Announcement of Capstone Presentation

Candidate: Alicia Williams

Date, Time, Place: Monday, July 15th at 1pm in Room 435

Capstone Project Title: Establishing the content validity of an early extubation protocol: A quality improvement project for improving early extubation of CABG patients

Capstone Project Abstract: (You must type your abstract on this form in the space provided)

Problem: Patients undergoing coronary bypass graft require intubation and the use of mechanical ventilation during and after surgery. It is well accepted that early extubation is associated with not only positive patient outcomes, but organizational outcomes as well. Patients that are not extubated early are at risk for complications associated with prolonged intubation such as pneumonia and airway trauma that could lead to a cost increase of a patient’s hospital stay when compared to patients who are extubated earlier. One strategy to promote early extubation of intubated patients is the use of a standardized protocol.

Purpose: The purpose of this capstone project was to select and establish the content validity of an early extubation protocol.

Methods: A review of the literature revealed two appropriate protocols for the organization and patient population. A panel of fifteen cardiac surgery experts including respiratory therapists, registered nurses, nurse practitioners, and intensivists were invited to participate in the project. Twelve participants reviewed each protocol and select the protocol that was most appropriate for use. The same reviewers were then asked to further analyze the protocol, based on a five-question survey for reliability and content validity.

Results: Twelve of the fifteen experts participated in the project. Content validity was estimated using 1) inter-rater agreement for relevance for each item (I-CVI) and 2) scale content validity (S-CVI). Means were established for each item. Cronbach’s alpha was estimated to establish reliability (0.972). Content validity was estimated using 1) inter-rater agreement for relevance for each item (I-CVI: 0.75 to 1.00); and the scale content validity index (S-CVI/average = 0.92.

Implications: Selecting an appropriate protocol to be used in this patient population is the first step in implementing an effective early extubation process. The results highly suggest that the content of this protocol is appropriate for this patient population. It is hoped that this will serve as the first step in establishing a protocol for early extubation in post-op cardiac surgery patients.

Capstone Chair (name & title): Lyn S. Murphy, PhD, MBA, RN

Capstone Advisory Committee Members (names & titles):
Member: Kristin Seidl, PhD, RN
Member: Joan Davenport, PhD, RN