

## Doctor of Nursing Practice (DNP) Capstone Project Abstracts Cohort 5

Submitted in partial fulfillment of the requirements for the Doctor of Nursing Practice Degree

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Northeastern University

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## Doctor of Nursing Practice (DNP) Capstone Projects Cohort 5

## **Student Speakers:**

Thomas Lansden – Convocation Nancy Dirubbo – Leadership Symposium Melissa Taylor – Leadership Symposium

1. Carl Anderson, DNP, MSN, CPNP\*\*

## Capstone Title: *Exploring Weight Perceptions and Health Status in Adolescents with Hypertension*

Capstone Advisor: Ann C. Stadtler, DNP, RN, CPNP Adjunct Clinical Associate Professor, Northeastern University Boston MA; Director, Touchpoints Site Development & Training, Brazelton Touchpoints Center, Boston Children's Hospital, Boston, MA

Expert Mentors: Deborah P. Jones, MD, Professor of Pediatric Nephrology and Hypertension, Monroe Carell Jr. Children's Hospital at Vanderbilt, Nashville, TN

Deneen Schaudies, MS, RD, LDN, Monroe Carell Jr. Children's Hospital at Vanderbilt, Nashville, TN

2. Elisabeth Bailey, DNP, RN/PC, PMHCNS-BC\*

## Capstone Title: Exploring Pediatric Nurse Practitioners' Self Perception of Readiness to Deliver Evidence-Based Mental Health Care in the Primary Care Setting

Capstone Advisor: Karen Pounds, PhD, APRN-BC, Assistant Clinical Professor, Northeastern University, Boston, MA

Expert Mentor: Christopher M. Young, MD, Medical Director, Wellmore Behavioral Health, Waterbury, CT

3. Tara Brown, DNP, CPNP-AC/PC, CCRN\*\*

## Capstone Title: A National Survey Examining Current End-of-Life Pain and Symptom Management Strategies in Children's Hospitals

Capstone Advisor: Michele DeGrazia, PhD, RN, NNP-BC, FAAN Adjunct Associate Professor Northeastern University, Boston, MA; Director of Nursing Research, Neonatal Intensive Care Unit Children's Hospital Boston, MA

Expert Mentor: Angela C. Anderson, MD, Hasbro Children's Hospital, Associate Professor, Warren Alpert School of Medicine at Brown University, Providence, RI

#### 4. Dorothea Devanna, DNP, RN, ACNS-BC\*\*

## Capstone Title: Implementation of a Nursing Driven Mobility Protocol: A Quality Improvement Project to Evaluate Impact on Fall Rates, Pressure Ulcer Rates, Length of Stay, and Discharge Destination in Older Adults

Capstone Advisor: Elizabeth Howard, PhD, MSN, RN, ACNP-BC, FNAP, Associate Professor, Northeastern University, Boston, MA; Visiting Scientist, Institute for Aging Research, Hebrew Senior Life, Boston, MA

Expert Mentor: Rebecca Logiudice, MS, RN, CCRN, Critical Care Clinical Nurse Specialist, Mount Auburn Hospital, Cambridge, MA

5. Nancy Dirubbo, DNP, APRN, FNP-C, FAANP, Certificate in Travel Health\*

Capstone Title: *Integrating Knowledge About Adult Travel Immunizations in Primary Care* Capstone Advisor: Michelle Beauchesne, DNSc, RN, CPNP, FAAN, FNAP, FAANP, Associate Professor, Director, Doctor of Nursing Practice (DNP) Program, Northeastern University, Boston, MA Expert Mentor: Mary Jo Goolsby, EdD, MSN, NP-C, CAE, FAANP, Founder and Principal Partner, Institute for Nurse Practitioner Excellence, Augusta, GA

## 6. Darryl Duvall, DNP, CRNA, ARNP\*

Capstone Title: *Evaluating the Lead of Integration of Evidence-Based Practice Content in Doctor of Nursing Practice Curricula: A National Survey of Doctor of Nursing Practice Programs* Capstone Advisor: Susan Jo Roberts, DNSc, RN, ANP-BC, FAAN, Professor, Director Primary Care Adult/Gerontology and Family Nurse Practitioner, Northeastern University, Boston, MA Expert Mentor: Cynthia Fitzgerald, PhD, FNP-BC, Associate Professor, Interim Associate Dean for Academic Affairs, and Director, Doctor of Nursing Practice Program, Washington State University College of Nursing, Spokane, WA

## 7. Glenda Francis, DNP, MBA/HCM, RN, CCRN, CLNC, NEA-BC\*

# Capstone Title: An Exploration of the Benefits of Napping on Night Shift Nurses' Health and Patient Safety

Capstone Advisor: Janet Briand-McGowan, DNP, MS, RN, Director, Direct Entry On-Campus Master's Nursing Program, Assistant Clinical Professor, Northeastern University, Boston MA Expert Mentor: Anne E. Rogers, PhD, RN, FAAN, Professor and Director, Graduate Studies, Nell Hodgson Woodruff School of Nursing, Emory University, Atlanta, GA

