols
- ❖ Skilled and knowledgeable staff is essential for providing quality pressure ulcer management (AHRQ, 2011), therefore it is imperative that staff be equipped with the necessary skills and knowledge
- ❖ Multiple studies concluded that a variety of teaching strategies are effective in increasing nurses' knowledge and skills

## Setting/Sample

### Setting

- ❖ Suncoast Hospice: A subsidiary of Empath Health
  - ❖ Not-for-profit, community based organization offering comprehensive hospice and palliative care, caregiver education, individual and group counseling, and spiritual support to its' clients
  - ❖ Located in North Pinellas County, FL

### Sample

- ❖ N=13 hospice nurses, 7 from Coral Team and 6 From burgundy Team

## Methods

- ❖ In order to determine the current state of evidence and the feasibility of the proposed project, a literature review and synthesis on current recommendations for pressure ulcer management in hospice facilities and also on the effect of implementing a nursing pressure ulcer education program was conducted
- ❖ Relevant English articles in Cumulative Index of Nursing and Allied Health Literature (CINHAL), PubMed, Google Scholar, EBSCO, OVID, and Cochrane Database of Systematic Reviews were searched, reviewed and then appraised using The Johns Hopkins Nursing Evidence-Based Practice Appraisal Tools (JHNEBPAT)
- ❖ The QI project employed the PDSA model for improvement and testing changes on a small scale
- ❖ Meetings were conducted with the facility's selected teams, and the QI initiative-a nursing education in-service and summary tool of the facility's wound care guideline and protocol-was driven by the cause and effect analysis performed by the teams

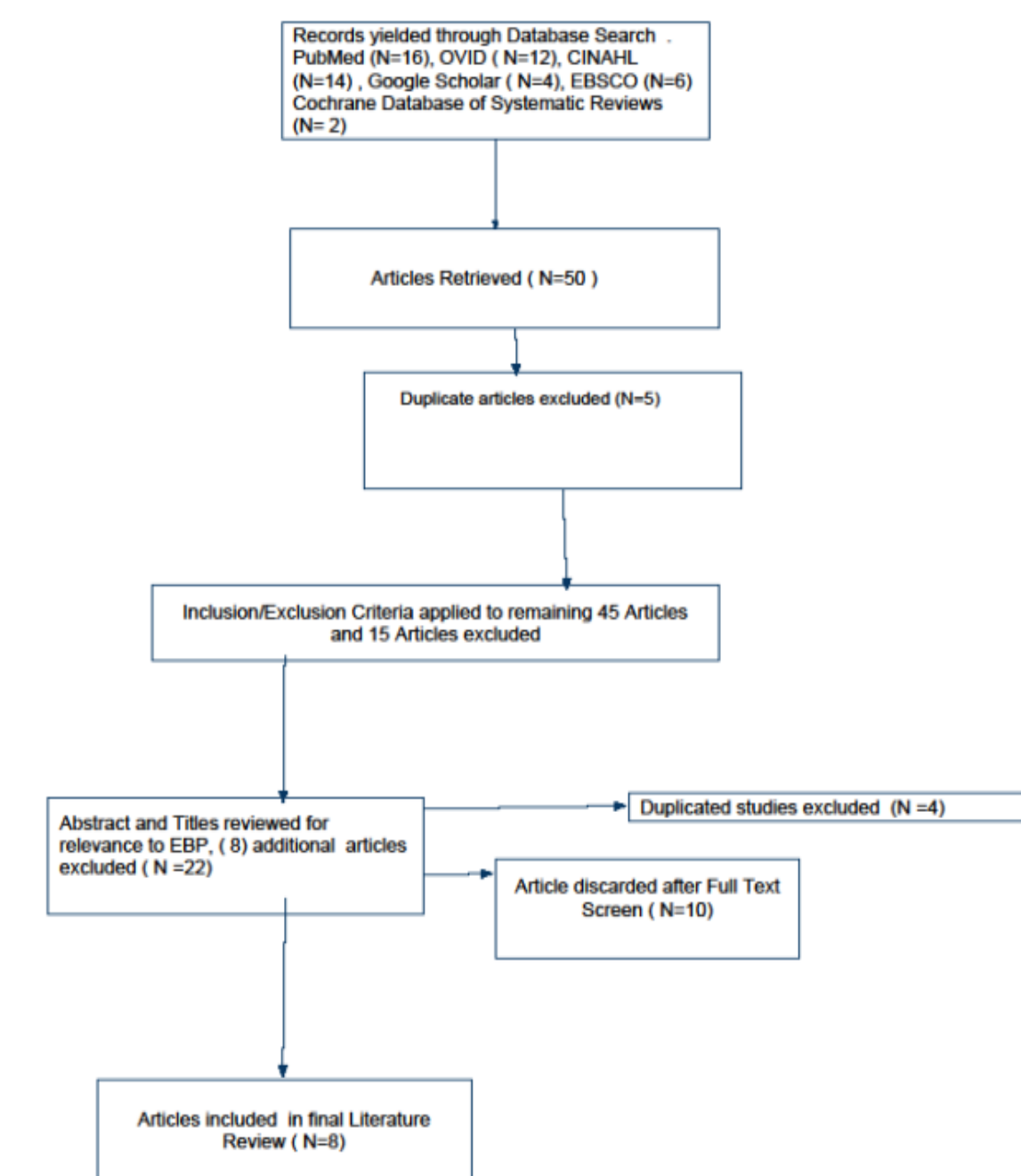
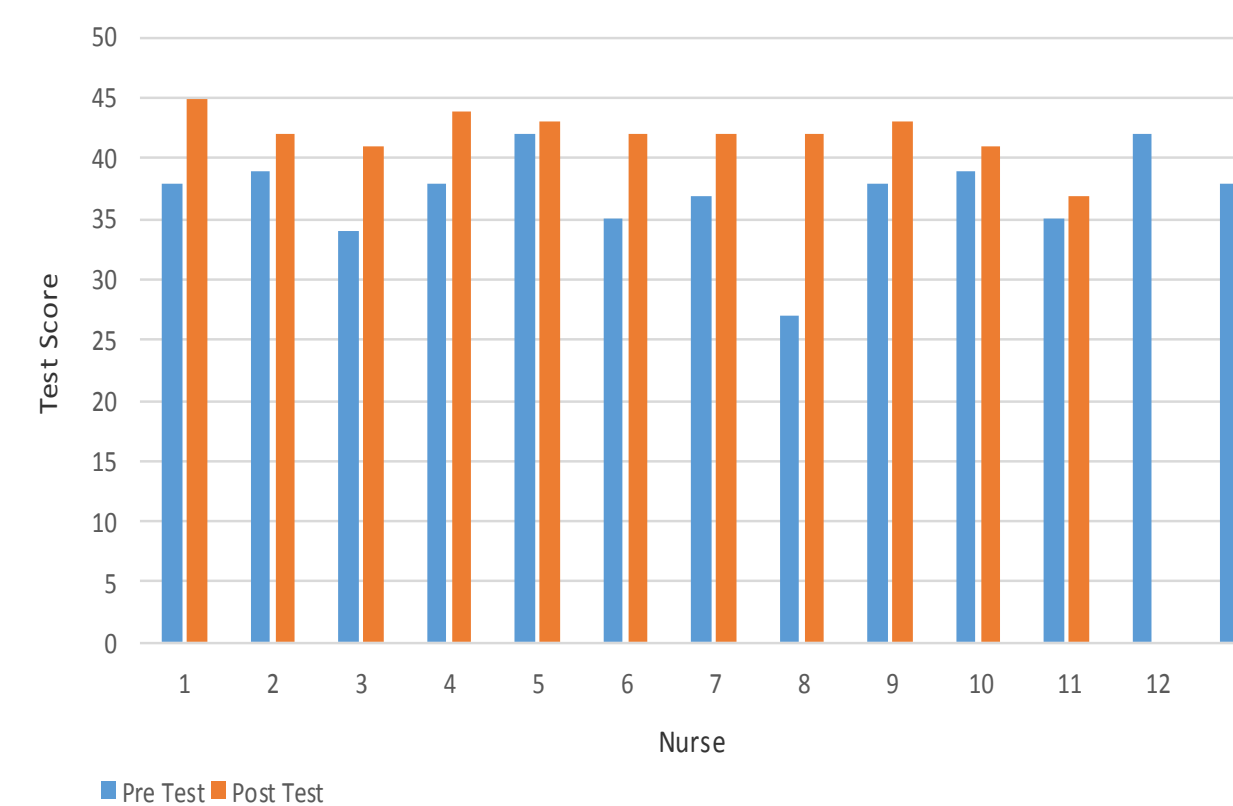


