Effects of a Nursing Professional Practice Model On Customer Satisfaction of Nursing Indicators in the Emergency Department

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Effects of a Nursing Professional Practice Model on Customer Satisfaction of Nursing Indicators in the Emergency Department

Jennifer Thomas

Submitted in Partial Fulfillment for the Doctor of Nursing Practice degree

Regis University

August 12, 2013
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Executive Summary

Problem
Nursing practice gaps exist affecting the overall care of the patient. Though the promotion of nursing theory nurses can promote a consistent, humanistic and caring encounter which can translate to improved patient satisfaction (Kenney, 2006). Market forces are requiring healthcare organizations to demonstrate excellence in patient outcomes to include satisfaction. Furthermore patient satisfaction has the potential to drive volumes, revenues and market share.

Purpose
The purpose of this project was to explore the correlation of the newly developed M Nursing Professional Practice Model (MNPPM) on patient satisfaction specific to nursing sensitive indicators. The model was developed using the theoretical underpinnings of the Careful Nursing Model (Meehan 2003, 2012a, 2012b). The rationale for this project was to test the newly created model to demonstrate impact on patient satisfaction of nursing care.

Goals
The goal of the project was to successfully implement an education program to expand upon the introduction of the MNPPM within the Emergency Department (ED); and facilitate the integration of the model into practice while determining impact of patient satisfaction of nursing care.

Objectives
The primary objectives of this study were to identify and correlate patient satisfaction with the implementation of the professional practice model, with demographic variables and acuity scores. Long term objectives would be to improve overall patient satisfaction of nursing care.

Plan
Patients that received care in the designated ED were randomly selected to participate in the study. A pre-intervention survey was conducted. Numerous educational offerings of the MNPPM were conducted for professional nursing staff, as well as completion of ‘I will’ statements to facilitate the translation of the model into daily practice. Six weeks following the education, a post-intervention survey was conducted on patients receiving care in the same ED. A quantitative, non-experimental design approach was utilized to determine patient satisfaction using the Patient Satisfaction of Nursing Care Quality Questionnaire (PSNCQQ).

Outcomes and Results
Project results suggest that after the education and exercise to translate the model into practice the post survey results were higher than the pre-intervention survey scores. Furthermore, there was no correlation with gender, age or acuity level of the patient participants in customer satisfaction scores.
Acknowledgements

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Our children have been a constant source of encouragement with a much needed “Go Mom” just at the right time. My parents have taught me to pursue my dreams and to reach for my goals. My sister has been my personal cheering squad through all of this.

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Effects of a Nursing Professional Practice Model on Customer Satisfaction of Nursing Indicators in the Emergency Department

Theory based nursing practice allows the nursing practitioner to combine nursing knowledge and nursing practice in a meaningful way that impacts the individual(s) within their care. The hallmark of professional nursing as discussed by Fawcett (1997) is the ability to use conceptual models and nursing theories to guide nursing practice. The application of nursing theory can improve nursing practice by promoting a consistent, humanistic, caring encounter instead of the “dehumanizing, fragmented and paternalistic approach” that beleaguer the contemporary health care delivery system (Kenney, 2006, p. 96). Failure to implement theory based practice creates a theory-practice gap, which results in the inability to guide practice and improve quality outcomes (Parker & Smith, 2010). Given the complexities in emergency departments, implementing a professional practice model could be very beneficial.

Problem Recognition and Definition

Emergency departments (ED) are often the portal of entry into a hospital. Care can become very task-oriented, fragmented and unsatisfactory for the patient. Healthcare organizations understand the growing pressures to improve patient satisfaction scores to increase market share and revenue. Challenges face nursing staff with high volumes, high acuities, short staffing, and a gap in utilizing professional practice models. As the healthcare environment continues to change due to regulatory requirements, core measures, competing organizations, and limited healthcare dollars, more pressure is placed on organizations for high customer satisfaction scores.

Within the project hospital, the ED treats on average 52,000 patients a year (M, 2012). Within this organization, patient satisfaction scores have been historically below average.
national benchmark rankings (Press Ganey, 2011). Comments on previous satisfaction surveys indicated poor experiences specifically referencing nursing care (Press Ganey, 2011). Within the organization, poor satisfaction scores have been approached through a variety of efforts that touched on nursing care which included scripting, frequent rounding and signage. Customer satisfaction efforts had not been approached through the implementation of a professional practice model. The M Nursing Professional Practice Model (MNPPM) was introduced within the System in May, 2012 however, it has not been tested.

Using Meehan’s (2003, 2012a, 2012b) Careful Nursing Model as the philosophical and theoretical basis for the MNPPM, the research question is: “What is the impact of the implementation of the MNPPM in the emergency department on patient satisfaction of nursing sensitive indicators using the Patient Satisfaction of Nursing Care Quality Questionnaire (PSNCQQ)?” The population, intervention, current practice and outcome (PICO) statements were formed for this project.

P-Patients seeking care in a faith-based hospital emergency department reports poor satisfaction with nursing care.

I-Reinforce education of the MNPPM into the emergency department nursing practice, with emphasis on the three concepts and fifteen dimensions of the model.

C-Existing practice

O-Increased perception of patient satisfaction on nursing sensitive indicators

This project used the MNPPM as the professional practice model which was developed using Meehan’s Careful Nursing Model as the nursing theoretical framework (Meehan 2003, 2012a, 2012b). By approaching the issue with an extensive literature review, evidence based practice, and a rigorous scientific approach for data collection and analysis, accurate information
was obtained to determine the relationship between the MNPPM and patient satisfaction using nursing sensitive indicators. Using a traditional approach of generic satisfaction surveys, inferences might be made with non-controlled data resulting in potentially inaccurate synthesis of the data. In this Capstone Project, the data was appropriately analyzed resulting in improved insight into the relationship of enhanced education, application of the MNPPM and patient satisfaction using nursing sensitive indicators through the use of the PSNCQQ instrument.

**Project significance**

There is increasing pressure to improve patient satisfaction in healthcare organizations. Otani, Waterman, and Dunagan, (2012) note customer satisfaction is essential to an organization’s survival. Additionally, Fotter, Ford, and Heaton (2011) suggest health care systems consider patients as guests within the organization that expect positive clinical outcomes as well as quality service encounters. The failure to effectively impact patient satisfaction and clinical outcomes, can result in loss of community reputation, loss of patient volume, reduction in primary payer’s as well as reduction in governmental payment for services (Fotter, Ford, & Heaton, 2011). Mahoon (1996) notes satisfied patients are important to an organization as they become loyal customers and refer others; which subsequently increases revenue, market share, profitability, and potentially improves outcomes. Ultimately, the issue of sustained improvement in satisfaction and outcomes are important for the future of healthcare.

The Capstone Project outcomes are focused on ED nursing practice and correlation with patient satisfaction on nursing sensitive indicators. The purpose of the Capstone Project was to enable the investigator to demonstrate the impact of the full implementation of the MNPPM on customer satisfaction of nursing sensitive indicators in the ED setting. The outcomes chosen for the Capstone Project include enhanced understanding the MNNPM by the nursing staff;
application of the MNNPM into daily practice of the emergency department; and an improved patient perception of customer satisfaction on nursing sensitive indicators within the department.

Theoretical Foundation

Careful Nursing Model

Meehan (2003, 2012a, 2012b) utilizing historical research and content analysis using primary source documentation formulated the Careful Nursing Model. Careful nursing was originally developed by Catherine McCauley, foundress of the Religious Order of the Sisters of Mercy in the early 19th century (Meehan, 2003). Catherine McCauley was well educated and cared for numerous sick family members, friends as well as caring for the sick poor. According to Meehan (2003) McCauley studied principles and works by Catherine of Siena, Catherine of Genoa and John of God. She was able to find women with the same social desire to join her in her work. Ultimately, the Institute of Our Lady of Mercy was founded in Dublin, Ireland in 1828 (Meehan, 2003). Due to social and political pressures, ultimately the ladies became the Religious Sisters of Mercy. The Religious Sisters of Mercy now have an international presence in healthcare.

McCauley and Sisters developed nursing practice to address physical care; emotional care however used a spiritual perspective. The Sisters of Mercy were present in several health events of the time; including the Asiatic cholera outbreak in Ireland in 1832, as well as the Crimean War (Meehan, 2003). It was through these events their style of nursing was admired. Eventually, the Sisters traveled to London, and the United States to teach nursing care using the approach of careful nursing.

When first presented, Meehan (2003) introduced the concepts of Careful Nursing as disinterested love, contagious calmness, creation of a restorative environment, ‘perfect’ skill in
fostering comfort and safety, nursing interventions, health education, participatory-authoritative management, trustworthy collaboration, power derived from service and nurses caring for themselves. Meehan subsequently revised the original key concepts, using a more contemporary approach. The revised concepts included therapeutic milieu; practice competence and excellence; management in practice and health care systems; and professional authority (Meehan, 2012a, 2012b). The M Nursing Professional Practice Model (MNPPM) has components of the Careful Nursing Model lifted from historical documents of the early Sisters of Mercy; as well as concepts and definitions that fit contemporary practice, organizational mission, vision and values. The model uses theoretical underpinnings the Careful Nursing Model (Meehan, 2003, 2012a, 2012b). Moreover, the MNPPN was developed with the input of system Chief Nursing Officers, nurse leaders, nurse educators and staff nurses as well as input from Dr. Therese Meehan. Using the Careful Nursing Model as the theoretical framework, organizational nursing representatives developed the M Nursing Professional Practice Model (see Appendix A).

According to Reed and Lawrence (2011), post-postmodern perspectives regarding theory, have changed the paradigm of practice-based nursing knowledge. Furthermore, with the change in thinking, theories are to be used, adapted and improved on by using nursing creativity, critical thinking, and interactions. The MNPPM is an example of this adaptation approach. This allows for the nurse to adapt the model to the current practice in which “nursing is lived in practice” (Reed & Lawrence, 2011, p. 139). Kaplow and Reed (2008) identify through literature research safer work environments and improved patient satisfaction in a nursing unit that adopted a nursing theory. Literature demonstrates repeatedly, the improvement of patient care through application of nursing practice models.
While the Careful Nursing Model has been implemented in a few hospitals to include Our Lady’s Ward, St. Vincent’s University Hospital in Dublin, Ireland (Meehan et al., 2010), it has not been tested in practice. Subsequently, as the MNPPM is in the early stages of implementation, it also lacks testing. While the models have not been formally tested, the concepts of the Careful Nursing Model came from the framework from the Sisters of Mercy nurses. The Sisters of Mercy have been practicing these concepts since their formation in the early 19th century (Meehan, 2003).

**Conceptual Map of MNPPM**

The background of the model reflects the mission, values, charisms, and nursing vision of the organization. In the forefront of the model, there are three concepts, with 15 dimensions as seen in Table 1, when put together in circles, the circles intercept to demonstrate attributes of the nurse. As the patient experiences nursing care using this model, the experience should be comprehensive, easy, personal, professional, and vibrant. The outcome of the experience is described as optimal health, healing of dignified end of life (M Nursing Leadership Council, 2011). Outcomes can be measured through patient satisfaction surveys, quality monitoring and regulatory reporting.

Incorporation of the concept translates to an experience that is comprehensive as the nurse provides care fused in therapeutic environment, practice expertise, and professional commitment (M Nursing Leadership Council, 2011). As the patient experiences the nursing encounter, the care should be comprehensive and personal. This ensures the uniqueness of the patient is addressed; the experience is vibrant and easy. The outcome of the patient is what most individual’s desire when experiencing healthcare: optimal health, healing of illness or a dignified end of life (M Nursing Leadership Council, 2011). Subsequently, as the patient experiences
nursing care using this approach, the encounter should reflect a positive patient satisfaction (M Nursing Leadership Council, 2011).

Table 1

|M Nursing Professional Practice Model Concepts and Dimensions|
|-----------------|-----------------|----------------|
| **Practice Expertise** | **Therapeutic Environment** | **Professional Commitments** |
| Vigilance | Compassionate care | Trustworthy collaboration |
| Safety and comfort | Attentive presence | Care for self and others |
| Clinical reasoning and decision making | Contagious calmness | Self-competence development, continuous learning |
| Patient/other(s) engagement in care | Tender courage | Advancement of nursing profession |
| Spiritual and ethical attentiveness | Intellectual engagement | |
| Comprehensive care orchestration | | |

**Practice expertise.** Practice expertise concentrates on the nurse’s engagement in patient care which includes competence and excellence (Meehan, Murphy, & McMullin, 2010).

Subsequently, practice expertise is represented by the dimensions of vigilance; safety and comfort; clinical reasoning and decision making; patient/other engagement in care; spiritual and ethical attentiveness; and comprehensive care orchestration (M Nursing Leadership Council, 2011). Vigilance is demonstrated when the nurse uses expertise to closely monitor the patient for changes in condition, assesses the response to treatment as well as anticipating individual needs. While providing comfort and ensuring a safe environment, the nurse exhibits the dimension of safety and comfort. Interventions associated with safety and comfort would include functional assessments, implementation of fall precautions, and providing pain medication. When a nurse exhibits clinical reasoning and decision making, the skills demonstrated are the use of sound judgment, analytical skills and intuition, data collection, and
problem solving (M Nursing Leadership Council, 2011). Engaging the patient and others facilitates the participation in self-care, dependent care, and discharge planning as well as appropriate referrals. Spiritual and ethical attentiveness embraces the concepts of providing spiritual/ethical care when needed or requested by the individual. Demonstration of comprehensive care orchestration is represented by the professional nurse collaborating with multidisciplinary groups to ensure the care delivery process is effective, timely, and appropriate. The dimensions within this concept intercept to promote clinical competence, nursing practice, and patient satisfaction.