## 8. Thomas Lansden, DNP, CRNA\*\*

## Capstone Title: *Diagnosis and Treatment of Post-Dural Puncture Headache (PDPH): Improving Patient Outcomes Using an Algorithm*

Capstone Advisor: Janet Dewan, PhD, CRNA, Assistant Clinical Professor, Northeastern University, Boston MA

Expert Mentor: Robert M. Felden, DO, Aultman Center for Pain Management Canton, OH

## 9. Erin Latina, DNP, AG-ACNP, CCRN-CSC\*

## Capstone Title: Investigation of Intensive Care Unit Readmissions

Capstone Advisor: Dorothy Mullaney, DNP, MHS, APRN, Adjunct Clinical Associate Professor Professor Northeastern University, Boston, MA; Director, Advanced Practice, Dartmouth-Hitchcock Medical Center, Lebanon, NH

Expert Mentor: William Goodman, MD, MPH, FCCP, Director, Hospital Medicine and Dartmouth-Hitchcock Pulmonary & Critical Care Medicine, Lebanon NH, and Catholic Medical Center, Manchester, NH

### 10. Adrianne Louloudes, DNP, RN CPNP\*

## Capstone Title: Examining the Influence of the Pediatric Nurse Practitioner Role on the Quality of Care of Children Hospitalized with Disorders for Primary Pain

Capstone Advisor: Michelle Beauchesne, DNSc, RN, CPNP, FAAN, FNAP, FAANP, Associate Professor, Director, Doctor of Nursing Practice (DNP) Program, Northeastern University, Boston, MA Expert Mentor: Jean Solodiuk PhD, RN, CPNP, Pain Treatment Service, Boston Children's Hospital, Boston, MA

### 11. Kelly McCue, DNP, CNS, RN\*

## Capstone Title: An Exploration of Why Oncology Patients Do Not Adhere to Oral Chemotherapy Regimes

Capstone Advisor: Michelle Beauchesne, DNSc, RN, CPNP, FAAN, FNAP, FAANP, Associate Professor, Director, Doctor of Nursing Practice (DNP) Program, Northeastern University, Boston MA Expert Mentor: Letha Mills, MD, Board Cert. Oncology, Hematology & Palliative Care, Dartmouth Hitchcock Medical Center, Lebanon, NH and Brattleboro Memorial Hospital, Brattleboro, VT

### 12. Elizabeth McGrath, DNP, APRN, AGACNP-BC, ACHPN\*\*

## Capstone Title: Comparison of the National Comprehensive Cancer Network Distress Thermometer and Hospital Anxiety and Depression Scale Among Gastrointestinal Cancer Survivors

Capstone Advisor: Carol Anne Marchetti, PhD, RN, PMHNP-BC, SANE, Assistant Professor, Northeastern University, Boston, MA

Expert Mentor: Natalie Riblet, MD, Patient Safety Fellow, VA White River Junction, VT

#### 13. MacGregor Morgan, DNP, RN, MSN/MBA\*

## Capstone Title: An Analysis of Retrospective Chart Reviews to Identify Code Team Training Needs at Spaulding Hospital Cambridge

Capstone Advisor: Laura Mylott, PhD, RN, ANP BC, Clinical Professor, Northeastern University, Boston, MA

Expert Mentor: Tamera M. Corsaro, RN, MSN, CRRN, Nurse Manager, Spaulding Hospital, Cambridge, MA

14. Cheryl Nadeau, DNP, MPH, RN, FNP, APHN, CNE\*

## Capstone Title: Analysis of Knowledge and Competencies Required to Prepare Entry Level Nurses to Address Violence Prevention in Practice

Capstone Advisor: Pam Burke, PhD, RN, FNP, PNP, FSAHM, FAAN, Clinical Professor, Interim Dean, School of Nursing, Northeastern University, Boston MA

Expert Mentor: Michelle Eaton, DNP, RN, Clinical Faculty, New York University College of Nursing, New York, NY

## 15. Maevelyn O'Donnell, DNP, CRNA\*

## Capstone Title: Implementation of the Day of Surgery Evaluation: A Quality Assurance Project of the Department of Anesthesia at Tripler Army Medical Center

Capstone Advisor: Karla Damus, PhD, MSPH, MN, RN, FAAN, Adjunct Clinical Professor, School of Nursing, Northeastern University, Boston, MA; Research Faculty, Family Medicine, Boston University School of Medicine, Boston, MA

Expert Mentor: Hayong Nicole Hirst, MSN, CRNA, FNP-BC, Tripler Army Medical Center, Honolulu, HI

#### 16. Kimberly Smith, DNP, MSN, RN, ACNS-BC, CGNS-BC, CPHQ, CMAC\*\*

Capstone Title: *An Education Intervention for Improving Utilization of a Rapid Response Team* Capstone Advisor: Susan Distasio, DNP, ANP-CS, APRN, AOCNP Adjunct Associate Clinical Professor Northeastern University, Boston, MA; Administrative Director, Nursing, Norris Cotton Cancer Center, Dartmouth-Hitchcock Medical Center, Lebanon, NH