Figure 1. Flowchart of Article Selection

## Results

- ❖ A pretest/posttest design, before and after an educational intervention, using the Pieper Pressure Ulcer Knowledge
- ❖ Test was administered to 13 hospice nurses
- ❖ To evaluate the effect of the pressure ulcer education in-service, descriptive statistics and the Student *t* test for paired groups was used
- ❖ Paired sample analysis showed significant improvement in knowledge (mean pretest: 36.11[SD 3.82] vs. mean posttest score: 41.55 [SD 2.54]; 95% CI -7.12, -2.51 ; *t* = 4.66; *p* < 0.0009)

Pieper Pressure Ulcer Knowledge Test Results



Descriptive Statistical Analysis of Pre and Post Test Results

Statistical Description	Pre-Test	Post Test
Mean	36.11	41.55
Median	37.08	42
Mode	38	42
Range	15	8

## Discussion

This QI project was undertaken to determine knowledge and practice for management of PUs and to assess the efficacy of an educational in-service. Additionally, a summary tool of the facility's wound care protocol was provided to the nurses for quick reference.

### Findings

- ❖ Based on the results of the pre and post tests, education sessions increase nurses' knowledge of PU management
- ❖ The findings suggest that greater emphasis needs to be placed on nurses' education regarding the management of PUs
- ❖ Providing nurses with information relating to management of PUs is essential as it can promote adherence to best practice and improve high quality, patient-centered care
- ❖ Overall, the nurses acknowledged the importance and relevance of the subject, and indicated that the in-service and quick reference tool was beneficial

### Limitations

- ❖ Small sample size
- ❖ Sample attrition (2 nurses were not included in post test analysis)

## Recommendation/Next Steps

- ❖ Ongoing quarterly nursing education in-services
- ❖ Continued QI Initiatives and collaboration with Empath Health

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## References

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