**Therapeutic environment.** Therapeutic environment describes the healing environment created by the nurse in which nursing care and management of the patient occurs (Meehan, Murphy, & McMullin 2010). Therapeutic environment includes the dimension of compassionate care, attentive presence, contagious calmness, tender courage, and intellectual engagement (M Nursing Leadership Council, 2011). Contributing to therapeutic environment is attentive presence, which is defined as being present in the moment with the individual with whom the nurse is interacting. Contagious calmness influences the environment through the nurse’s ability to have an inner calmness or inner peace that is communicated to the patient and others within the environment (Meehan, 2003, 2012a). When a nurse demonstrates the dimension of tender courage, the patient experiences gentleness, sensitivity as well as compassion and empathy during the encounter (Meehan 2003, Murphy, & McMullin, 2010). The final dimension of therapeutic environment is intellectual engagement. The nurse can actively participate in intellectual engagement through the use of critical thinking skills, the use of evidenced based practice, assessment, and selection of appropriate nursing intervention.
Professional commitments. This concept describes the personal commitment the professional nurse makes to ensure excellence in nursing care. This concept includes the dimensions of trustworthy collaboration, care for self and one another, self-competence development and continuous learning, as well as the advancement of nursing profession (M Nursing Leadership Council, 2011). Professional trustworthy collaboration incorporates care at the individual level, the multidisciplinary, level as well as political, social, and cultural levels (Meehan et al., 2010). Meehan (2003, 2012a, 2012b) describes the importance of self-care and caring for others to include spiritual care, emotional, and physical care as part of the nurse’s professional commitment. Additionally, this encompasses support of nurse colleagues, use of safety equipment, and valuing the uniqueness of each individual. Finally, as the nurse demonstrates professional commitment, and personal self-confidence develops. Furthermore, continuous learning incorporates nursing authority, autonomy, and life-long commitment to learning.

Review of Evidence

A systematic review of evidence (SRE) was performed to identify supportive literature for evidence-based processes for the selected project (Appendix B). As part of this review searches were conducted on the Cumulative Index to Nursing and Allied Health Literature (CINHAL), academic search premier (ASP), as well as the medical literature analysis and retrieval system (MEDLINE). Key search words included: patient satisfaction, emergency department, nursing care, Careful Nursing, professional practice model, M Nursing Professional Practice Model, and attentive presence.

As part of the literature search various theoretical frameworks, nursing models, and measurement tools were evaluated for appropriateness to this project. There were 110 articles
originally identified but within the SRE, only 34 articles applicable to be included for review. The 34 articles were narrowed by scope of project with emphasis in customer satisfaction. The SRE review included numerous case studies, discursive studies, descriptive studies, qualitative studies, as well as a few quantitative studies. There were no studies identified directly relating to the Careful Nursing Model, M Nursing Professional Practice Model, or specifically to patient satisfaction in the ED after implementation of a professional practice model.

Patient satisfaction is described in relationship to the patient’s expectation of care and the actual care received (Laschinger, Hall, Pederson, & Almost, 2005). Patient satisfaction of nursing care has also been identified as having a relationship with the overall hospital experience (Wagner & Bear, 2009). Furthermore, patient satisfaction who been identified as a significant indicator of quality of nursing care (Laschinger, Hall, Pederson, & Almost, 2005; Wagner & Bear, 2009). Mohanan, Kaur, Das, and Bhalla (2010) observe that due to the nature of nursing, a patient may judge the entire quality of hospital services based on the perception of nursing care received. Moreover, patients that experience higher satisfaction levels are more likely to follow recommended care instructions and have a more positive impact on health (Mohanan et al., 2010). Finally, a correlation was noted with higher satisfaction with nursing care, the more likely patients are to recommend the hospital to their families and friends (Laschinger et al., 2005; Mohanan et al., 2010).

Mohanan, Kaur, Das, and Bhalla (2010) note patients report dissatisfaction with care in the emergency department at times. Furthermore, it was noted by Mohanan et al. the perception of medical personnel on expectations of good quality care is not always in congruence with the patient’s perception. The literature review demonstrates interpersonal encounters between patients and nurses correlated positively to patient satisfaction (Ekwall, Gerdtz, & Manias,
Furthermore, Ekwall et al. indicate the interpersonal encounters with staff were the only stable predictor for patient satisfaction, while other predictors such as physician encounters, discharge instructions, and wait times did not demonstrate the same level of consistency. Improved health outcomes have also been reported with individuals who report higher customer satisfaction (Ekwall, Gerdtz, & Manias, 2008; Mahoon, 1996; Mohanan, Kaur, Das, & Bhalla, 2010).

Nursing is described by Wagner and Bear (2009) as the only service in a healthcare facility who has a direct relationship that can impact overall patient satisfaction. In review of Mahon’s concept analysis of patient satisfaction specific nursing patient satisfaction indicators were identified. These include: art of care/interpersonal manner/humanness, technical quality of care/competence/proficiency, and environmental/nursing milieu (Wagner & Bear, 2009). Mahon’s concept analysis does not match directly with the MNPPM, however there are similarities of the concepts within the framework of the MNPPM.

Nursing satisfaction has been described as “the degree of convergence between the expectations that the patients have of ideal care and their perception of the care they actually receive” (Findik et al., 2010, p. 162). Patient satisfaction is important to measure to determine if the patient needs are being met to reach the desired outcome. Findik et al. (2010) identified several themes of patient satisfaction which include relationship building, nursing knowledge levels, courtesy, promptness, response to needs, and anticipation of needs. The MNPPM addresses each of the identified themes of customer service within the three concepts through integration of specific dimensions. Specifically for the concept of therapeutic environment the dimensions specific to customer service would include compassionate care, attentive presence, tender courage, and intellectual engagement. The concept of practice expertise addresses
customer satisfaction through safety and comfort, patient/other engagement in care, and clinical reasoning/decision making. The final concept of professional commitment addresses the importance of nursing knowledge and relationship building through self-competence development, continuous learning, and trustworthy collaboration.

While developing the model of Quality Caring, Joann Duffy noted dissatisfied patients stated, “nurses just don’t seem to care” (Parker & Smith 2010, p. 403). Meehan et al (2010) refer to customer service through the concepts of tender courage addressed by “sensitivity to patients’ experiences and needs” (p. 29). Facilitating a safe and comfortable environment can be accomplished by hourly rounding, assisting with food and toileting needs, ensuring the individual safety needs are identified, and care delivered accordingly. These interventions can also be associated with patient satisfaction.

In a study of 300 patients by Perez-Carceles, Gironda, Osuna, Falcon, and Luna (2010) report 66% of patients considered the attention they received as good or excellent. In this study, there was no statistical difference noted in gender, age, or education level. There was a statistical difference in the overall satisfaction with the patient perception of received information. The patients who were the most satisfied were those who had received the information regarding medications, tests, treatments, and discharge information (Perez-Carceles et al., 2010).

McBrien (2010) conducted a literature search regarding spiritual care in the emergency department. It was noted in the literature review that nurses do not feel prepared for their roles as spiritual providers. McBrien observed in the ED culture nurses were becoming less personal and relying more on technology. McBrien recommended education for emergency nurses to address the holistic needs of the patients. Meehan (2012b) observed the recognition of “intrinsic
human dignity” (p. 6) comprise the foundation for spiritual care. Meehan also describes spiritual care within the Careful Nursing Model as a balanced approach with clinical competence and excellence. It is within the therapeutic milieu that spiritual care is created and nurtured (Meehan, 2012b). It is noteworthy that each of the dimensions has a spiritual approach. Caritas, contagious calmness, nursing caring for themselves and others, and providing a safe and restorative environment all have spiritual aspects, but not as overt as some of the other dimensions (Meehan, 2012b).

Wiman and Wikblad (2004) conducted a qualitative research project to explore caring and uncaring encounters in the ED. The study involved physicians, nurses, and assistant nurses. Five episodes of patient care occurred that was videotaped. The researchers analyzed the videotapes for caring and uncaring behaviors. The results indicated 61 aspects of uncaring behavior occurred, while 36 aspects of caring were identified (Wiman & Wikblad, 2004). It is noteworthy to mention neither the Careful Nursing Model nor the MNPPM have caring as a dimension, there are undertones of human connectedness. In the MNPPM this is demonstrated within the concept of therapeutic environment through compassionate care, attentive presence, contagious calmness, and tender courage. Additionally, Wiman and Wikblad noted nurses who displayed openness, perception, and genuine concern for the patient displayed feelings of goodwill and holistic views of the patient.

Using Kenney’s (2006) guidelines for selection of models and theories, each step of the guideline was reviewed. The model review was based on personal beliefs regarding the nursing paradigm. Underlying values and beliefs were assessed and definitions reviewed. Consideration of the charisms and values of the organization against the MNPPM demonstrated alignment of values and belief systems regarding nursing. The concepts and dimensions were defined for the
organization. Other models reviewed included Duffy’s Quality Caring Model and Watson’s Theory of Caring.

Gaughan, Middleton, and Patton (2013) reviewed nursing theories in alignment with Catholic Identity. In this process, numerous theories were reviewed to determine how well the theory fit with Catholic health care to include its principles and identity, derived from *Ethical and Religious Directives for Catholic Health Care Systems* (ERDs), and finally the church’s moral theology and teachings (Gaughan et al., 2013). Through this review process, the Careful Nursing Model received a “perfect 5” on each of the scoring indicators (Gaughan et al., 2013) Using the theoretical framework of the Careful Nursing Model, the newly developed MNPPM is most appropriate in this project to maintain the legacy of the Mercy foundress, Catherine McAuley, the Catholic identity while promoting professional nursing practice. The Careful Nursing Model and the MNPPM were evaluated to determine the focus, concepts, dimensions, as well as overall outcomes. When reviewing the MNPPM, it has the ability to fit all patient encounters.

**Project Plan and Evaluation**

**Market Risk Analysis**

Hendren (2011) discussed the impact of value based purchasing and the patient experience. Value based purchasing is a process implemented by the Centers for Medicare and Medicaid Services (CMS) which results in a potential payment reduction based on performance. Performance indicators are clinical and experience related. Veterans Health Administration (VHA) (2011) cited in 2013 the reduction in payment was 1% with an incremental increase of 2% based on facility performance. Failure to meet the patient’s expectations can result in lower
financial payment. Utilization of a professional practice model can potentially affect the patient satisfaction.

Through a pay for performance process, healthcare organization must become strategic in addressing patient outcomes. Through implementation of a professional practice model to close the gap in consistent nursing practice and potentially improving customer satisfaction, financial incentives could be identified through value based purchasing as well as increase in market share, volumes and overall revenues.

**Strengths, Weakness, Opportunities and Threats.**

A careful analysis of the strengths, weakness, opportunities and threats (SWOT) was performed in respect to the Capstone Project, as demonstrated in Table 2. Issues that could have influenced successful accomplishment of the Capstone Project consisted of the following factors: limited participation by the nursing staff, lack of buy-in by nursing staff stakeholders, inconsistent application of the model by nursing staff, and a short intervention period. Strategies to facilitate successful completion of the Capstone project included discussion and project planning with project team and organizational leaders; providing written materials for nursing reference; reinforcement of previous education, multiple enhanced educational opportunities, nursing huddles, scripting, and integration of “I will” statements into practice; and one-on-one education as needed to reinforce model.

Table 2

**SWOT Analysis**

<table>
<thead>
<tr>
<th>Strengths</th>
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<tbody>
<tr>
<td>• Model grounded in Mercy history and Catholic Identity</td>
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<tr>
<td>• Coworkers participated in development of model</td>
</tr>
<tr>
<td>• Nurses embraced the Mercy Heritage</td>
</tr>
<tr>
<td>• Nursing leadership endorsed model</td>
</tr>
</tbody>
</table>
- System and local organization supportive
- Organization contribution to project through education and space allocations
- Project team included: DNP student, DNP clinical mentor, DNP Capstone chair, ED director, and Project Champions
- Stakeholders included: Nurses, Executive Leaders, Project Team, System Executive Nursing Leaders

<table>
<thead>
<tr>
<th>Weakness</th>
<th>Strategies to Overcome Weakness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction of Model initiated May, 2012</td>
<td>Reinforce previous education</td>
</tr>
<tr>
<td>Short research time</td>
<td>Daily reinforcement of model</td>
</tr>
<tr>
<td>Hospital customer service roll out September, 2012</td>
<td>Use PSNCQQ instrument</td>
</tr>
<tr>
<td>Limited nursing participation</td>
<td>Offered education variety of times/dates</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing staff had introduction into the model</td>
</tr>
<tr>
<td>Increase understanding and application of the model</td>
</tr>
<tr>
<td>Validation linkage with Careful Nursing Model</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Threats</th>
<th>Strategies to Overcome Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excessive wait times in ED</td>
<td>Rounding with scripting for nursing staff</td>
</tr>
<tr>
<td>Lack of funding for expansion to other units</td>
<td>Budget monies for next fiscal year</td>
</tr>
<tr>
<td>Inconsistent application of model by nurses</td>
<td>One-on-one education as needed</td>
</tr>
<tr>
<td>Lack of stakeholder buy-in (nursing staff)</td>
<td>Develop I will... statements, reinforce model</td>
</tr>
</tbody>
</table>

Meehan et. al. (2010) developed “I will” statements as part of the orientation to nurses within the Lady’s Ward, St. Vincent’s University Hospital in Dublin, Ireland. As part of the education process, after a concept was introduced, the nurse translated the concept or dimension into an action item. As part of the education plan for the Capstone Project, the principle investigator facilitated the use of “I will” statements among participants. For example, using the dimension of attentive presence, the nurse might write: while speaking to a patient, I will maintain eye contact during the interaction. The statements help the nurse to translate the model into their practice (Meehan et al., 2010).

**Sustainability**

The MNPPM was deployed across the System in May, 2012. There was an introduction of this model as part of the deployment. As part of the rollout, several project tools were
available for long term utilization. These include the visual diagram of the model, posters, puzzles, and key chains of the model. Furthermore, the model is steeped in the tradition of the organization religious heritage. Coworkers at all levels in the organization participate in formation to learn and understand the Mercy tradition. Through the process of formation, individuals are formed into lay leaders of the ministry. Through the formation process, the traditions of Mercy are explored which subsequently strengthens the bond of this professional practice model as part of the organizational culture.

After the initiation of the advanced education, the principle investigator and the project champions made rounds in the ED. As part of the rounds, active dialog occurred regarding the MNPPM and the application of the dimensions into practice. The project champions had huddles with the nursing coworkers with a brief discussion of the dimensions and the “I will” statements with conscious effort to implement during the shift.