Expert Mentor: Carolyn C. Goojins, MSN, RN, Director of Quality and Accreditation, Lawrence General Hospital, Lawrence, MA

#### 17. Kathleen Spinello, DNP, RN\*

### Capstone Title: Exploratory Study to Gather Data as to Why Masters of Science in Nursing (MSN) Prepared Nurses Chose to Pursue a Graduate Degree, and Why They Have Remained in the Same Job as Before their Educational Advancement

Capstone Advisor: Mary Samost, DNP, MSN, RN, Adjunct Associate Clinical Professor, Northeastern University, Boston, MA; Associate Chief Nursing Officer, Cambridge Health Alliance, Cambridge, MA Expert Mentor: Deborah Farina Mulloy, PhD, RN, Associate Chief Nurse, Brigham and Women's Hospital, Boston, MA

## 18. Susan Sykas, DNP, APRN, PPCNP-BC, CNE\*\*

## Capstone Title: Evaluation of a Pilot Project on Group Visits for Well-Baby Care in a Rural Pediatric Practice

Capstone Advisor: Karen Farnum, DNP, RN, PPCNP-BC, Adjunct Associate Clinical Professor, Northeastern University, Boston, MA; Pediatric Primary Care, Greater Lowell Pediatrics, Lowell, MA Expert Mentor: Theodore Johnson, MD, Brookside Pediatrics & Adolescent Medicine, Bennington, VT

### 19. Melissa Taylor, DNP, MPH, RNC-OB, BSN, CEN, CPEN, TNCC\*

### Capstone Title: Leadership Perspectives from Two Regional Professional Nursing Organizations on the Impact of Advocacy Initiatives on Nurses' Motivation to Sustain Momentum in Public Policy Advocacy

Capstone Advisor: Steve Alves, PhD, CRNA, FNAP, Clinical Professor, Nurse Anesthesia Program Director, Project Director US Army Graduate Program in Anesthesia Nursing, Northeastern University, Boston, MA

Expert Mentors: Tiffany Wenter, BSN, RN, Deputy Executive Officer-Association Operations, Ohio Nurses Association

Mary Jane Maloney, RN, MSN, CNP, CWS, Director of Government Relations for the Ohio Association of Advanced Practice Nurses

## 20. Mary Wiggin Loux, DNP, RN\*

## Capstone Title: *Evaluating the Impact of a 360-degree Survey and Feedback Quality Improvement in a Community Hospital Operating Room*

Capstone Advisor: Sharon Kuhrt, DNP, RN Adjunct Associate Clinical Professor, Northeastern University, Boston, MA; Director, Clinical Excellence, Martin's Point Health Care, Portland ME Expert Mentor: Larry Harmon, PhD, Director PULSE Program/Physicians Development Program, Voluntary Associate Professor, Psychiatry & Behavioral Sciences, University of Miami, Miller School of Medicine, Miami, FL

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## References for Capstone Abstracts are available upon request.

### Exploring Weight Perceptions and Health Status in Adolescents with Hypertension

#### **Carl Anderson**

**Background:** According to the Centers for Disease Control and Prevention, approximately 17% of children and adolescents in the United State are obese (CDC, 2014). Moreover, overweight children are more likely to become overweight adults (Biro & Wien, 2010). It is recognized that obesity increases the risk of cardiovascular disease, type-2 diabetes, dyslipidemia, liver disease, sleep apnea, and negative psychological consequences. Regarding blood pressure specifically, it is estimated that between 1% and 5% of children and adolescents in the U. S. have systemic hypertension (Thompson, Dana, Bougatsos, Blazina, & Norris, 2013). Finally, an adolescent's perception of weight may affect the extent to which lifestyle changes are implemented. One study found less than one-fourth of high school students sampled perceived themselves as overweight even though nearly one-half of them were overweight based on measured height and weight (Brener, Eaton, Lowry, & McManus, 2004). Unfortunately, there is little data examining perceptions of weight and health status among adolescents with hypertension.

**Purpose:** The purpose of this study is to add to the current body of knowledge regarding adolescents' perceptions of their weight status.

**Methods:** This study uses a descriptive, two-group design, exploring perceptions of weight status and other health related concerns in adolescents. Purposive sampling will be used from retrospective chart reviews over six-plus months identifying patients who meet criteria. The goal for sample size will be 35 participants per group. Inclusion criteria: Adolescents 13-17 years old at time of initial evaluation for hypertension, being overweight or obese as defined by the CDC, and having a diagnosis of essential hypertension as defined by the National High Blood Pressure Education Program Working Group on Children and Adolescents (2005) and being treated with antihypertensive medication(s). Two groups will be formed and consist of those who lost at least five pounds within the first six months of being evaluated, regardless of whether weight was gained back, and those who did not lose weight within the same time frame. All participants will complete the 2015 National Youth Risk Behavior Survey (CDC, 2014). Descriptive statistics will be used to examine differences between groups in terms of perceptions of weight status and additional health related behaviors. IRB approval has been obtained.

