Title:
Dedicated Education Unit: An Academia and Clinical Practice Partnership Aimed at Improving Outcomes

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Session Title:
Poster Presentations

Slot (superslotted):
PST: Saturday, 18 March 2017: 7:30 AM-8:00 AM
Slot (superslotted):
PST: Saturday, 18 March 2017: 9:45 AM-10:15 AM
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Keywords:
dedicated education unit, missed nursing care and nursing clinical education

References:


Abstract Summary:
The academic-practice gap is an area of concern related to quality care and education of nursing students. The purpose of this study is to provide preliminary quantitative and qualitative outcomes following the implementation of a dedicated education unit clinical model at Mayo Clinic Rochester, in collaboration with Winona State University.

Learning Activity:

<table>
<thead>
<tr>
<th>LEARNING OBJECTIVES</th>
<th>EXPANDED CONTENT OUTLINE</th>
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<tbody>
<tr>
<td>The learner will be able to identify two negative effects of missed nursing care leading to a need for innovation in preparing future nurses for the current state of the profession.</td>
<td>II. Missed Nursing care a. Definition: “any aspect of required patient care that is omitted (either in part or in whole) or delayed” (Kalisch, Landstrom, &amp; Hinshaw, 2009, p. 1511). b. Failure to complete nursing care has been shown to result in adverse outcomes c. Investing on factors that reduce missed nursing care is worthwhile d. Effects on nursing staff i. Nurses are aware of missed care occurrences ii. Workload of nursing staff iii. Increasing acuity of the patients iv. RNs must prioritize care provided v. Moral distress results from the inability to fulfill nursing duties vi. Job satisfaction is linked to perception of missed nursing care</td>
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The learner will be able to state at least two positive impacts regarding the implementation of a dedicated education unit (DEU) clinical model on unit and staff outcomes.

<table>
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<tr>
<th>V. Impact on Outcomes</th>
<th>a. Implementation of the DEU model has the potential to provide evidence of an intervention to impact missed care</th>
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<tbody>
<tr>
<td>i. Implementation of the DEU has the potential to promote healthy work environments</td>
<td>1. Benefits to the patient care unit</td>
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<td>a. Culture of excellence</td>
<td>b. Climate of learning</td>
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<td>c. Potential pipeline of well-educated new graduate nurses</td>
<td>2. Benefits to the staff of the patient care unit</td>
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<td>a. Enhanced self-reflection</td>
<td>b. Opportunity to impact the future of the profession</td>
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<td>c. Professional development</td>
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<td>ii. Implementation of the DEU has the potential to provide a positive patient safety culture</td>
<td>1. Promotion of evidence-based care</td>
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<td>2. Closer relationship between clinical nurse teachers (CNT) and students reduces harm</td>
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**Abstract Text:**

The academic-practice gap is an area of concern when dealing with the education of future health care professionals. The transition from hospital-based training to academically based training for nurses contributed inadvertently, but substantially to the development of a wide chasm between the academic and practice sectors (Beal, 2012). Traditional clinical experiences for nursing students involve the faculty member being the expert and imparting knowledge and experiences on their students as time permits. This approach to clinical education limits the students’ opportunities to learn about the workflow and culture on a nursing unit. Because students are traditionally only on the unit one time per week, for an average of five hours, their perspective of floor nursing is fragmented at best.

With the ever-increasing complexity of patients, the quality of nursing care being delivered has also come into question. Failure to complete nursing care has been shown to result in adverse outcomes, including medication errors, patient falls resulting in injury, and nosocomial infections (Kalisch, Tschannen, & Lee, 2011; Maloney, Fendt, & Hardin, 2015; Papastavrou, Andreou, & Efthymiou, 2014; Papastavrou, Andreou, Tsangari, Schubert, & De Geest, 2014). “Missed care refers to any aspect of required patient care that is omitted (either in part or in whole) or delayed. Missed nursing care is an error of omission” (Kalisch, Landstrom, & Hinshaw, 2009, p.1511).

Investing in the exploration of interventions that may reduce missed nursing care is worthwhile (Papastavrou, Andreou, Tsangari et al., 2014). These interventions would need to address improved communication with other departments, improved teamwork on the patient care unit, increased job satisfaction among nursing staff, and improved staffing to accommodate changes in patient acuity and volume (Kalisch et al., 2011). The dedicated education unit (DEU) model is an intervention that has the potential to address all of these concerns. To date, few studies have addressed the impact of the implementation of a DEU on quality of care delivered.