**Stakeholders and Project Team**

Stakeholders of the Capstone Project included the patients who received the nursing care, the nurses who provided the care, local and system nursing executive leadership, and the project team as shown in Table 3. The project team included the team leader which is the principle investigator, the ED nursing director, and project champions. The project champions included the ED clinical nurse manager, ED supervisor, ED quality/education coordinator, and the ED charge nurses. The project champions had the ability to have a 24 hour a day impact on the project.
Table 3

Capstone Stakeholders and Project Team

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Project Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients</td>
<td>Team Leader/DNP Student</td>
</tr>
<tr>
<td>Nursing Staff</td>
<td>ED Nursing Director</td>
</tr>
<tr>
<td>Project Team</td>
<td>Project Champions</td>
</tr>
<tr>
<td>Local Executive Leaders</td>
<td></td>
</tr>
<tr>
<td>System Executive Nursing Leaders</td>
<td></td>
</tr>
</tbody>
</table>

Cost-benefit analysis

Primary costs related to this project were determined based from nursing staff salaries to attend the additional education opportunities. Other costs related to education supplies, paper goods, and postage was considered nominal. Furthermore, costs associated with the project team are considered minimal as much of the activities will fall within normal job scope. The system already incurred costs during the introduction of the model in May, 2012.

The benefits of the Capstone Project included collaboration with Dr. Meehan, collaboration with the system nursing leaders as well as validation of one outcome of the MNPPM. Additional benefits included potential to increase patient satisfaction within the emergency room. As indicated by Mahoon (1996), satisfaction with nursing care has a positive financial impact to the organization through additional volume and revenue. Further potential benefit included increasing market share of patients within the community. Based on these factors the potential benefit of the project outweighed the costs.
Risk/Benefit Analysis

The risks and benefits of the study have been analyzed to determine the value of the project. It is important as part of the project plan to ensure that the benefits outweigh the risks in the study.

Risks of the study. Minimal potential harm was identified as a consequence of the project. If harm occurred as a result of this study, it would have been potential emotional harm if the patient had an upsetting event in the emergency department and recounted the event. No potential physical harm was identified as a result of the study. The patients had already received ED care so there were no perceived concerns shared that a failure to participate or by participating that care would be altered in the Emergency Room for the current visit.

Benefits of the study. Davis and Bush (2003) noted health care agencies experience significant competition for patients, market share, and financial stability. Furthermore, it has been repeatedly demonstrated within the literature, correlations of nursing care satisfaction and satisfaction within the overall hospital experience (Davis & Bush, 2003; Ekwall; Gerdtz, & Manias, 2008; Laschinger, Hall, Pederson, and Almost, 2005; Mohanan, Kaur, Das, and Bhalla, 2010). Therefore, ultimately, nursing services are pressured to improve patient satisfaction. The emergency department is the entry point for many patients into the organization. While some patients are admitted, more patients are discharged home. Mohanan, Kaur, Das, and Bhalla (2010) indicate more attention needs to be placed on the non-urgent groups of patients within the emergency department. This model is comprehensive and applicable to acute and non-acute patients. This Capstone Project provided information to the local and system organization of the potential effectiveness of the MNPPM toward patient satisfaction of nursing care. The subsequent impact across an integrated health system can be extremely significant.
Project Objectives

In developing the Capstone Project, a mission and vision statement was developed. The objectives and desired outcomes were also identified. Through the Capstone process the identified outcomes are measurable.

Mission/Vision

The mission of this project was to implement advanced education of the MNPPM in the ED setting in order to promote improved nursing patient satisfaction for those receiving care. The vision was to provide an educational basis for the ED nurses to provide a transformative experience to patients receiving nursing care which will result in higher patient volumes, higher market share and improved financial stability. The core values of the Capstone Project aligned with the organization’s values which are dignity, justice, stewardship, excellence and service.

Goals

The outcome measures for the Capstone Project included the following goals: improvement of ED patient satisfaction on nursing sensitive indicators as well as the improvement in the understanding and application of the MNPPM into daily practice. The outcomes were chosen in collaboration with course faculty, DNP mentor, DNP capstone chair, and System Chief Nursing Officer. Measurable outcomes for the project have been identified in both short and long term results as indicated in Table 4.

1. Determine correlation of patient satisfaction to advanced education of MNPPM-
   Measured by comparison of pre-intervention patient group and post-intervention patient group.

2. Identify correlations between demographic variables and satisfaction scores-
   Measured by comparison of demographic data and satisfaction scores.
3. Identify correlations in Emergency Severity Index (ESI) acuity score and satisfaction scores—Measured by comparison of ESI score and satisfaction scores

4. Participation in education by professional nurses of MNPPM—Measured by number of registered nurses that participate in the education offering.

5. Improved reputation in the community—Measured by shift in market share. This is a long-term goal and is beyond the scope of this project.

6. Sustained improvement in patient satisfaction in the ED—Measured by the consulting organization group hired by the facility. This is a long-term goal and is beyond the scope of this project.

Table 4

Study Outcomes and Types

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Types of Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify correlation of patient satisfaction to MNPPM</td>
<td>Short-Term</td>
</tr>
<tr>
<td>Identify correlations between demographic variables and satisfaction scores</td>
<td>Short-Term</td>
</tr>
<tr>
<td>Identify correlations in acuity score and patient satisfaction</td>
<td>Short-Term</td>
</tr>
<tr>
<td>Participation in the Education of MNPPM</td>
<td>Short-Term</td>
</tr>
<tr>
<td>Improved reputation in the community</td>
<td>Long-Term</td>
</tr>
<tr>
<td>Sustained improvement in patient satisfaction in ED</td>
<td>Long-Term</td>
</tr>
</tbody>
</table>

The Emergency Severity Index acuity score allows the nurse to assess acuity level upon presentation to the ED to ensure the event is not life or limb threatening which would indicate a score of one or two (Area Agency On Healthcare Quality And Research, 2011). Upon determination that the event falls within the category of three, four or five the nurse evaluates the anticipated resources needed for the visit. Resources considered include but are not limited to
laboratory, radiology, intravenous therapy, and medical intervention such as sutures. After the evaluation, the nurse assigns the ESI score. ESI scores range from one-five, with one being the most emergent and five being the lowest acuity and the fewest resources anticipated to be utilized.

**Evaluation Plan**

**Logic Model**

The Logic Model was chosen for the conceptual model of the Capstone Project (Zaccagnini & White, 2011) (Appendix C). The use of the Logic Model allowed for a systematic and visual method to outline the plan (Zaccagnini & White, 2011). Through the utilization of the Logic Model, the inputs, constraints, activities, outputs, as well as the short and long term outcomes were identified. Issues were anticipated using this model and used to aid in the evaluation of the plan.

**Population/Sampling Parameters/Setting**

The target population was patients within a hospital service area of a Midwestern state. The hospital primary and secondary service area included combined 11 counties in the Midwestern region. The hospital is part of a multi-hospital system, referred to in this document as the System. The population included in the survey received care within the hospital Emergency Department (ED) at some point in the date range of March 2013-June 2013. Patients excluded were individuals under the age of 18, patients with a primary or secondary psychiatric diagnosis at discharge that could result in an altered level of consciousness, individuals unable to speak English, and individuals with legal guardians.

Two acute care hospitals provide medical care for the community. According to the United States (US) Census Bureau (2010) the population of the community was 86,209. The
county reports a population of 125,744 (US Census Bureau, 2010). There was a 7.6% population
growth in the community from 2000 to 2010. Within the Emergency Department visits there
were 25,265 or 49% of the visits classified as self-pay or Medicaid (M Ark, 2012). These
patients often did not have a primary care provider and did not receive routine preventative care.
Additionally, within the primary service county, the median income was $39,482 (US Census
Bureau, 2010). County Health Rankings and Roadmap (2012) reported 19% of the population in
the county was in poor-fair health range as compared to 10% of the population in a national
benchmark.

**Sample Size**

To determine population size, Sample Size and Power as a Function of the Population
Correlation Coefficient, for Alpha =0.05 (Two-Tailed Test) chart was utilized (Polit, 2010,
p.202). Using the Power of 0.80, and the estimated population correlation (ρ) of medium effect
(0.30) the population sample needed was 85. Since there were two groups, the sample size was
rounded up to 86 subjects. The participants were chosen using a computer report from the facility
electronic medical record (EMR). This report allowed for random selection of potential
participants for the study.

Once selected, the participants were contacted by telephone to invite them to participate
in the study. If the researcher was unable to contact the randomly selected individual due to
inaccurate contact information provided, another round of random selection occurred. This
process continued until the full sample size was achieved. Sample size for the survey was 86
individuals with 43 individuals per group.
Protection of Human Rights

Using the 45CFR46.101 (b) Categories of Exempt Human Subjects research to review this project, the project fit the eligibility requirements for exempt status (Terry, 2012). The Capstone Project was granted approval by the hospital IRB in December 2012 (see Appendix H). The project was subsequently approved by the Regis University IRB in February 2013 (see Appendix I).

Provision of implied informed consent. Implied consent was obtained from all subjects (see Appendix J). Prior to administration of the instrument, the consent form was read to the individual over the telephone. If the individual wished to proceed it is understood implied consent had occurred. If a declination would have been received directly or indirectly such as ending the phone call, the process would have ended. A copy of the consent was mailed to each participant who participated in the survey.

The research involved using the PSNCQQ survey instrument to gather the data using a telephone survey. This project evaluated the patient’s perceptions of customer service regarding nursing sensitive indicators in the Emergency Department. Therefore, the survey occurred after care had been given. The survey was conducted within 14 days of treatment for all participants.

Confidentiality of data. Patient confidentiality was essential in the study design. The selected individuals had their identity translated into code, utilizing a code guide. The code was developed using date and time of treatment. The groups were divided into the pre-intervention group and the post-intervention group. As stated previously, those participating were contacted after receiving care in the ED. Stringent methods to maintain confidentiality which included coding of identity, limited access to code and identity, as well as securing documents were taken.
If somehow the identity of a subject was determined, the data will cause minimal physical, financial, emotional, employability, or reputation damage.

**Protected population categories.** The population in the Capstone Project had subjects that fell within protected categories. This included elderly, pediatric patients, physically disabled, and pregnant patients (Zaccagnini & White, 2011). Based on review of the protected categories and other potential issues, patients excluded in the project included individuals under the age of 18, patients with a primary psychiatric diagnosis at discharge that could result in an altered level of consciousness, individuals unable to speak English, and individuals with legal guardians. There was minimal risk identified to participation by the elderly, pregnant women, or physically disabled individuals. The population identifiers were kept confidential and the use of a numerical coding methodology was utilized. This methodology was performed to maintain confidentiality and minimize potential concern by patients regarding future visits.

**Ethical considerations.** Responsibilities for this project included ensuring the ethical principles were followed. These principles included autonomy, beneficence, non-maleficence, justice, respect for person, fidelity, as well as veracity (Zaccagnini & White, 2011). The consent was written at an eighth grade level. The interviewer read the consent, and ensured the individual understood the consent. The participants were able to end the telephone conversation or survey at any time during the process.

The principle investigator is an employee of the organization in which the study was performed. The investigator demonstrated diligence to maintain a separation of the roles of investigator and employee. This diligence included keeping the data confidential as well as honestly reporting the outcomes and avoidance of any areas of scientific misconduct. The
principle investigator had the potential to experience professional discomfort if the results did not positively correlate with the implementation of the professional practice model.

**Study Methodology**

The project was a quantitative, non-experimental design. Terry (2012) discussed quantitative research as the most appropriate methodology to establish the interconnection of the relationship between variables. Furthermore, quantitative research utilizes the principles of positivism that allows for objective and measurable research (Terry, 2012). Additionally, a Post-Test-Only Design was utilized (Creswell, 2009). This was the most appropriate since it was not possible to pre-test, post-test the same group of ED patients prior to the intervention and after the intervention. The test was given to two different patient groups, at two different times. This design allowed the testing of a group of patients after treatment in the ED prior to the intervention.

For those agreeing to participate, one of two options was offered. The first option was to administer the instrument immediately. If agreeable, after reading the consent form and obtaining implied consent, the survey was given over the telephone using the PSNCQQ instrument. The other option was to allow the participant to schedule an appointment time for a future phone survey. The same process was planned for obtaining implied consent and administration of the PSNCQQ instrument at the appointed time. All participants took the survey at the first time of contact so subsequently no additional appointments were required or utilized.

After administration of the pre-intervention ED patient group, with the project team assistance, classes were scheduled offering six times on four different dates. Nurses were assigned a class as part of their work schedule. The first class was offered in mid-April, 2013 with the final class completed in early May, 2013. This process facilitated the availability of
nursing staff to attend. Classes were presented that aligned with the staff schedules for convenience of both day and night shift nursing staff. To ensure continuity and consistency of classes, a class outline was developed (Appendix D). “I will” worksheets were utilized during education. The primary investigator facilitated each group in completion of the “I will” hand-out. Encouragement was given to each individual to commit to one statement per dimension to utilize in daily practice (Appendix E). Each participant verbally shared at least one “I will” statement with other class participants. The project team members had 24 hour-a-day access to nursing staff to reinforce the model. The project team members conducted huddles and discussed the MNPPM and reinforced the ‘I will’ statements.

During the months of May and June, 2013, the principle investigator and the project team continued to reinforce the MNPPM during huddles, staff meetings, one-on-one interactions and observation. The post-implementation patient survey was conducted in July, 2013. After the data was collected, the results were tabulated.

After the intervention of extensive education of the MNPPM, a second post-care test was administered to a post intervention group of ED patient’s. Correlation analysis was subsequently conducted with both groups related to patient satisfaction of nursing sensitive indicators, age, gender, and acuity.

There were no benchmarking measures specific to the nursing sensitive indicators identified, or for the instrument selected. National benchmarking with Centers for Medicare and Medicaid Services (CMS) is available through the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) instrument. The HCAHPS instrument does not isolate nursing sensitive indicators. There are other national database companies that provide customer satisfaction services to hospitals and health systems, however the indicators offered included
dimensions beyond nurse sensitive indicators. The services offered include national benchmarking of patient satisfaction against others organizations within their database. The methodologies as stated above were not applicable in this study due to lack of congruent nursing sensitive indicators.

The benchmark used for this study was the pre-intervention patient satisfaction group referred to as group 1, against the post-intervention patient satisfaction group referred to as group 2. For long term monitoring of overall customer satisfaction, the organization will continue to utilize Professional Research Corporation (PRC), a customer service measurement contracted service that monitors HCAHPS scores, non-nursing specific questions to observe trends and two nursing specific questions.

The study variables were defined for the project as demonstrated in Table 5. The variables and the measures to address are described below:

1. Advanced Education of the MNPPM (Intervention included six instructor led group study sessions with didactic and application practice. Each session was 90 minutes long. Educational activities included a review of the MNPPM to include the three concepts and 15 dimensions, application to practice examples and facilitated discussion and opportunity to complete the “I will” worksheets).