**Results:** Data collection and analysis are in progress. It is hoped that among overweight or obese adolescents with essential hypertension, there are statistically significant differences in perceptions of weight and other health related behaviors between those who attempt lifestyle modifications and those who do not.

**Implications for Practice:** Overweight and obese children in the U. S. are becoming a greater strain on the healthcare system. Lifestyle modifications can lessen the impact of obesity related diseases. Although treating hypertension with medication is recommended and warranted in many cases, it is not a preferred first-line treatment. Weight loss can lower blood pressure and in some instances medication may not be needed. This study will contribute to a better understanding of health perceptions affecting lifestyle change. It is hoped that by better understanding which adolescents are more likely to attempt lifestyle changes, interventions may be more specifically targeted toward those particular adolescents to increase successful management of hypertension thus improving long-term health and reducing the impact on the healthcare system.

Key words: Weight, adolescents, perception, hypertension, overweight, obesity

## Exploring Pediatric Nurse Practitioners' Self-Perception of Readiness to Deliver Evidence-Based Mental Health Care in the Primary Care Setting

### **Elisabeth Bailey**

**Background**: With an estimated 15 million American children meeting criteria for a diagnosable mental illness, and only 20 percent of these children receiving any type of mental health care, primary care providers (PCPs) are facing a deluge of pediatric psychiatric need (American Academy of Child and Adolescent Psychiatry, 2014). This high demand, coupled with a widespread shortage of pediatric psychiatric specialists, means PCPs - including pediatric primary care nurse practitioners (PNPs) - are often first to recognize and treat their patients' mental health needs. There are several initiatives in place to increase PNPs' competence and confidence in providing mental health care. These include: the Association of Faculty of Pediatric Nurse Practitioners' effort to develop, implement and evaluate a model PNP curriculum in evidence-based primary mental health care; yearly workshops offered at the National Association of Pediatric Nurse Practitioners' Conference; and several intensive workshops and online training programs, among others (Hawkins-Walsh, Crowley, Melnyk, Beauchesne, Brandt & O'Haver, 2011; Van Cleve, Hawkins-Walsh, & Shafer, 2013). No recent studies were found, however, looking specifically at practicing PNPs' self-perception of their ability to provide effective and evidence-based mental health care in primary care settings.

**Objective**: This descriptive project examines PNPs' self-perception of preparedness and confidence in providing mental health care to their patients, as well as identifying any barriers PNPs have encountered in increasing their own expertise and/or implementing evidence-based practices.

**Methods**: Semi-structured interviews were conducted with a convenience sample of eight pediatric primary care PNPs in the New England region. Interviews are audio recorded, transcribed verbatim, coded and analyzed using thematic analysis methodology.

**Results**: Initial analysis indicates that participating PNPs feel prepared to manage Attention Deficit Hyperactivity Disorder, to provide support and guidance to families, and to triage and refer mental health issues. Participating PNPs reported feeling unprepared initiating psychiatric diagnoses and medications, managing patients with psychiatric comorbidities or severe symptoms, and managing complex psychotropic medication regimens. All participants reported that the majority of their learning about mental health was "on the job" and experiential, and 75% reported having no to minimal mental health content in their formal PNP education.

**Implications for Practice**: Barriers to increasing expertise, evidence-based practice, and best practice delivery are identified, as are positive resources and supports. These finding will shape recommendations for practice in both the clinical and educational settings.

Keywords: Behavioral/Mental Health, Educational Initiatives, Pediatric Primary Care

#### A National Survey Examining Current End-of-Life Pain and Symptom Management Strategies in Children's Hospitals

#### Tara M. Brown

**Background:** In 2003, the Institute of Medicine published *When Children Die: Improving Palliative and End-of-Life Care for Children and Their Families,* a report focused on pediatric palliative and end-of lifecare. It was found that terminally ill children and their families do not always receive competent and consistent care that meets their complex physical and emotional needs. The report concluded that end-of-life care could be improved with the development of guidelines and protocols focused on pediatric palliative care.

Despite many new developments in medications and interventions used to treat pain and discomfort in the dying patient, there is a lack of standardized education in both medical and nursing schools that focuses on pain and symptom management in the dying child. Guidelines, protocols, policies and procedures focused on pediatric end-of-life care would assist the medical personnel working with children by giving them access to and ability to utilize the newest information and interventions.

**Purpose:** The purpose of this project is to examine current end-of-life pediatric pain and symptom management strategies in pediatric hospitals nationally. The survey will help identify gaps in education and resources for staff members with regards to end-of-life pediatric pain management strategies. A content analysis of data collected will provide specific information about medications including names, doses, and titration recommendations included in the protocols. It will provide an assessment and comparison of guidelines, protocols, policies and/or procedures utilized in pediatric hospitals nationally.