The DEU model attempts to bridge the academic-practice gap by using existing resources, reframing roles, and allowing nursing students to participate fully as members of a patient care unit. The DEU is a partnership between a practice and academic institution, which puts expert bedside nurses in the role of primary educator for nursing students. These bedside nurses, known as Clinical Nurse Teachers (CNT) in this study, are current with medications, clinical procedures, and facility regulations and practices, as well as the inner workings of the health care system. The DEU model offers access to information, support,
resources, and opportunities for continuous learning, which all lead to a sense of empowerment among staff and students (Purdy, Laschinger, Finegan, Kerr, & Olivera, 2010).

In this study, a Midwestern academic medical center has partnered with a Midwestern state university to pilot the DEU clinical model. The purpose of this study is to assess the feasibility of implementing a DEU clinical education model on a medical/surgical/progressive care unit, and to evaluate preliminary outcomes of the model related to student, faculty, staff, and nursing unit leadership perception of and satisfaction with the clinical design, teamwork on the unit and incidences of missed nursing care. Patient safety and satisfaction outcomes were also evaluated. The purpose of this presentation is to provide methods of implementation of the DEU model, as well as findings related to the impact of the DEU model on satisfaction, teamwork, and quality of care.

This Institutional Review Board (IRB) approved study involved a prospective, quasi-experimental design, enrolling 112 participants, including 104 unit staff (registered nurses, patient care assistants, health unit coordinators) and fourteen undergraduate nursing students. A mixed method approach to data collection was implemented, incorporating both quantitative and qualitative research techniques.

Data were collected at two different time points. The fall 2015 data set serves as the control group, as the traditional clinical model was still in use. The spring 2016 data set represents the intervention group, when the DEU clinical model was implemented. Quantitative data were gathered using the following tools: Clinical Nurse Teacher Survey (CNTS), MISSCARE Survey, and Clinical Learning Environment Supervision and Nurse Teacher Scale (CLES+T).

The CNTS elicits perspectives from staff on the DEU about the “quality of clinical education that students received” while on the unit (Nishioka, Coe, Hanita, & Moscato, 2014, p. 295). Response rates for the CNTS were 31% (n = 74) and 60% (n = 25) for fall 2015 and spring 2016 semesters, respectively. The MISSCARE Survey (Kalisch, Xie, & Ronis, 2013) measures staff perceptions of errors of omission of nursing care. Missed nursing care was utilized as a indicator of quality in this study. Response rates for the MISSCARE survey were 26% (n= 104) for both fall 2015 and spring 2016 semesters. The CLES+T was completed by the nursing students and is designed to gather information about the “optimal state of the learning environment, supervisory relationship, and role of the NT [Nurse Teacher]” (Saarikoski, Isoaho, Warne, & Leino-Kilpi, 2008, p. 1234). Response rates for the CLES+T survey were 100% for both fall 2015 (n =6) and spring 2016 (n=8) semesters.

Quantitative data were also gathered regarding unit-specific patient safety and satisfaction outcomes as routinely collected by the academic medical center. These outcomes included rate of hospital acquired catheter-associated urinary tract infections (CAUTIs) per 1,000 Catheter Days, rates of VTE (venous thromboembolism) prophylaxis application documented, patient overall rating of their experience at the hospital, patient perception of communication about medications, patient perception of communication with nurses, patient perception of responsiveness of hospital staff, and patient perception of pain management.

A descriptive analysis was performed to summarize baseline characteristics of the participants, including participant demographics. These results will include age, gender, and ethnicity of both the CNTs, as well as the nursing students.

Focus group interviews were conducted separately with CNTs and nursing students to examine their perceptions of the clinical design and potential impact on outcomes. Overall, anecdotal evidence has been positive from both groups, with thematic analyses in progress. Predominant themes (i.e., issues, feelings, or opinions repeated/common across multiple participants) will be identified individually by the primary investigator and a second investigator who both have previous experience with qualitative data analysis. The two investigators will then meet to compare and contrast each other’s findings and will collaboratively integrate the findings into one structure.
The main intent of this investigation was to determine the feasibility of the DEU model and to ensure no deleterious impact on the outcomes measured. Although an aim of this study was to examine the relationship between a clinical teaching model and patient/staff perceptions of care, the study design and sample sizes did not allow for a cause-effect or causal relationship to be established. However, the outcomes of this study may assist in creating healthy work environments as more positives are revealed about the DEU clinical model.