3. Age, gender, and acuity level on Customer Satisfaction of Nursing Sensitive Indicators (Measured using electronic medical record report of surveyed individuals).
Table 5

Study Variables

<table>
<thead>
<tr>
<th>Study Variables</th>
<th>Type of Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Education of the M Nursing Professional Practice Model</td>
<td>Independent</td>
</tr>
<tr>
<td>Customer Satisfaction of Nursing Sensitive Indicators</td>
<td>Dependent</td>
</tr>
<tr>
<td>Age, Gender and Acuity on Customer Satisfaction of Nursing Sensitive Indicators</td>
<td>Dependent</td>
</tr>
</tbody>
</table>

Study Design

To minimize issues with validity and reliability, a team of two individuals was formed. The team consisted of the primary investigator and the ED director who conducted the patient surveys and presented the education material. The purpose was to develop a standardized education process, lesson plan, worksheet, as well as education on instrument utilization to minimize variation. To minimize risks of failure of the nursing coworkers receiving the same education, the education outline was utilized. This ensured the same education content was presented to the nursing staff regarding the MNPPM.

For administration of the instrument, it was essential the questions were asked consistently the same without any verbal cues from the administrator who could alter the results. The team met and reviewed questions, potential issues, and developed appropriate scripting to minimize threats to data collection.

Timeframe

Using the DNP Process Model (Zaccagnini & White, 2011) the Capstone Project began in August, 2011 and concluded in August, 2013 (Appendix F). Application to the facility and university investigational review board (IRB) processes was performed using the “exempt”
status. Approval was granted by both organizations. The timeline for initiation of the project was dependent upon IRB approval.

**Budget and Resources**

Budget and resources were included in the consideration for the Capstone Project (Appendix G). Principle investigator is employed full time by the existing facility. The project team members were also employed full time by the existing facility and their participation into this project encompassed part of their normal job function. The registered nurses participating in the advanced education were active members of the ED nursing staff. Participation in the education offering incurred salary expenses for the nursing staff. The facility agreed to contribute the education time needed for the nursing staff to attend. The facility also provided classroom space, paper materials, and postage. Nursing staff or the patients received any financial or other benefit from participating in this project. The patients that participated in the PSNCQQ did so voluntarily. There were no additional funding sources needed.

**Instrumentation**

The instrument selected for the Capstone Project was the Patient Satisfaction of Nurse Care Quality Questionnaire (PSNCQQ) (Appendix K). The instrument was developed by Laschinger, Hall, Pederson, and Almost (2005) modified from the Patient Judgment of Hospital Quality (PJCQ) questionnaire. Modifications made to the PJCQ instrument extended questions across the spectrum from admission to discharge which were incorporated into the PSNCQQ instrument. As part of the psychometric testing, Laschinger et al. (2005) randomly tested 14 hospitals in Ontario, Canada. The breakdown was five teaching, five large community, and four small facilities. The patients selected were all medical and surgical patients discharged during a three month period. Laschinger et al. (2005) reported construct validity was confirmed through
exploratory factor analysis and confirmatory factor analysis. The final sample size consisted of 1041 individuals across a variety of institutions. The Cronbach α reliability estimates for the PSNCQQ was 0.97, which demonstrated an excellent reliability (Laschinger et al., 2005). The results imply the patients in different environments were interpreting the questions on the PSNCQQ in a consistent manner. Furthermore as part of the psychometric testing, Laschinger et al. (2005) established strong support for predictive validity and sensitivity of the instrument. The instrument used a 5-point Likert scale. The methodology for calculating scores was to average scores and determines one value per participant.

**Data Analysis**

Data from a variety of sources was collected as demonstrated in Table 6. The PSNCQQ instrument was utilized for satisfaction data collection. Furthermore, gender, age, and Emergency Severity Index (ESI) acuity data was collected for each subject.

**Table 6**

<table>
<thead>
<tr>
<th>Study Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Attendee’s in Class</td>
</tr>
<tr>
<td>Number of Participants in Study</td>
</tr>
<tr>
<td>Characteristics of Participants (Demographic Data)</td>
</tr>
<tr>
<td>Emergency Severity Index Score</td>
</tr>
<tr>
<td>Pre-Intervention Post-Care PSNCQQ Scores (Group 1)</td>
</tr>
<tr>
<td>Post-Intervention Post-Care PSNCQQ Scores (Group 2)</td>
</tr>
</tbody>
</table>

To analyze the data, the independent sample t-Test and Pearson’s product moment correlation coefficient (also called Pearson’s r) was chosen to allow examination of the
relationship between the implementation of the M Nursing Professional Practice Model and patient satisfaction using nursing sensitive indicators. Polit (2010) describes Pearson’s r as a “descriptive statistic that summarizes the magnitude and direction of a relationship between two variables” (p.197). Data was collected using an interval level approach by determining the mean score by individual and group. This collection approach is appropriate with Pearson’s r (Polit, 2010).

**Project Findings and Results**

**Education Intervention**

The classes were presented to 59 nursing staff. The participants were engaged in the class as evidenced by active dialog and participation in application activity. Most participants remembered the name of the model, however, very few were able to articulate the model prior to the additional classroom presentation. Open dialog occurred during the presentation of the concepts and dimensions. At the end of the prepared presentation, each professional nurse was requested to complete the “I will” statements. After the completion of the statements, each nurse shared at least one statement with the class. The process of sharing incurred collaborative dialog on new and interesting ways to apply the MNPPM into daily practice. Many of the nurses during the class and at the end of the class indicated a significant understanding of the model and shared that the model made “sense” after the application exercise. One nurse shared after the class that the model seemed “too confusing” when first presented, so she had ignored it.

Following the class, nurses were encouraged frequently by the team to continue to incorporate the “I will” statements into practice. Nurses were supported by the team if they were unsure how to incorporate it into practice. Overall, the nurses were able to articulate components of the MNPPM, however, many needed to reference their “I will” statements or copies of the
model to be able to speak to the components or specific dimensions of the model. The additional reinforcement of the education appeared to be effective in understanding the model and assisting the nurses with the ability to put the dimension into daily practice.

**Descriptive Statistics**

Eighty-six participants were examined in the study. Data were screened for the presence of univariate outliers. The presence of outliers was assessed by standardizing the variables of interest and checking for values below -3.29 and above 3.29 (Tabachnick & Fidell, 2012). One outlier was found for satisfaction scores and the corresponding value was removed from the data set. Final analyses were conducted on all 86 participants.

The majority of participants were female 56 (65%), while 30 (35%) participants were male. An equal number of participants 43 (50%) were in each group (group 1 versus, group 2). Twenty five (29%) of participants skipped question three and four, while 26 (30%) participants skipped survey question five and six, finally 14 participants (16%) skipped survey question 14. Frequencies and percentages on participants’ demographics are presented in Table 7.

**Table 7**

*Frequencies and Percentages on Participants’ Demographics*

<table>
<thead>
<tr>
<th>Demographic</th>
<th>( N )</th>
<th>%</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>56</td>
<td>65</td>
</tr>
<tr>
<td>Male</td>
<td>30</td>
<td>35</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>43</td>
<td>50</td>
</tr>
<tr>
<td>Group 2</td>
<td>43</td>
<td>50</td>
</tr>
</tbody>
</table>
Note. Percentages may not total 100 due to rounding error.

Ages ranged from 18 to 88, with mean ($M$) = 40.55 and standard deviation ($SD$) = 15.17. ESI acuity scores ranged from two to five, with $M$ = 3.43 and $SD$ = 0.64. Means and standard deviations for ages and acuity scores are presented in Table 8.

Table 8

<table>
<thead>
<tr>
<th>Variable</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>40.55</td>
<td>15.17</td>
</tr>
<tr>
<td>Acuity</td>
<td>3.43</td>
<td>0.64</td>
</tr>
</tbody>
</table>

Reliability

Cronbach’s alpha test of reliability was conducted on satisfaction scores. Satisfaction scores had a reliability coefficient ($\alpha$) of 0.96, indicating excellent reliability (George & Mallery, 2010). Descriptive statistics yielded a mean of 4.36 ($SD = 0.72$) for satisfaction scores, where scores ranged from 2.13 to 5.00. Descriptive statistics on satisfaction scores are presented in Table 9.
Goal 1

Determine correlation of patient satisfaction to advanced education of MNPPM-Measured by comparison of pre-intervention patient group and post-intervention patient group.

To assess goal one, an independent sample t-test was conducted to determine if statistical differences exist on satisfaction scores by group type (group 1 versus group 2). Statistical significance was determined at $\alpha = 0.05$. The dependent variable in this analysis was satisfaction scores. The dichotomous independent variable in this analysis was group type (group 1 versus group 2). Prior to analysis, the assumptions of normality and equality of variance were assessed. Normality was assessed by skew and kurtosis values. Normality is defined as skew values between -2.00 and +2.00 and kurtosis values between -7.00 and +7.00 (Kline, 2011). The observed values were within these parameters and the assumption of normality was met. Equality of variance was assessed with Levene’s Test and the results were significant, $p < 0.001$, indicating the assumption was violated. Due to this violation, equal variances were not assumed for the analysis.

The results of the independent sample $t$-test yielded statistically significant findings, $t(60.33) = -2.56, p = 0.013$, indicating that satisfaction scores were statistically different by group type (group 1 vs. group 2). Group 2 had statistically higher satisfaction scores ($M = 4.56$).
than group 1 ($M = 4.17$). The results of the independent sample $t$-test are presented in Table 10.

Figure 1 presents a boxplot for satisfaction by group.

Table 10

*Independent Sample $t$-Test on Satisfaction Scores by Group Type (Group 1 vs. Group 2)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group 1</th>
<th>Group 2</th>
<th>Mean Difference</th>
<th>$t(60.33)$</th>
<th>$P$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>4.17</td>
<td>0.88</td>
<td>4.56</td>
<td>0.45</td>
<td>-0.39</td>
</tr>
</tbody>
</table>

*Figure 1.* Boxplot for Satisfaction by Group.
Goal 2

Identify correlations between demographic variables and satisfaction scores—measured by comparison of demographic data and satisfaction scores.

To address goal two, two sets of statistical analyses were conducted. The first set of analyses consisted of three independent sample $t$-tests on satisfaction scores by gender (male versus female); one $t$-test for the full sample and two $t$-tests by group type (group 1 versus group 2). The dependent variable in these analyses was satisfaction scores. The dichotomous independent variable in these analyses was gender (male vs. female). Statistical significance was determined at $\alpha = 0.05$. Prior to analysis, the assumptions of normality and equality of variance were assessed. Normality was assessed by skew and kurtosis values. The observed values were within the aforementioned parameters and the assumption of normality was met. Equality of variance was assessed with three Levene’s Tests; one test for the full sample analysis, one test for the group 1 analysis, and one test for the group 2 analysis. The results were only significant for the full sample and group 1, indicating the assumption was violated. Due to this violation, equal variances were not assumed for these two analyses.

The results of the independent sample $t$-test for the full sample were not statistically significant, $t(81.60) = 1.71, p = 0.091$, suggesting that satisfaction scores were not statistically different by gender. The results of the independent sample $t$-test by group 1 were not statistically significant, $t(36.31) = 1.19, p = 0.240$, suggesting satisfaction scores were not statistically different by gender for group 1. The results of the independent sample $t$-test by group 2 were not statistically significant, $t(41) = 0.96, p = 0.342$, suggesting satisfaction scores were not statistically different by gender for group 2. The results of the three independent sample $t$-tests are presented in Table 11. Figures 2 – 4 present a boxplot for satisfaction by gender.
Table 11

*Independent Sample t-Test on Satisfaction Scores by Group Type (Group 1 vs. Group 2)*

<table>
<thead>
<tr>
<th>Satisfaction</th>
<th>Male</th>
<th>Female</th>
<th>Mean Difference</th>
<th>t</th>
<th>df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full sample</td>
<td>4.52</td>
<td>0.50</td>
<td>4.28</td>
<td>0.81</td>
<td></td>
<td>1.71</td>
</tr>
<tr>
<td>Group 1</td>
<td>4.37</td>
<td>0.59</td>
<td>4.08</td>
<td>0.98</td>
<td>0.29</td>
<td>1.19</td>
</tr>
<tr>
<td>Group 2</td>
<td>4.64</td>
<td>0.40</td>
<td>4.50</td>
<td>0.48</td>
<td>0.13</td>
<td>0.96</td>
</tr>
</tbody>
</table>

*Figure 2. Boxplot for Satisfaction by gender (all groups).*
Figure 3. Boxplot for Satisfaction by Gender for Group 1.

Figure 4. Boxplot for Satisfaction by Gender for Group 2.
The second set of analyses consisted of three Pearson product moment correlations were conducted between age and satisfaction scores; one correlation for the full sample and two correlations by group type (group 1 vs. group 2). Statistical significance was determined at \( \alpha = 0.05 \). The result of the correlation for the full sample was not statistically significant, \( r(85) = 0.11, p = 0.318 \), suggesting no statistical relationship exists between age and satisfaction scores for the full sample. The results of the correlation by group 1 was not statistically significant, \( r(42) = 0.02, p = 0.897 \), suggesting no statistical relationship exists between age and satisfaction scores by group 1. The results of the correlation by group 2 was not statistically significant, \( r(43) = 0.17, p = 0.271 \), suggesting no statistical relationship exists between age and satisfaction scores by group 2. The results of the three correlations are presented in Table 12. Figures 5 – 7 present scatterplots for age and satisfaction.

Table 12

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full sample</td>
<td>.11</td>
</tr>
<tr>
<td>Group 1</td>
<td>.02</td>
</tr>
<tr>
<td>Group 2</td>
<td>.17</td>
</tr>
</tbody>
</table>

*Note.* \( * p < .05 \), \( ** p < .01 \).
Figure 5. Scatterplot between age and satisfaction.

Group: 1.00

Figure 6. Scatterplot between age and satisfaction for Group 1.
Goal 3

Identify correlations in Emergency Severity Index (ESI) score and satisfaction scores which were measured by comparison of EIS score and satisfaction score.

To address goal three, three Pearson product moment correlations were conducted between acuity and satisfaction scores; one correlation for the full sample and two correlations by group type (group 1 versus group 2). Statistical significance was determined at $\alpha = 0.05$. The result of the correlation for the full sample was not statistically significant, $r(85) = 0.06$, $p = 0.605$, suggesting no statistical relationship exists between acuity and satisfaction scores for the full sample. The results of the correlation by group 1 was not statistically significant, $r(42) = -0.03$, $p = 0.860$, suggesting no statistical relationship exists between acuity and satisfaction scores by group 1. The results of the correlation by group 2 was not statistically significant, $r(43)$
= 0.12, \( p = 0.459 \), suggesting no statistical relationship exists between acuity and satisfaction scores by group 2. The results of the three correlations are presented in Table 13. Figures 8 – 10 presents the scatterplots for acuity and satisfaction.