**Methodology:** This quality improvement science research project utilizes a web-based survey to identify resources and education available to health care providers within their facility. The survey assesses whether or not guidelines, protocols, policies or procedures are utilized to treat specific types of pain. In addition, it inquires about guidelines, protocols, policies or procedures used to treat potential respiratory and gastrointestinal symptoms experienced at the end-of-life.

**Results:** Descriptive statistics will be used to describe the survey findings. A qualitative content analysis will be utilized to interpret the information obtained from the guidelines, protocols, policies and procedures.

**Implications for Practice:** Pediatric end-of-life pain and symptom management is not a part of standardized education for medical and nursing students. As a result health care providers may not be adequately prepared to care for this vulnerable population. Evaluating current end-of-life pediatric pain and symptom management strategies utilized in pediatric hospitals is the first step toward improving pediatric end-of-life care.

Keywords: End-of-life, pediatrics, pain

## Implementation of a Nursing Driven Mobility Protocol: A Quality Improvement Project to Evaluate Impact on Fall Rates, Pressure Ulcer Rates, Length of Stay, and Discharge Destination in Older Adults

#### **Dorothea Devanna**

#### **Background and Significance**

Since the Affordable Care Act of 2010 and hospital designations as Accountable Care Organizations, it has become imperative for organizations to prevent functional decline and their associated complications. Improved functional ability has also been linked to a decrease rate of falls, pressure ulcers, length of stay, and post discharge rehabilitation. Yet, under-mobilization is still a pervasive problem in healthcare. This project determined that a nurse driven mobility protocol and information technology had a positive influence on these patient outcomes

#### Methods

Two mobility protocols were merged to provide an overarching approach to mobility in an acute care community hospital. This comprehensive approach to mobility was then integrated into information systems and care processes. A quasi-experimental pre- post design with sample stratification based on age was used to evaluate the protocol. The first 100 patients, 60-99 years of age with orders for the mobility protocol comprised the experimental group. The control group was found by reviewing discharge diagnoses of patients admitted within 4 months prior to protocol implementation and matching patients by discharge diagnoses, gender, mobility level prior to admission, and age within 1 year. Fifty-one matches were obtained.

#### Results

In comparison with the control group, length of stay was shorter for mobility protocol patients (4.01 days vs 5.19 days). There were no falls or pressure ulcers in the protocol group but 3 falls and 2 pressure ulcers were documented in the control group. Lastly, only 12 patients needed a higher level of skilled care that required a new discharge location in a skilled nursing facility or rehabilitation setting compared to 19 control patients. This study suggests that a nurse driven mobility protocol has favorable effects on patient outcomes in comparison to standard mobility orders

**Significance for Practice**: Although the benefits of improving mobility have been studied in many settings separately, the benefits of using one protocol across settings has not been investigated. This mobility protocol was integrated into the electronic medical record throughout a community hospital. All patient outcomes studied were positively effected.

Key Words: Nursing Mobility Protocol, Mobility, Outcomes

#### Integrating Knowledge about Adult Travel Immunizations for NPs in Primary Care

#### **Nancy Dirubbo**

**Background and Significance**: Numerous studies have shown that most international travelers do not receive adequate pretravel health services. When travelers seek advice, they most often consult primary care providers (PCPs) rather than a travel health specialist. Insufficient knowledge of adult travel immunizations is a barrier to increasing access of pretravel care for patients in primary care settings.

**Methodology:** This project analyzed the outcomes of a one-day educational program using case studies to increase the PCP's knowledge of adult travel immunizations. Nine primary care nurse practitioners (NPs) participated in the program and all completed a pretest and posttest the day of the program and a web based evaluation two weeks later to assess translation of knowledge into practice. Demographics, pretest/posttest measurements, an outcome evaluation and course satisfaction tool were used to evaluate this pilot program.

**Conclusion:** Primary care practices are important points of access for patients who will be traveling internationally for advice and vaccinations to protect themselves and help reduce the importation of VPDs worldwide. Educating NPs and primary care providers in a manner that will help them apply knowledge into clinical settings while recognizing their clinical expertise in risk identification and management, patient counseling and education, will help ensure that additional knowledge will be translated into practice. A Continuing education significantly increased primary care NP's knowledge of adult travel immunizations, which was readily integrated into clinical practice.

**Implications for practice:** A one-day live continuing education program based on case studies is an effective tool for increasing knowledge about adult travel immunizations for NPs in primary care. Other PCPs including physician assistants and physicians, as well as providers of immunizations, such as pharmacists, could benefit from education about adult travel immunizations. All PCPs can play a crucial role in increasing the number of adults who are properly immunized for routine as well as travel related VPDs. Travel health services need to be included in primary care. Understanding adult travel immunizations is essential to prevent vaccine preventable diseases (VPDs) in travelers and to reduce the importation of these diseases back into the U.S. Continuing education is an effective tool to meet these goals.

Key Words: Travel health, Immunizations, Continuing Education

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#### Evaluating the Level of Integration of Evidence-Based Practice Content in Doctor of Nursing Practice Curricula: A National Survey of Doctor of Nursing Practice Programs

#### Darryl DuVall

**Background:** Evidence-based practice, (EBP), is the conscientious, intentional integration of current research evidence, clinical expertise, and patient values into the decision-making process that guides the provision of health care for individuals, families, and populations. Evidence-based practice is associated with improved patient outcomes (Institute of Medicine Committee on the Health Professions Education, 2003; Melnyk, 2014), yet the majority of advanced practice nurses do not practice or teach from this framework (Benner, 2010). Despite their knowledge of the significance and usefulness of EBP in their practice, the majority of nurses are unable to translate research findings or incorporate them into their practice (Fink, Thompson, & Bonnes, 2005). Barriers to EBP have been identified in the published literature (Melnyk, 2011), however the knowledge and skills required for establishing EBP in advanced nursing practice are not yet broadly incorporated into graduate nursing curricula. The EBP framework, although included in research and translational research based courses, is not fully integrated in DNP core courses or advanced clinical courses (Melnyk, Fineout-Overholt, Gallagher-Ford, & Kaplan, 2012).

**Goals:** This project assessed the overall level of integration of EBP content in Doctor of Nursing Practice (DNP) education programs, identified and described faculty beliefs related to EBP content, and presents the extent of integration of EBP content in DNP curricula as reported by DNP Program Directors. The project's objectives are to evaluate the level of integration of EBP in DNP curricula and explore the relationship between demographic variables, faculty beliefs and reported implementation of EBP.

**Methods:** A web-based survey was utilized to address the major questions. Participants were recruited from a convenience sample of all Program Directors listed on the Commission on Collegiate Nursing Education, (CCNE), list of accredited DNP programs in the United States, (n>150). The study instrument was the 19 item, *Organizational Culture & Readiness for School-wide Integration of Evidence-based Practice Survey* instrument (Fineout-Overholt & Melnyk, 2010), with customized demographic questions.

**Results:** The survey results are based on 64. 86 % of participants reported either "moderately" or "very much" the extent to which EBP is clearly described as central to the mission and philosophy of their institution. 85 percent of participants reported EBP is practiced either "moderately" or "very much" in their organization. Participants named most frequently, "*The continued teaching of how to conduct rigorous research versus evidence based care in advanced clinical education tracts*" as the biggest barrier to implementation of EBP in DNP programs.

**Implications For Practice:** The Quality and Safety Education for Nurses (QSEN) project lists EBP as one of the six competencies for quality and safety education in nursing programs. The Institute of Medicine (IOM) includes EBP as a necessary competency for all health care clinicians. The EBP framework is consistently reported as implemented and central to the mission and philosophy of DNP programs throughout the United States, yet the majority of advanced practice nurses do not practice or teach from this framework. This project contributes to advanced nursing practice by further articulating the barriers to clinical implementation of EBP and examining possible demographic variables of nursing faculty that contribute to established barriers. The goal of this project is to foster more consistent implementation and utilization of EBP, ultimately improving patient care and outcomes.

Key Words: Evidence Based Practice, Nursing Education, DNP Curriculum

An Exploration of the Benefits of Napping on Night Shift Nurses' Health and Patient Safety

#### Glenda N. Francis

**Background:** Increased fatigue in nurses working the night shift has been discussed in the literature for over a decade. Intentional sleeping on the job is not allowed in most United States (U.S.) hospitals. However, some unionized and other facilities provide accommodation to night shift nurses and allow them to take naps to rejuvenate themselves in an effort to deliver safe, quality care. Yet at other facilities, nurses have been terminated for falling asleep on the job due to fatigue and sleep deprivation. Studies have shown that daytime sleep does not compensate for the lack of nighttime sleep due to the body's circadian rhythm (Rogers 2008). Furthermore, there is evidence to suggest that insufficient sleep can have adverse effects on patient safety (Rogers, 2008; Rogers et al, 2004 & Pilcher, J & Huffcutt, A. 1996).

**Purpose and Goals:** The purpose was to explore if there are there potential benefits of structured napping on night shift nurses' health & their ability to provide safe patient care. The goal was to increase the awareness of the dangers of sleep deprivation and subsequent fatigue in nurses and the associated negative consequences. An additional aim was to facilitate discussion among healthcare leaders to catapult the desire to stimulate creativity and innovation to encourage safe practice and to promote nurses' health.

**Methodology:** A convenience sample of night shift nurses from two nationally recognized local professional nursing organizations voluntarily participated in a web-based, Likert-scale10 question survey. Questions were designed to provide a better understanding about the subject and to assess the description of night shift nurses with respect to key variables, including the impact on personal life, development of nurse - patient relationship and work satisfaction.