Table 13

*Pearson Correlations between Acuity and Satisfaction*

<table>
<thead>
<tr>
<th>Satisfaction</th>
<th>Acuity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full sample</td>
<td>.06</td>
</tr>
<tr>
<td>Group 1</td>
<td>-.03</td>
</tr>
<tr>
<td>Group 2</td>
<td>.12</td>
</tr>
</tbody>
</table>

*Note.* *p < .05.* **p < .01.

*Figure 8.* Scatterplot between acuity and satisfaction.
Figure 9. Scatterplot between acuity and satisfaction for Group 1.

Figure 10. Scatterplot between acuity and satisfaction for Group 2.
Goal 4

Participation in education by professional nurses of MNPPM was measured by number of registered nurses who attended the education offering.

Within the six classes offered, 59 nursing staff participants who attended the class. There are 46 professional nurses in the ED and 45 (98%) attended the classes, as well as three support professional nurses. Three were unable to complete the class in its entirety. The remaining staff who participated was ED nursing assistants. The average class size was 10. There was active participation by all participants in the class. Each participant completed “I will” statements during the class. The classes were 90 minutes in length and followed the education outline.

Limitations of Study

Only patient satisfaction of nursing sensitive indicators was evaluated in this study. Other factors involving patient care that could affect satisfaction such as wait times to be seen, individual length of stay in the emergency department, mode of arrival, or left without being seen data were not evaluated. The study evaluated group two six weeks after the completion of the final class. Therefore the study measured the short-term outcomes of the education, but did not measure satisfaction over a long period of time. Therefore, it is unknown if the change will be sustained in the future. While short-term outcomes were measured, longer term outcomes such as improved reputation in the community, shift in market share, sustained patient satisfaction, or likelihood to recommend were not evaluated due to time constraints of the study. Long term measurement of outcomes could demonstrate the long term impact of the MNPPM on patient satisfaction within the ED and potentially the market place.
Potential Threats to Validity and Reliability

Internal validity is described as the extent it can be inferred that an outcome was produced by a treatment, as opposed to other factors (Polit, 2010). There were anticipated threats identified for the Capstone Project as demonstrated in Table 14. Specific internal threats included selection of participants. While a random selection approach occurred, correct contact information was essential to make contact to participate. If proper contact information was not available, the randomly selected individual was removed from the group and new participant was selected. During the survey process, issues of inaccurate telephone numbers did occur in both groups. This required additional rounds of random selection to obtain enough participation.

Testing also created an internal validity threat. Given the nature of the study, there was not a pre-test, post-test process involving the same individuals. While many individuals seek care one time in the ED, the likelihood of multiple visits in the study period was very low. Therefore, it was not possible to perform a pre-test/post-test with the same group. By using two different groups, one for a pre-intervention post care test and a second test on for post-intervention post care test, visits may be different and the sample population for each group may not be similar in nature.

Another internal threat of the study included the nursing staff being aware of the study. Potentially this could have resulted in a temporary behavior change therefore the results may have been skewed based on the knowledge of the study (Hawthorne effect). Ultimately, the short time interval from education to the evaluation of group two while indicating a statistical correlation, does not demonstrate enculturalization of the model into daily practice.

The final internal threat was the lack of an instrument developed for this specific model. Therefore, another instrument tested for validity and reliability for patient satisfaction with
nursing sensitive indicators was utilized. Moreover, to minimize potential issues with the delivery of the instrument, two individuals were trained on administration to reduce any potential variability in the delivery process.

The major threat to external validity was multiple treatment interference. As part of an organizational approach to improve the patient experience and branded service, the System initiated a customer service program. The customer service program has five touch points the study participant might confuse as one of the measured nursing sensitive indicators. The touch points are: engaging arrival, peaceful preparation, individualized encounter, mindful departure, and enduring connection (M Health System, 2012). As part of the System initiative, a customer service team was formed within the ED to improve overall customer satisfaction. The customer satisfaction team was formed in December 2012 and continued during the time of the study. During the project implementation timeline, the customer service team rolled out scripting language for ED staff. The scripting language impacted the medical screening process for patients with ESI scores of four or five, patients waiting in the rooms to see medical providers and scripting for the financial aid counselors. There were 17 (39.5%) of patients with an acuity score of 4 or 5 in group 2 resulting in the possibility the actions of the customer service team also impacted the results of the Capstone Project through the scripting process.

The second threat to external validity was the irrelevant replicability of treatments. Irrelevant replicability of treatments occurs if a change is noted or not noted, but unrelated to the specific measure. This can occur with or without the investigators knowledge (Green, 2010). Specifically, in this study failure to have a specific instrument for the MNPPM may result in demonstrating a change that was not applicable to the specific nursing dimension.
The threats to reliability for this project included missing data, data entry errors, coding errors, transcription errors, and calculation errors. Some participants declined to answer a specific questions on the instrument as it did not pertain to their experience. For example some questions, such as family involvement were not applicable to their visit therefore no data was obtained for those questions. To minimize data, transcription, and coding errors, all worksheets were double checked by a second individual. To minimize calculation errors, data was calculated using SSPS Stats Package for Social Sciences software and recalculated to ensure correct value.

Table 14

<table>
<thead>
<tr>
<th>Potential Threats to Validity and Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal Threat to Validity</strong></td>
</tr>
<tr>
<td>Random Sampling</td>
</tr>
<tr>
<td>Different Participants with Post Tests</td>
</tr>
<tr>
<td>Instrument</td>
</tr>
<tr>
<td></td>
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</tbody>
</table>

**Recommendations**

Recommendations for future research opportunities include evaluating the MNPPM as part of a longitudinal study. The evaluation of sustained change within the ED would be beneficial to measure enculturalization of the model. Recommendations would be to measure customer satisfaction of nursing indicators quarterly for three years. Utilizing a longitudinal approach would provide an evaluation of long term impact of customer service related to the MNPPM implementation. Furthermore recommendations would include evaluation of potential market shift of ED services within the community exist. Market share data could be analyzed specific to elective admissions, non-elective admissions, and admissions by diagnosis type.
Comparison data of customer satisfaction and market share could provide further evidence of potential impact of the nursing model.

Other research scenarios could include evaluation of patient satisfaction of nursing sensitive indicators in other venues of patient care where the professional nurse has direct contact with the patient. Given the multiple hospitals within the System, comparisons could also be conducted utilizing multiple EDs in multiple states. This could allow the researcher(s) to determine correlations of satisfaction of nursing indicators in a variety of geographical locations.

Research opportunities also exist to evaluate the MNPPM by the concepts of Therapeutic Environment, Practice Expertise and Professional Commitments, as well as one of the 15 individual dimensions (M Nursing Leadership Council, 2012). Each concept or dimension has the potential for evaluation specific to nursing patient satisfaction as well as other patient outcome indicators. The research opportunities include measuring clinical outcomes such as hospital acquired conditions, reduction in falls, or decreased length of stay.

Finally, other areas to evaluate including nursing satisfaction related to the MNPPM, retention levels as well as unit turnover based on enculturalization of the model. There is significant research potential within the MNPPM to determine various patient and nursing outcomes.

**Contribution**

The Sisters of Mercy first demonstrated their version of careful nursing in the 19th century (Meehan, 2003). Through the theoretical basis of Meehan’s Careful Nursing Model (Meehan 2003, 2012a, and 2012b), combined efforts of historical researcher Dr. Meehan, leaders, and professional nurses within the system, the M Nursing Professional Practice Model was developed. This research project is the first to investigate any outcome related to the model.
The results of the research open the door for future opportunities of nurse researches within the System, as well as other researchers investigating patient satisfaction of nursing care utilizing nursing professional practice models.

Professional nursing models influence professional nursing practice through the establishment of conceptual frameworks (Murphy, Hinch, Llewellyn, Dillon & Carlson, 2011). This project contributes to the body of knowledge of nursing through the evaluation of a professional nursing model in one component of professional nursing practice. Through the research project, a correlation was identified between patient satisfaction of nursing sensitive indicators following an intensive education intervention of a nursing professional practice model.

The genesis of this project was the development of the MNPPM and continued attempts at improving customer service scores. Attempts had occurred within the organization to improve scores with less than desired results. The results of this study are encouraging through the use of a professional practice model as a potential tool to increase satisfaction with nursing care while possibly improving other patient outcomes.

The Emergency Department (ED) is often the portal of entry of a hospital for many individuals who require acute health care services. The quality and satisfaction of the encounter between physicians, nurses, and patients can effect customer satisfaction and influence the decision to return for future health care needs. This Capstone Project sought to investigate the relationship of patient satisfaction of nursing care using nursing sensitive indicators in the emergency department following additional education of a professional practice model. The model had been previously introduced, however, the education was brief and nurses struggled with the application into daily practice.
The post-education survey scores from group two demonstrated a statistically significant higher mean score. This project suggested a correlation of education and application exercises influenced patient satisfaction on nursing indicators. Comments made by patients during the survey process provided the researcher with insight into the nursing care following the intervention. Comments included: “very caring, excellent experience”; “nurses have everything together”; “the nurse was excellent”; “great experience”; and “better experience than the last time I came to the ED”. While the age, gender and ESI score did not demonstrate statistical significance, it suggests that patients perceived nursing care consistently regardless of the selected demographic variables.

Summary

The literature search clearly documented correlations with patient satisfaction with nursing care. It is demonstrated repeatedly that nursing care is a predictor for patient satisfaction to the hospital experience. The ability to influence improving satisfaction with nursing sensitive indicators has significant impact to the approach of improving customer perceptions. Furthermore, the literature documents that nursing professional practice models guide nursing practice and patient interaction ultimately with the possibility of improving patient satisfaction.

Through the full implementation of the MNPPM the researcher identified a statistical significant higher post-intervention survey score existed with patient satisfaction on nursing sensitive indicators after additional education of the M Nursing Professional Practice Model. The implication is significant to the System that developed the model, as well as to the nursing profession as efforts to close the nursing practice gaps continue. As healthcare organizations continue to pursue opportunities to improve satisfaction, this project may help provide the linkage of professional practice models and customer satisfaction, thereby encouraging
continued closure of the practice gap. The results of this project, can arm the nursing leader with another tool to push the cause for implementation of professional practice models, as well as a different approach to address customer satisfaction of nursing care.
References


*Journal of Clinical Nursing, 21*, 2905-2916.


*Journal of Nursing Management, 20*(8), 990-1001.

Meehan, T. C., Murphy, S., & McMullin, R. (2010). *Careful nursing workbook one* (Rev. ed.). 

Elm Park, Dublin 4, IR: Our Lady's Ward St. Vincent's University Hospital.

M Ark (2012). *Emergency department trended summary*, AR.

M Health System (2012). *M brand platform: People, M signature service*. St. Louis, MO.


Appendix A

M Nursing Professional Practice Model

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<table>
<thead>
<tr>
<th>Article Title and Journal</th>
<th>Author / Year</th>
<th>Database and Keywords</th>
<th>Research Design</th>
<th>Level of Evidence</th>
<th>Study Aim/Purpose</th>
<th>Population Studied/ Sample Size/ Criteria/ Power</th>
<th>Methods/ Study Appraisal/ Synthesis Methods</th>
<th>Primary Outcome Measures and Results</th>
<th>Author Conclusions/ Implications of Key Findings</th>
<th>Strengths/ Limitations</th>
<th>Funding Source</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Careful Nursing philosophy and professional practice model - Journal of Clinical Nursing</td>
<td>Meehan- 2012</td>
<td>Professional Practice Model- Academic Search Premier (ASP)</td>
<td>Discursive</td>
<td>VII</td>
<td>Present careful nursing philosophy and PPM which has its source in 19th century Irish nurses and to propose its implementation could provide a relevant foundation for contemporary practice</td>
<td>None</td>
<td>Review of historical literature with new primary resources.</td>
<td>Author has revised 10 concepts down to 7 broad categories. Demonstrates the transition from 19th century to 21st century nursing practice. The revised model is more contemporary and more likely to be adopted by an organization.</td>
<td>Careful nursing can be applicable to today's standards. The revised model incorporates spirituality through the use of caritas (instead of catholic ideology). Opportunities for research exist.</td>
<td>Author has revised concepts from original 2003 article. More contemporary in design. Limitations: still no research on the nursing model.</td>
<td>None</td>
<td>Second article with foundation of MNPPM, critical in understanding foundation for MNPPM</td>
</tr>
<tr>
<td>Spirituality and spiritual care from a Careful Nursing perspective - Journal of Nursing Management</td>
<td>Meehan-2012</td>
<td>Careful Nursing, Professional Practice Model</td>
<td>Discursive</td>
<td>VII</td>
<td>To provide historical review of spirituality in nursing and describe spiritual care from the perspective of Careful Nursing and professional practice model.</td>
<td>None</td>
<td>Review of historical literature with new primary resources with emphasis in spiritual care.</td>
<td>Examine spirituality through the literature and within the context of the Careful nursing model.</td>
<td>Careful nursing has dimensions of spirituality woven into the model. Spirituality is also interwoven in health and nursing.</td>
<td>Strengths: Author has provided another dimension of Careful Nursing and explored the concept of spirituality. Limitations: No research was conducted to validate concepts.</td>
<td>None</td>
<td>Article provides additional insight into the Careful Nursing Model, with additional historical perspective.</td>
</tr>
<tr>
<td>Title</td>
<td>Authors</td>
<td>Design/Methodology</td>
<td>Sample Size</td>
<td>Data Collection</td>
<td>Analysis/Results</td>
<td>Strengths</td>
<td>Limitations</td>
<td>Remarks</td>
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<tr>
<td>Patient satisfaction regarding nursing care at emergency outpatient</td>
<td>Mohan, Kaur, Das, Bhalila -2012</td>
<td>Quantities, Quasi-experimental</td>
<td>III</td>
<td>Find out the level of patient satisfaction with selected care dimensions.</td>
<td>Emergency department tertiary care, sample size 25, purposeful sampling.</td>
<td>52% rated nursing care as excellent, 44% rated as very good-No significant relationship with demo variables</td>
<td>Patients reported high levels of satisfaction, however which is high in ED where nurses can be understaffed.</td>
<td>Strong evidence to show that the PSNCQQ tool has very good psychometric properties is reasonable length, easy to administer. The results provide encouraging data to support reliability, validity and clinical utility as a measure for patient satisfaction.</td>
<td>None</td>
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<tr>
<td>department in a tertiary care hospital-Journal of health and human behavior</td>
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<tr>
<td>Psychometric analysis of the patient satisfaction with nursing care</td>
<td>Lashinger, Hall, Pederson, Almost -2004</td>
<td>Descriptive design, random sample</td>
<td>III</td>
<td>Validate the Patient Satisfaction Nursing care quality questionnaire</td>
<td>Canada, 14 teaching, 5 community, 4 small hospitals, mailed to 3036 patients, final sample 1041 (31%) Descriptive statistics and reliability analysis, exploratory factor and confirmatory factor analysis, risk adjusted, ANOVA for subgroup analysis.</td>
<td>Cronbach reliability at .97, Construct validity established through exploratory factor analysis. Various fit indices demonstrated good fit, predictive validity demonstrated strong support, sensitivity demonstrated ability to discriminate between high and low satisfaction.</td>
<td>Strong evidence to show that the PSNCQQ tool has very good psychometric properties is reasonable length, easy to administer. The results provide encouraging data to support reliability, validity and clinical utility as a measure for patient satisfaction.</td>
<td>None disclose</td>
<td></td>
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<td>quality questionnaire re-Journal of nursing care quality</td>
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<tr>
<td>Title</td>
<td>Author(s)</td>
<td>Year</td>
<td>Journal</td>
<td>Type</td>
<td>Methodology</td>
<td>Data Measured</td>
<td>Link Identified</td>
<td>No funding</td>
<td>Comments</td>
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<tr>
<td>Patient satisfaction with nursing care: a concept analysis within a nursing framework</td>
<td>Wagner &amp; Bear</td>
<td>2009</td>
<td>Journal of Advanced Nursing</td>
<td>Meta-analysis</td>
<td>Report a concept analysis of patient satisfaction with nursing care</td>
<td>None</td>
<td>Link identified with nursing care and patient satisfaction; discuss importance for future work for nurses to find ways to measure and improve satisfaction</td>
<td>No specific</td>
<td>This was a literature review with application to Cox's Interaction Model of Client Health behavior, not a research project. Very helpful when defining satisfaction for capstone.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Emergency nurses' provision of spiritual care: a literature review</td>
<td>McBrien</td>
<td>2010</td>
<td>British Journal of Nursing</td>
<td>Literature Review</td>
<td>To review the literature to determine while technology has advanced and allowed nursing to objectively monitor outcomes, does technology supersede holistic nursing care.</td>
<td>None</td>
<td>Emergency nursing has become less personal and more technical in nature. Author recommended addressing the practice gap, education on holistic nursing as well as spiritual care be conducted. Recommended further research.</td>
<td>None reported.</td>
<td>Applicable to spiritual component of nursing model.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Patient satisfaction with nursing care and its relationship with patient characteristics | Fındık, Unsal, Sut-2010 | "Patient Satisfaction, Nursing Care, CINAHL" | Cross sectional study | IV | Assess satisfaction with nursing care, and patient characteristics.  
1100 bed tertiary teaching hospital in W. Turkey; 229 patients must be 18y/o; bone hospitalized >2days; be discharged, read and understand Turkish, not confused, too ill and voluntarily agreed. | Data collected using Newcastle Satisfaction with Nursing scales, Satisfaction with nursing scale (SNCS); Experience of nursing care scale (ENCS); Cronbach's alpha were 0.95 and 0.75 respectfully. | Surgical ward patients reported higher satisfaction than medical ward patients; low level of satisfaction with patients that were critically ill; males more satisfied than females; higher level of education by patient the lower level of satisfaction; middle age patients were | The type of ward, age, sex, income, education and hospitalization effects patient satisfaction with nursing care. | Cross sectional study | None reported | Article outlines patient satisfaction and how satisfaction relates to patient condition. Will aid in the collection of data during capstone. |
<p>| Change process during redesign of a model in nursing practice in a surgical ward | Nursing Practice Model, ASP | Case study VI | Report case study of nursing practice model redesign | Surgical ward in large metro hospital in Australia | Descriptive case study design. Use of database, staff rosters, attendance records, resignations and transfers, occupancies, ADT, DRG, observations, meetings, conversations, staff input. Study determined number of factors to be considered when redesign a model of nursing practice. Nurses needed to empower self during change; top-down approach was beneficial; while nurses were negative, no one left due to changes, census did increase during first three months which could have contributed to negativity. | Manager must assess and identify needs of nurses involved in redesign &amp; adopt collaborative approach involving participatory decision making; Case study with outcomes demonstrated, in-depth information from patient and staff regarding changes/ cannot be generalized, researcher was immersed in environment and could have been biased. | None reported | Great Case Study, applicable to capstone project, especially pitfalls to avoid. |
|---|---|---|---|---|---|---|---|---|---|</p>
<table>
<thead>
<tr>
<th>Integrating human caring science into a professiona l practice model- Critical Care Nurse</th>
<th>Donka rd- 2008</th>
<th>Professio nal Practice model- CINAHL</th>
<th>Quasi experimen tal, between-subjects; Naturalisti c, longitudin al study</th>
<th>Improving nurse satisfaction, retention by decreasing work intensity, streamlining nursing processes, creating a human caring environment in the workplace.</th>
<th>Phase I work was to decrease work intensity. Results achieved except in documentatio n processes. Nursing satisfaction survey completed after phase I demonstrated increase up to 16.1%. Phase 2 creation of human caring environment, patient perception of caring scores were not statistically significant. Patient satisfaction score increased, no statistical difference in nursing satisfaction.</th>
<th>Study suggests making time for caring is necessary to maximize nursing practice contribution. If time is saved, nurses can provide care processes at the bedside. Ultimately, nurses that have time for caring behaviors have higher job fulfillment and patient care is more holistic.</th>
<th>The use of multi­hospitals and multi units provide for greater ability for generalization. Allows diverse population groups to respond and compare scores limitati ons in that there was no random assignment, which may have systematic bias, long time frame (4 yrs.) meant other changes were occurring in units.</th>
<th>HRSA</th>
<th>Combination quantitative and qualitative study. Good guide to help if incorporate any qualitative data into study. Furthermore, helps to define caring for MNPPM.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A pilot study of a systematic method for translating patient satisfaction questionnaires</td>
<td>Liu, You- 2011</td>
<td>Patient Satisfaction, Nursing- CINAHL</td>
<td>Comparati ve, Descriptiv e study, use of CVI testing&quot;</td>
<td>Improve nurse satisfaction, retention by decreasing work intensity, streamlining nursing processes, creating a human caring environment in the workplace.</td>
<td>Use of NINDQI nursing satisfaction, use of professional research group for patient satisfaction, use of turnover reports, vacancy rates, evaluation of study group and control group.</td>
<td>A pilot study significantly reduced the level of language translation and validity/validity of instrument. While language is not an issue within my project, the lessons of validity and validity testing does impact the following.</td>
<td>None</td>
<td>This article significantly covered the issue of language translation and validity/validity of instrument. While language is not an issue within my project, the lessons of validity and validity testing does impact the following.</td>
<td></td>
</tr>
</tbody>
</table>

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**Table notes:**
- NINDQI: National Institute of Nursing Research Developmental Quality Instrument
- CVI: Content Validity Index
- LOPSS: Linguistic, Oncological, Psychological, Social, and Spiritual
- HRSA: Health Resources and Services Administration
| An analysis of the concept 'patient satisfaction' as it relates to contemporary nursing practice | Mahon -1999 | Concept analysis | VII | Concept analysis of patient satisfaction. | Literature review: patient satisfaction; quality evaluation; generic sources; patient/client/customer; empirical references. | Greater satisfaction is noted with greater professional nursing presence in terms of staffing, time, dependence on nursing competence. Essentially that patient's understand staff differentiation (i.e. RN, LPN, and NA). | Expectations are not well managed prior to hospitalization, pts. With most unrealistic expectations were the least satisfied. Essential to communicate to patients what to expect from various nursing members gives the nurse a critical opportunity to shape expectations and experience with care. | None | Good review of several instruments, opportunity to review and select final instrument. Further aid in defining patient satisfaction for capstone model. |
| Promoting professional nursing practice: Linking a professional practice model to performance expectations | Murph y, Hinch, Llewellyn, Dillon, Carlson -2011 | Case Study | VI | Case Study | Rush University Medical Center | Descriptive Case Study/organizational outcomes. | Review implementation of professional practice model. | Development of model made positive impact on organizational characteristics, such as increase in BSN prepared nurses, increase in certifications, reduction of turnover. Professional practice model made a positive impact to the organization. | None | A great review of what worked well and what struggles occurred. Emphasis for capstone is the struggles during implementation and the impact of the professional practice model. |
| Professional Practice model: strategies for translating models into practice | Nursing clinics of North America | Erickson, Ditomassi - 2012 | Case Study | VI | Case Study | Massachusetts General Hospital | Descriptive case study | Development of a revised professional practice model (original model in place 10 yrs.), explanation of revised model and implications for practice/ opportunities to perform monitoring for effectiveness of change. | Good explanation of current model and implementation within their organization. Limitations: there were no quantitative research performed. | None | A great review of what worked well and what struggles occurred. Emphasis for capstone is the struggles during implementation and the impact of the professional practice model. |

| Shared Governance and empowerment in RN working in hospital setting | Nursing Admin Quarterly | Barden, Quinn-Griffin, Donahue, Fitzpatrick - 2011 | Descriptive correlation study | IV | Determine relationship between perceptions of professional practice, shared governance, and empowerment. | Sample size of 348 nurses in 13 units, 2 studies conducted using Conditions of Work Effectiveness II Questionnaire. | Use of CWEQ-II, frequency distributions, Cronbach alpha used for reliability of instrument, descriptive statistics/sig relationship r= -34, p <0.0001. | Nurses in study perceived themselves as empowered, implementation of professional practice model for all disciplines had effect for relatively high score, positive relationship between nurse's perception of shared governance and empowerment, Pearson's r on the same of the instruments, revealed signification relationship of variables. | Emphasis in nurse exec role in creation and sustaining professional practice model to promote culture of excellence. Study indicates high correlation with shared governance and empowerment. | Use of tools, and good use of statistical approaches. Referenced standard scoring to aid in the benchmark of the scores, i.e. score of moderate to high empowerment. Would have liked to have seen graphic display of key instrument results. | None disclosed | This article contributes through nursing satisfaction and nursing impact to patient satisfaction. The organization is rolling out shared governance during the time of study. |
| Redesign of the model of nursing practice in an acute care ward: nurses’ experience-Collegian |
| Haymaan, Cioffi, Wilkes-2006 |
| Descriptive case study VI |
| Nurse’s experience of the change associated with redesign of model of nursing practice. |
| Medical surgical unit, AU, prep and implementation phases. |
| Change was difficult to change the model. While some were accepting of trying to change, the author discussed insufficient preparation prior to change occurred. This resulted in difficulty post change. Staff still unsettled with changes 6 months later. |
| Nurses experience of the change in the prep phase as: apprehension, hope, negativity, concern about quality care. Six months later seven categories identified: willingness to give model a go, negativity, ambivalence; supportive of new role, concern about quality care and inadequate resources. |
| Study honestly discussed problems with the implementatio, not enough preparation for nurses, the project almost failed related to not enough prep of nurses for change, limitation-this is not 'generalizable' however, lessons are present for other managers. |
| None |
| This article does not add to the research data significantly. However, it does add to the overall project of implementation and pitfalls to avoid failure in the MNPPM roll out. |