**Results:** Survey respondents are in support of allowing nurses to take structured naps to alleviate fatigue and to offer them the opportunity for rejuvenation to perform their responsibilities safely and to maintain good physical and mental health. However, when asked "In your hospital, are night shift nurses allowed to nap if they feel too fatigued to provide safe patient care?" 100% participants indicated that napping was not permitted. Participants indicated highest agreement on increased fatigue and sleep deprivation having the potential for increase in error making. The majority of the participants reported that if a nurse made an error related to fatigue that they would receive a verbal warning or reprimand.

Conclusion: Due to the small sample size it is not possible to generalize the findings.

**Implication for Practice:** Nurses that are rested are in a better position to think critically and demonstrate good clinical reasoning by using sound judgment to make sound clinical decisions (IOM 1999). Our current healthcare industry has placed strong emphasis on performance and patient satisfaction scores and the financial viability of hospitals are dependent on them. (CMS 2013) Therefore, administrators and leaders need to ensure patient care providers are satisfied and have the ability to practice in a safe environment.

Key Terms: Nursing, Night shift, Safety, Health, Benefits, Patient, Napping

### Diagnosis and Treatment of Post-Dural Puncture Headache (PDPH): Improving Patient Outcomes Using an Algorithm

#### Thomas M. Lansden

**Background and Significance:** Puncture of the dura and subsequent post-dural puncture headache (PDPH) are well known complications associated with substantial discomfort (Baysinger, Lockhart & Mercaldo, 2011). Diagnosis and treatment regimens vary widely among anesthesia providers resulting in delays in patient care and increased hospital readmissions for treatment (Bezov, Lipton, & Ashina, 2010). Accurate diagnosis and treatment of PDPH performed in a rapid and uniform manner by anesthesia providers using algorithms may alleviate, or at least decrease, pain and suffering caused by this severe type of headache. In the case of the post-partum patient with PDPH, it may also offer increased bonding time for mother and baby, as well as reduce costs incurred through readmission for treatment, resulting in a significant improvement in patient satisfaction (Reamy, 2009).

**Methods:** An on-line survey was created to evaluate the usability of the diagnostic and treatment algorithms created for the study. These algorithms were included with the survey. Consent was obtained by two separate anesthesia private practice groups comprised of approximately 100 Anesthesiologists and CRNAs employed on either a full time or part time basis who provide contracted independent services to four hospitals within one healthcare system in Florida. *Inclusion criteria*: Anesthesia providers; either Anesthesiologists or Certified Registered Nurse Anesthetists (CRNAs) employed by 2 private practice anesthesia groups in Florida on either full or part-time basis. *Exclusion criteria*: Cannot read and write English.

**Results:** Quantitative analysis will be used to evaluate the data obtained in the survey. Preliminary results indicate overall satisfaction with the ease-of-use and accuracy of the algorithms, with several respondents stating they would in fact; incorporate them into their daily anesthesia practice.

**Significance for Practice:** The introduction of algorithms for the uniform diagnosis and treatment of PDPH may assist the anesthesia provider in making timelier, accurate decisions, offering treatment options for the alleviation of pain and accompanying symptoms which may be unfamiliar to the provider at present. Reduction of hospital re-admissions and increased patient satisfaction are additional benefits.

Key words: PDPH, Dura, Algorithms, Usability, Survey

#### Investigation of Intensive Care Unit Readmissions

#### Erin Latina

**Background:** Critically-ill patients, and in particular those admitted to the Intensive Care Unit (ICU), are some of the hospital's most vulnerable patients. Their alterations in physiology, need for interventions and life-sustaining support, and chronic comorbidities place them at a high risk for complications and prolonged length of hospital stay. Recent studies indicate that the rate of readmission to ICUs throughout the United States has increased over the past 20 years, and while several large-scale studies have proven the correlation between readmission and poor outcomes, there is a knowledge-gap regarding the specific reasons for readmission and how these can be addressed.

**Purpose:** The purpose of this quality improvement (QI) project is to discern the primary reasons that patients return to the ICU in the first 72 hours after internal transfer from the ICU to a step-down unit, telemetry unit, or medical-surgical floor. This study explores the first phase of an initiative to reduce ICU readmission rates and improve continuity of care and patients outcomes. Data gathered will be used to provide a concrete basis for targeted interventions to decrease this phenomenon.

**Methods:** A retrospective, quantitative chart review of adult patients admitted to the ICU at Catholic Medical Center, a 330-bed community hospital in New Hampshire, was performed. Charts were evaluated in detail with data collection including basic demographics, diagnoses, date and time of transfer and readmission, temperature, heart rate and rhythm, blood pressure, respiratory rate, oxygen saturation and oxygen support requirements, and basic laboratory values.