<p>| Theories in action and how nursing practice changed-Nursing Science Quarterly |
| Jasovsky, Morrow, Clemet, Hindle-2010 |
| Nursing Practice, Nursing Theory-CINAHL |
| Descriptive Case Study VI |
| Implement of Magis professional practice model that improved outcomes. |
| Facility sampled was a 570 bed hospital, in Chicago. |
| Through the process of implementatio, theories were merged together to develop organizational professional practice model. Through this incorporation of the models, it made &quot;sense&quot; to nursing staff. One year out, the changes are sustained. |
| The organization ultimately implemented a professional practice model by incorporating several theories. The change was effective and sustained over first year. Ultimately sister units adopted model. |
| The organization strongly interpreted the nursing actions as related to the model. These actions (i.e. bedside reporting, hourly rounding, etc.) solidified the model into the culture. |
| Limitations: no quantitative measurement occurred other than using HCAPS rankings on nurse indicators of patient satisfaction. |
| None |
| Good resource for capstone in relationship to implementation of MNPPM. |</p>
<table>
<thead>
<tr>
<th>Model</th>
<th>Source</th>
<th>Methodology</th>
<th>Type</th>
<th>Description</th>
<th>Strengths</th>
<th>Limitations</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Careful Nursing: a</td>
<td>Medha n-2003</td>
<td>Discursive</td>
<td>VII</td>
<td>Conduct a preliminary content analysis of the primary source historical documents of the Careful Nursing system and present with the structure of a contemporary conceptual model of nursing.</td>
<td>Author extracted central elements of a nursing model through the historical literature. These were 10 key concepts, additionally was able to group key concepts into relationship for inward life and outward life.</td>
<td>None</td>
<td>This article is foundation of MNPPM, and foundation for capstone project.</td>
</tr>
<tr>
<td>model for contemporary nursing practice</td>
<td>Journal of Advanced Nursing</td>
<td></td>
<td></td>
<td>No population studied, review of literature primarily from 1800's.</td>
<td>Review of historical documents of Sisters of Mercy, newspapers, Florence Nightingale.</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>From the inside: an infrastructure for the continuing development of nurses' professional practice model</td>
<td>Henderson, Winde, Henny, McCoy, Grugan -2005</td>
<td>Case Study</td>
<td>VI</td>
<td>Describe how nursing executive of tertiary facility revised mgmt. structure for new infrastructure: educations, research at core of Professional Practice Model (PPM).</td>
<td>Changes have occurred in organization, however, no supporting data demonstrates the effectiveness of change. Plans in place for measurement.</td>
<td>Limitations is that &quot;plans&quot; are in place for measurement but none in place.</td>
<td>None</td>
</tr>
<tr>
<td>Working from the inside: an infrastructure for the continuing development of nurses' professional practice model</td>
<td>Journal of Nursing Management</td>
<td></td>
<td></td>
<td>Description of current practice and needed changes in strategies to overcome barriers (lack of empowerment).</td>
<td>Emphasis on developing a sustaining organizational culture by incorporating Evidence Base Practice (EBP) into PPM, as well as empowerment characteristics.</td>
<td>Fair amount of self-evaluation and literature review.</td>
<td>This article does not have significant research value, however, does have some applicability in the education of the MNPPM as part of the capstone project.</td>
</tr>
<tr>
<td>Title</td>
<td>Authors</td>
<td>Year</td>
<td>Design</td>
<td>Sample size</td>
<td>Description</td>
<td>Analysis/Conclusions</td>
<td>Strengths/Weaknesses</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------</td>
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<td>------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Registered Nurse job satisfaction and the satisfaction with the professional practice model</td>
<td>McGlynn, Griffin, Donahue, Fitzpatrick</td>
<td>2012</td>
<td>Descriptive, cross-sectional</td>
<td>101 RN (55% response rate)</td>
<td>Describes the initial assessment of job satisfaction and satisfaction with the PPM environment. Demonstrated nurses working in units with PPM had overall low job satisfaction, however, moderate job satisfaction in the professional practice environment.</td>
<td>Nurses had overall low job satisfaction with PPM, however, moderate job satisfaction with environment. Opportunities for nursing leaders to maximize the working environment to minimize turnover.</td>
<td>The use of two models and correlation of job satisfaction with both PPM and PPE. Limitations include not knowing specifically what in the PPM made satisfaction low and the PPE for mod satisfaction.</td>
</tr>
<tr>
<td>Patient satisfaction of emergency nursing care in the US, Slovenia, and Australia</td>
<td>Davis, Bush</td>
<td>2003</td>
<td>Quasi-experimental</td>
<td>616 patients (equal gender and mean age 44)</td>
<td>To determine patient satisfaction among different cultures.</td>
<td>Groups did not differ in caring sub scores, however, Australia demonstrated lower education sub scores. There were differences in individual items.</td>
<td>Patient satisfaction sub scores related to caring were essentially the same, but varied with education. The individual items varied and could be related to cultural issues, regional or organizational issues. Given US is becoming more multicultural, opportunities to further study cultural differences exist.</td>
</tr>
<tr>
<td>The influence of patient acuity on satisfaction with emergency care: perspective of family.</td>
<td>Ekwall, Gerdtz, Marcians</td>
<td>2008</td>
<td>Descriptive, cross-sectional</td>
<td>128 consecutive sample</td>
<td>To investigate the factors that influence satisfaction with ED care among individual accompanying patients.</td>
<td>Completed in AU, n=128, use of CECSS, cronbach's alpha .92. Significant differences in perceptions of patient urgency between accompanying person and nurse; those with higher urgency had higher levels of satisfaction than those with lower levels of urgency, even though wait time was not statistically</td>
<td>Good statistical analysis of data with explanation, good use of graphics. Limitations: did not include. Good use and application of instrument specific to nursing sensitive indicators. Good use of demographics.</td>
</tr>
</tbody>
</table>

**Data sources:**
- CINAHL
- Nursing Management Journal
On a hidden game board: the patient's first encounter with emergency care in the ED-Journal of clinical NSG

| Friends, and carers—Journal of Clinical Nursing | Urgency were more satisfied than those with a lower urgency. Older individuals more satisfied than younger ones. | Significant. Age demonstrated differences, with older individuals more satisfied than younger ones. | Individuals in distress, that came by ambulance, unable to speak English, approached in the ED waiting room. |
| Emergenc y Department, Patient Satisfacti on-CINAHL | Qualitativ e, phenomenological approach | ED personnel must not expect patients to know the unwritten rules of ED, but must clarify what to expect and any other information needed, by providing the "rules" a foundation of expectation is developed. |
| Sample size was 14 individuals to include patients, Next of Kin (NOK) and health care providers, in Sweden. | Taped interviews, lasting 35-65 minutes, responses were divided into meaningful units, the units were put into meaningful clusters. | By using a qualitative approach, real life feelings and responses are recorded. Limitations, only 14 individuals were interviewed; no quantitative data obtained. A different 14 individuals might have answered differently. |
| VI | The author explains encounters as a game, the patient entering the ED without knowing the rules of the game and becoming very frustrated. The frustration is greatest with lower acuity and enters a "isolation" period while waiting for care. Discussion of courtesy encounters (rounding) but did not do much for developing relationship. | None |
| Surgical patients satisfaction as an outcome of | Surgical patients from 6 European countries | Results demonstrated that nurses consistently performed caring |
| Palese, Tomiet to, Suhone n, | Use Caring behaviors Inventory, and Patient Satisfaction | Data analysis is very thorough with tables represented in |
| Patient Satisfacti on-CINAHL | Scores demonstrated high mean values for satisfaction | None |
| Multicenter correlation design | Address three research questions a) what is the correlation | Article is outside of ED, however, very good for nursing |
| nurses’ caring behaviors: as descriptive and correlation study in six European countries- Nursing Scholarship | Esfathizadeh, Tsangarinejad, Merko, Jarosova, Leino-Kilpi, Patiraki, Durlou, Balogh, Papavassilopoulos 2011 | between caring as perceived by patients and patient satisfaction? B) Are there differences across various countries on correlation on caring as perceived patients and patient satisfaction. C) Do caring behaviors affect patient satisfaction? (Cyprus, Czech Republic, Greece, Finland, Hungary and Italy), 1565 pts., 88 wards and 34 hospitals; convenience sampling. Scale, power of 95% and p<.01, descriptive statistics utilized, level of statistical significance was p<.05. and caring behaviors, correlations between 2 instruments related to satisfaction, population demographics fairly equally divided. Behaviors vary frequency to always, nursing care was scored high, and positive correlation emerged between the 2 instruments. Article to allow reader to interpret, very good very analysis of the data; limitations populations were picked from convenience sampling, in Cyprus; patient from all over country selected while in other countries; patients from specific location selected. | None | Good for article to help define attentive presence. |
| Modes of relating in a caring conversatio n: a research synthesis on presence, touch and listening-Journal of Advanced Nursing | Fredriksson 1999 | Attentive Presence, Patient Satisfaction-ASP Qualitative research synthesis V To develop an ontological and theoretical understanding of presence, touch and listening into caring conversations. Review of research, total of 28 studies, 10 on presence, 11 on touch and 7 on listening. Review of research and defined presence, touch and listening as a cumulative approach. Author describes presence, touch and listening as to what it is and what it looks like, there is no research so no "data" to review. Descriptions and synthesis of presence, touch and listening-applicable to MNPPM in "attentive presence". Very thorough literature review to help in the definition of presence. Limitations: no research to validate findings. | None | Good for article to help define attentive presence. |
| Patients privacy and satisfaction in the ED: a descriptive analytical study- Nursing Ethics | Nayyeri, Aghaian 2010" | Emergenc y Departme nt, Patient Satisfaction-CINAHL Descriptive Analytical Study IV Investigate the extent to which patient privacy is observed and its correlation with patient satisfaction in 3 ED. Convenienc e sampling of 360 patients admitted to ED. Chronbach's alpha was .88 for privacy and .90 for satisfaction. Questionnaire Demographic data analyzed, mean scores were gathered from questionnaire, spearman's correlation factor was calculated for correlation of Privacy was perceived as most respected when in four walled area; no in common areas, more than half the patients perceived that privacy was poorly Satisfaction and privacy were correlated, however, in this sample privacy/satisfaction was reported. No significance was determined based on demographic data. Privacy was felt most in a four Literature review was good, analysis of data was good. However, study in Tehran and results do not match literature review. Could possible | None | The article was good for the instrument and used the instrument in which I have chosen. However, the environment is very different and cannot be generalized to my |
| The effects of ED staff rounding on patient safety and satisfaction | Meade, Kennedy, Kaplan -2010 | Patient Satisfaction, Attentive Presence - CINAHL | Eight week Quasi-experimental, Non-equivalent group, time sampling design. | To test the effectiveness of three different rounding techniques. | Using the AHA, hospitals were contacted, ultimately 28 participated representing a total of 5759 patient beds, with average of 42, 438 ED visits. | Ten hospitals performed 30 minute rounds. 9 performed 1 hour rounds and 9 performed 1 hour rounds with individualized patient tactic. Left Without Being Seen (LWBS), Against Medical Advice (AMA), use of call lights, number of approaches by pt. and family measured. Vendor satisfaction data also gathered. | Hourly rounding with IPC had the most significant impact. However, all hospitals that instituted rounding demonstrated an increase in satisfaction. Reduction of call lights, fewer approaches by family and reduction of LWBS/AMA. | Patient rounding is very beneficial in improving satisfaction, reduction of call lights, keeping patient families informed as well as reducing the frustration that leads to pts. leaving. | Good use of various trial methods with good variations of hospitals, makes it more generalizable. Satisfaction is based from impressions, frequent rounding can improve the impression through frequent communication. | Studor Group | This article helps to connect attentive presence and safety. Each are dimension of the MNPPM. |
| **Patient satisfaction: how patient health conditions influence their satisfaction** | Otani, Waterman, Dunagan, 2012 | **Quasi-experimental, Cross Sectional, Probability Sampling Methodology** | **To determine how seriously ill patients differ from less seriously ill patients during their combining process.** | **BJC Healthcare in MO, 12 hospitals within St. Louis, mid-MO and Ill. Data gathered from 5 largest facilities, n=32053.** | **Demographic data was analyzed, patient satisfaction survey was analyzed for patient satisfaction and correlation with DRG.** | **The results do not demonstrate a statistically significant correlation to severity of illness and patient satisfaction, however, it did indicate that severity did effect interactions by the physician/nurse. Correlations between physician and food, and influences of staff reduce in less sick patients.** | **Results indicate that the more ill the patient is, the more likely the professional can influence the patient attributes, the less sick, and the less influence.** | **Very strong study and well written, very good tables and graphs for the reader. Limitations include using only large hospitals, small and rural hospitals excluded, response rate 37%.** | **None** | **Article is excellent in not "lumping" patient satisfaction as a one size fits all. Patient acuity can change satisfaction. Will make an impact in ED population group and will add a question to determine their perceived level of health.** |

| **Using organizational mission, vision, and values to guide professional practice model development and measurement of nurse performance** | Ingersoll, Witzel, Smith-2005 | **Professio nal Practice Model-CINAHL** | **Case study** | **VI** | **To review importance of mission/vision/Values in developing PPM.** | **Strong Memorial Hospital, NY** | **Literature review, review explanation of current practice within organization.** | **Demonstration of PPM within organization and tied the model to nursing performance outcomes and expectations.** | **Through the proper use of PPM, nurse behaviors should be tied to performance behaviors. These ultimately guide the outcomes of the patient.** | **Tables and examples helpful, logical and very applicable. Limitations, no data to back the results.** | **None** | **Good explanation of the process, However, no data as to results and** |

<p>| <strong>Creating a personalized professional practice framework</strong> | Miles, Vallish -2010 | <strong>Professio nal Practice Model-CINAHL</strong> | <strong>Case Study</strong> | <strong>VI</strong> | <strong>To discuss methodology for creating PPM unique to organization.</strong> | <strong>Shands Jacksonville Medical Center, FL.</strong> | <strong>Literature review, discussion of dimensions: structural, process, Review of implementatio n of the model, discussed difficulties</strong> | <strong>Author embraced creating model that fits within organization and not adopting a &quot;off the shelf&quot;</strong> | <strong>Good explanation of the process, However, no data as to results and</strong> | <strong>None</strong> | <strong>Good review for implementing/education of MNPPM as part of capstone.</strong> |</p>
<table>
<thead>
<tr>
<th>Title</th>
<th>Author, Year</th>
<th>Methodology</th>
<th>Findings</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing as caring theory: living caring in practice: Nursing science quarterly</td>
<td>Bulfin, 2005</td>
<td>Literature review, concept analysis, use of HCAHPS data</td>
<td>To measure the effect of caring model on patient perception of care. Patient satisfaction scores increased following the implementation of nursing caring theory. Caring expressions significantly impact patients and families. Those that have experienced it, express sincere gratitude and appreciations. Furthermore, for those that implement caring, this is also evident in relationships with coworkers, leaders as they begin to nurture each other.</td>
<td>None</td>
</tr>
<tr>
<td>For nursing: Nursing Economics</td>
<td></td>
<td>VI</td>
<td>To measure the effect of caring model on patient perception of care. Patient satisfaction scores increased following the implementation of nursing caring theory. Caring expressions significantly impact patients and families. Those that have experienced it, express sincere gratitude and appreciations. Furthermore, for those that implement caring, this is also evident in relationships with coworkers, leaders as they begin to nurture each other.</td>
<td>None</td>
</tr>
<tr>
<td>Professional tears: developing emotional intelligence around death and dying in emergency work: Journal of Clinical Nursing</td>
<td>Bailey, Murphy, Pollock, 2011</td>
<td>Qualitative study using unstructured observations of practice and semi-structured interviews, three development stages emerged through the observation and interviews. Examples of observed situations give for each stage. Stages identified were: 1) investment of therapeutic self in the nurse-patient relationship, 2) managing emotional labor in the emergency work, 3) developing. Findings show those nurses that invest into therapeutic self into a nurse-patient relationship are able to manage emotional labor and develop emotional intelligence and effectively manage caring.</td>
<td>Very meaningful in application to MNPPM, practice expertise, therapeutic environment, and professional commitments. Limitations is that it is qualitative.</td>
<td>None</td>
</tr>
<tr>
<td>Professional Nursing Practice: Impact on Organizational and Patient Outcomes - JONA</td>
<td>Mark, Salyer, Wan, 2003</td>
<td>Professional Nursing Practice - CINAHL</td>
<td>Longitudinal, Quantitative II</td>
<td>Test a causal model of the impact of professional practice on nursing unit outcomes and patient outcomes.</td>
</tr>
<tr>
<td>index), nursing unit characteristics and organizational outcome/patient outcomes.</td>
<td>fit; Tucker Lewis index.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix C

Logic Model Tabular Representation

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Constraints</th>
<th>Activities</th>
<th>Outputs</th>
<th>Outcomes Short Term</th>
<th>Outcomes Long Term</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer satisfaction report</td>
<td>Inconsistent patient participation in satisfaction surveys</td>
<td>Determine baseline satisfaction scores</td>
<td>Improvement in satisfaction scores</td>
<td>Improvement in scores specific to nursing sensitive indicators</td>
<td>Sustained improvement in satisfaction of nursing sensitive indicators</td>
<td>Increase in customer satisfaction in percentile ranking</td>
</tr>
<tr>
<td>Nursing model selected</td>
<td>Lack of understanding importance of a nursing model in delivery of care.</td>
<td>Develop education plan with CNO</td>
<td>Implementation of model into daily practice.</td>
<td>Consistent approach to nursing care</td>
<td>Sustained continuity of nursing care delivery.</td>
<td>Increase in patient visits</td>
</tr>
<tr>
<td>Mercy Nursing Professional Practice Model</td>
<td>Inconsistent education rollout activities in Ministry</td>
<td>Re-enforcement of model education</td>
<td>All RN staff participation in education</td>
<td>RN staff consistently educated</td>
<td>RN staff will consistently apply concepts/dimensions of model</td>
<td>Change in nursing culture</td>
</tr>
<tr>
<td>Executive team support</td>
<td>IRB approval</td>
<td>Development of process</td>
<td>Adamson et al.</td>
<td>Improvement in percentiles of satisfaction</td>
<td>Increase in percentiles of satisfaction</td>
<td>Increase in percentiles of satisfaction</td>
</tr>
</tbody>
</table>

Problem Identification
- Poor patient satisfaction with nursing care
- Lack of nursing professional practice model
- Lack of standardized approach in nursing care/treatment
- Poor emergency department/hospital reputation
Appendix D

M Nursing Professional Practice Model Education

Education Plan

The primary researcher and another DNP student presented the education program using an education plan. The classes were offered six times to facilitate attendance by all staff. The times varied to accommodate day and night shift coworkers. The times offered were 0700 and 1900. The classes were presented over a four week period. Each class was ninety minutes in length. The classes were held in the Emergency Department within a designated space away from the core ED to minimize interruptions.

Class Outline:

I. Introduction

II. Development of Model

III. Key Concepts and Dimension Definitions
   a. Practice Expertise
   b. Therapeutic Environment
   c. Professional Commitment

IV. ‘I will’ statements

V. Putting Model into daily practice

VI. Conclusion
Appendix E

I Will Worksheet

Write an “I will” statement for each dimension. This will help describe how you will translate each dimension into daily practice.

**Practice Expertise**: Holistic evidence-based knowledge applied to each person we serve.

- **Vigilance**: Intentional observation of listening; acute awareness and anticipation of patient/other(s) need. ______________________________________________________

- **Safety and Comfort**: Preventing harm as first priority, attending to patient wellbeing. ______________________________________________________

- **Clinical reasoning and decision-making**: Applying evidence, critical thinking and sound judgment to the nursing process. ______________________________________________________

- **Patient/other(s) engagement in care**: Teaching patient/other(s) how to follow treatment plan and manage long term. ______________________________________________________

- **Spiritual and ethical attentiveness**: Careful assessment of and response to patient’s personal values and needs in treatment decisions and care giving. ______________________________________________________

- **Comprehensive care orchestration**: Coordinating and communicating care with all disciplines within and across touch-points of care. ______________________________________________________

**Therapeutic Environment**: The social context, culture and physical surroundings to promote healing and comfort.

- **Compassionate care**: Bringing to life the healing ministry of Jesus through attention to patient needs and providing exceptional service. ______________________________________________________

- **Attentive presence**: Fully engaged when “being with” the patient/other(s), aware of and attends to physical surroundings. ______________________________________________________

- **Contagious calmness**: Inner strength and adaptability to serve as a conduit for healing even under pressure. ______________________________________________________
• **Tender courage**: Professional self-confidence to lead from the heart and with intellectual grit to say and do what is right for the patient.

• **Intellectual engagement**: Using all knowledge, senses and skills to care for patient and communicate with others.

**Professional Commitments**: Fidelity to management of practice, self, the organization and health care.

• **Trustworthy Collaboration**: Being in right relationships with team members in planning and providing care and escalating patient need.

• **Care for Self and One Another**: Attending to personal, physical, emotional and spiritual wellbeing, supporting others to do the same.

• **Self-competence development, continuous learning**: Meeting professional standards while always curious and eager to learn more, professional education advancement.

• **Advancement of nursing profession**: Promoting nursing profession, practicing to full extend of education and experience.
Appendix F
Capstone Timeline

- PICO Developed
- Systematic Review of Evidence
- Regis IRB Approval
- Completion of the "I will..." statements
- Rounding
- Data Analysis

Timeline:
- Fall 2012: Population Identified
- Fall 2012: Mercy IRB Approval
- Spring 2013: Pre-intervention Survey
- March: Start Education Mercy Nursing Professional Practice Model
- April: Final Education Mercy Nursing Professional Practice Model
- May: Post-Intervention Satisfaction Survey
- June: Dissemination of study findings
Appendix G

Project Budget

<table>
<thead>
<tr>
<th>Direct Expenses</th>
<th>Number</th>
<th>Cost</th>
<th>Total</th>
<th>Funded by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing Salary</td>
<td>96 hrs.</td>
<td>$20</td>
<td>$1,920</td>
<td>Facility</td>
</tr>
<tr>
<td>Paper supplies</td>
<td>240</td>
<td>0.05</td>
<td>$12</td>
<td>Facility</td>
</tr>
<tr>
<td>Posters</td>
<td>7</td>
<td>$10</td>
<td>$70</td>
<td>Facility</td>
</tr>
<tr>
<td>Copies of consent</td>
<td>90</td>
<td>0.05</td>
<td>$4</td>
<td>Facility</td>
</tr>
<tr>
<td>Postage</td>
<td>86</td>
<td>0.45</td>
<td>$39</td>
<td>Facility</td>
</tr>
</tbody>
</table>

$2,045

Grand Total $2,045
December 6, 2012

Jennifer Thomas, RN, MS
7301 Rogers Avenue
Ft. Smith, AR 72903

Dear Jennifer,

Thank you for the submission of the Measurement of the impact of the Mercy Nursing Professional Practice Model in the emergency department on patient satisfaction using nursing sensitive indicators project for initial review and approval by Mercy Hospital Fort Smith Institutional Review Board (FWA # 00000444, IRBS Registration # 00001547).

The IRB reviewed the submission and is pleased to inform you that on December 6, 2012, it was approved in full board review, with a quorum present, for a period of one year with an expiration date of December 6, 2013.

The IRB requests that a progress report be submitted to this office by November 6, 2013 to allow ample time for review and approval before the project's expiration date. If the project ends prior to this please send notification to the IRB of the closing date and final results.

Please do not hesitate to call Melissa Key, IRB Manager, at 479-314-5726 if further assistance is needed.

Sincerely,

[Signature]

William Huskison, MD
IRB Chair
March 11, 2013

Jennifer Thomas
2042 Mt. Harmony Rd.
Greensboro, AR 72936

RE: IRB #: 13-088

Dear Ms. Thomas:

Your application to the Regis IRB for your project “Effects of Implementation of a Professional Practice Model on Nursing Sensitive Patient Satisfaction Indicators in the Emergency Department” was approved as an exempt study on March 3, 2013. This study was approved per exempt study category 45CFR46.101(f)(22).

The designation of “exempt” means no further IRB review of this project, as it is currently designed, is needed.

If changes are made in the research plan that significantly alter the involvement of human subjects from that which was approved in the named application, the new research plan must be resubmitted to the Regis IRB for approval.

Sincerely,

Patsy McGuire Cullen, PhD, CPNP
Chair, Institutional Review Board
Associate Professor and Director
Department of Accelerated Nursing
Loretto Heights School of Nursing
Rueckert-Hurdman College for Health Professions
Regis University

cc: Dr. Alma Jackson
Appendix J

Implied Informed Consent Form

Title of Project: Measurement of the impact of the M Nursing Professional Practice Model in the emergency department on patient satisfaction using nursing sensitive indicators

Principal Investigator: Jennifer Thomas RN, MS, Doctorate of Nursing Practice Student
Regis University
Denver, CO
(479)996-0282 thoma676@regis.edu

Regis University Advisor: Alma Jackson RN, PhD
Regis University
Carrol Hall 334, G-8, Lowell Campus
Denver, CO
(303)964-6389 ajackson@regis.edu

Mercy Advisor: Marianne Rataj, RN, MS
Chief Nursing Officer
Mercy Fort Smith
Fort Smith, AR
(479)314-6100 mary.rataj@Mercy.net

1. Purpose of the Study: The reason for this study is to learn how the use of a nursing care model impacts patient satisfaction with nursing care in the emergency department.

2. Procedures to be followed: You will be asked to answer 16 questions on a survey.

3. Discomforts and Risks: There are no risks in taking part in this research other than possible unpleasant feelings due to memories of your hospital visit.

4. Benefits: The results of the survey might provide more knowledge of how a nursing care model can improve patient satisfaction with nursing care. This information could help improve the nursing care given.

5. Duration: It will take about 10 minutes to answer the questions.

6. Statement of Confidentiality: Your participation in this survey is confidential. Your answers will be coded so only the investigator and advisors will have the code. The code will be kept in a locked cabinet and destroyed in 1 year.

7. Right to Ask Questions: Please contact Jennifer Thomas at (417)439-0493 with questions, complaints or concerns about this project.

8. Payment for participation: You will not receive money for taking the survey.

9. Cost of participating: There is no cost to take the survey.

10. Voluntary Participation: You can decide to take the survey if you want to. You can stop at any time. You do not have to answer any questions you do not want to answer. Taking the survey or not taking the survey will not affect future care in the emergency department or hospital.

11. Age: You must be 18 years of age or older to take part in this study.

Answering the questions means that you understand the information read to you and you agree to take part in the study.
Appendix K

Questions from Patient Satisfaction of Nurse Care Quality Questionnaire

Please rate each question with a score between 1-5. With the score 1 being the lowest possible and 5 being the highest possible score.

1. Information You Were Given: How clear and complete the nurse’s explanations were about tests, treatments, and what to expect.
   1 2 3 4 5
   Comments:

2. Instructions: How well nurses explained how to prepare for test and operations.
   1 2 3 4 5
   Comments:

3. (Family) Ease of Getting Information: How well the nurses kept them informed about your condition and needs.
   1 2 3 4 5
   Comments:

4. (Family) Information Given by Nurses: How well the nurses kept them informed about your condition and needs.
   1 2 3 4 5
   Comments:

5. (Family) Involving Family and Friends: How well the nurses kept them informed about your condition and needs.
   1 2 3 4 5
   Comments:

6. (Family) Involving Family or Friends in Your Care: How much they were allowed to help in your care.
   1 2 3 4 5
   Comments:

7. Concern and Caring by Nurses: Courtesy and respect you were given; friendliness and kindness.
   1 2 3 4 5
   Comments:

8. Attention of Nurses to Your Condition: How often nurses checked on you and how well they kept track of how you were doing.
   1 2 3 4 5
   Comments:

9. Recognition of Your Opinions: How much nurses ask you what you think is important and give you choices.
   1 2 3 4 5
   Comments:
10. Considerations of Your Needs: Willingness of the nurses to be flexible in meeting your needs.
   1  2  3  4  5
   Comments:

11. The Daily Routine of Nurses: How well they adjusted their schedule to meet your needs
   1  2  3  4  5
   Comments:

12. Helpfulness: Ability of nurses to make you comfortable and reassure you.
   1  2  3  4  5
   Comments:

13. Nursing Staff Response to Your Calls: How quick they were to help.
   1  2  3  4  5
   Comments:

14. Skills and Competence of Nurses; How well things were done, like giving medication and handling
   IV’s.
   1  2  3  4  5
   Comments:

15. Coordination of Care: The teamwork between nurses and other hospital staff who took care of you.
   1  2  3  4  5
   Comments:

16. Restful Atmosphere Provided by Nurses: Amount of peace and quiet
   1  2  3  4  5
   Comments:

Investigator Use Only:

Implied Consent Received: __________
Implied Consent Mailed on: ______________
Request Follow-up from Hospital Leadership: ______
Appendix L

CITI Training Certificate

CITI Collaborative Institutional Training Initiative

Human Research Curriculum Completion Report
Printed on 12/26/2012

Learner: Jennifer Thomas (username: thoma676)
Institution: Regis University
Contact Information Department: Nursing
Email: jlt631@centurylink.net

Social Behavioral Research Investigators and Key Personnel:

Stage 1. Basic Course Passed on 09/28/12 (Ref # 8870406)

<table>
<thead>
<tr>
<th>Required Modules</th>
<th>Date Completed</th>
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<td>09/28/12</td>
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<td>History and Ethical Principles – SBR</td>
<td>09/28/12</td>
<td>5/5 (100%)</td>
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<tr>
<td>The Regulations and The Social and Behavioral Sciences - SBR</td>
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<td>5/5 (100%)</td>
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<td>Assessing Risk in Social and Behavioral Sciences - SBR</td>
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<td>5/5 (100%)</td>
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<td>Informed Consent – SBR</td>
<td>09/28/12</td>
<td>5/5 (100%)</td>
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<tr>
<td>Privacy and Confidentiality – SBR</td>
<td>09/28/12</td>
<td>5/5 (100%)</td>
</tr>
<tr>
<td>Regis University</td>
<td>09/28/12</td>
<td>no quiz</td>
</tr>
</tbody>
</table>

For this Completion Report to be valid, the learner listed above must be affiliated with a CITI participating institution. Falsified information and unauthorized use of the CiTi course site is unethical, and may be considered scientific misconduct by your institution.

Paul Braunschweiger Ph.D.
Professor, University of Miami
Director Office of Research Education
CITI Course Coordinator
Appendix M

Authorization to Utilize Material

July 19, 2013

Regis University
Rueckert-Hartman College for Health Professions

Subject: Mercy Authorization for Use of Proprietary Work

To whom it may concern:

I am Vice President – Legal Counsel for Mercy Health (Mercy). I have been contacted by Jennifer L. Thomas for permission to use the Mercy Nursing Professional Practice Model© diagram in Appendix A of her document entitled Effects of a Nursing Professional Practice Model on Customer Satisfaction of Nursing Indicators in the Emergency Department.

Ms. Thomas hereby is granted permission by Mercy to use its copyrighted Mercy Nursing Professional Practice Model© diagram in Appendix A of her document entitled Effects of a Nursing Professional Practice Model on Customer Satisfaction of Nursing Indicators in the Emergency Department.

If you need anything further in this regard, please contact me as indicated above.

Sincerely,

Charles S. Gilham
Vice President - Legal Counsel
Mercy Health