**Results:** Fiscal year 2014, which included a total of 1,876 ICU admissions, was reviewed. A total of 115 readmission events within several days of ICU discharge were recorded and evaluated for this project. Patients who underwent surgical procedures requiring readmission to the ICU for recovery were excluded from recruitment. All patients included were over age 18 and remained hospitalized during the 72 hours prior to transfer back into the ICU. A total of 37 events involving 32 patients met the inclusion criteria, with 4 patients having multiple qualifying readmissions. Of the selected patients, the average hospital length of stay was 19.8 days, and the patients spent an average of only 28.6 hours on the transfer unit prior ICU readmission. The most common reasons for readmission were cardiac events (37.8%) and respiratory events (37.8%), followed by neurologic events (18.5%). Readmissions occurred on a weekend or holiday 40.5% of the time, and 35.2% were during off-hours. One of the hospital's surgical units was responsible for 48% of the readmissions, and 51% were under the care of the same service.

#### **Implications for Practice:**

The data collected for this project will be used to inform phase two of this QI initiative, which includes targeted efforts to reduce readmissions through a post-ICU transfer rounding program that focuses on supporting the unit with the highest rate of readmissions and screening patients for cardiac and respiratory changes.

Key Words: ICU readmissions, mortality, morbidity, length of stay

# Examining the outcomes for the Pain Treatment Service before and following the addition of a nurse practitioner for children with Primary Pain Disorders

#### **Adrianne Louloudes**

**Background:** The Pain Treatment Service in a 400-bed tertiary care pediatric hospital is a consulting service with an average in-patient census of 30 patients per day and a range of 30-60 patients per day. The service provides around the clock care with one physician and one nurse practitioner. A nurse practitioner is available for coverage overnight. Included in the daily inpatient consults are requests to manage children with chronic pain or Primary Pain Disorders (PPD). Prior to August 2013 the physician assigned to the service for the day completed consults for children and young adults with PPD. In response to the increase in number of consults for PPD and a desire to provide continuity of care for this group of patients, a new NP position was created to manage this subset of patients.

**Methodology:** The purpose of this project was to compare outcomes of length of stay and readmission rate between 2 patient cohorts managed by the Pain Treatment Service. The first cohort, group 1, consists of patients consulted for PPD and managed by the physician from July 2012 through July 2013. The second cohort, group 2, consists of patients with PPD managed by the nurse practitioner (NP) from August 2013 through August 2014. Through a comprehensive, retroactive chart review the primary outcome variables for measurement of the impact of the NP role are length of stay (LOS), and readmission rate within 30 days of discharge. The variables of age, gender, and diagnosis provide demographic information for descriptive purposes of the patient population. The secondary variables of interest address the treatment plan and include pharmacologic and non-pharmacologic methods of pain management. These include referrals for physical therapy, occupational therapy, psychology, nutrition and social work, which reflect the multidisciplinary approach and rehabilitative model of care recommended for children with primary pain disorders.

**Results:** Primary outcomes of length of stay and readmission rate for cohort 1 and 2 were 4.94 days and 2.85% and 6.86 days and 23.3%. The cohorts were similar for age, gender and admitting diagnoses. The discrepancy between the two groups in regard to LOS is due to three patients with prolonged length of stays and complex medical needs in the second cohort. Overall the qualities of care as measured by our indicators were similar with the exception of LOS and readmission rates.

**Implication for Practice:** This quality improvement initiative provides evidence in support of the Nurse Practitioner role in the management of children and young adults hospitalized with primary pain disorders.

Key Words: Children, Nurse Practitioner, Pain, Primary pain disorders

### An Exploration of Why Oncology Patients Do Not Adhere to Oral Chemotherapy Regimes

## Kelly McCue

**Background:** Over the last twenty years oral chemotherapeutic agents have become a viable option to cancer treatment offering vulnerable oncology patients less side effects than intravenous chemotherapy and better quality lives. However, this oral chemotherapeutic agent delivery trend has begun to demonstrate many adherence barriers for patients who are now enabled to self-medicate oral chemotherapy and poses challenges for oncology nurses. When oral chemotherapy is administered outside of a controlled clinical setting, barriers to adherence can be ten-fold as compared to chemotherapy provided in an observed clinical setting. It can involve patient and nurse behaviors that are concordant or discordant with those associated with therapeutic cancer treatment, significantly contributing to its success or failure.

**Methods:** The purpose of this study was to determine factors that present barriers and challenges to oral chemotherapy adherence with a goal to improve quality of care. The purposive sampling allowed recruitment of two groups in an oncology department in a rural community hospital: all four staff nurses and a convenience sample of twelve existing and new oncology patients who met the standard eligibility criteria for oral chemotherapy self-administration. A multi-perspective qualitative study was completed using investigator-developed surveys specific to each group with follow-up audio taped discussions.

**Results:** Predominant themes emerged from two perspectives into provision of patient care related to oral chemotherapeutic regimen adherence providing useful insights. Patients reported that they want to be informed about side effects to allay fears that they might have. They reported such barriers to oral chemotherapy adherence as side effects, drug distributor/manufacture issues, forgetting to take drug(s), and insurance issues. Barriers to oral chemotherapy adherence reported by nurses were cost, regime confusion, drug distributor delay, forgetting to take drug(s), nurse role confusion, documentation/provider communication problems, oncology nurse competency, side effects and patient fear. Nurses professed a commitment to oral chemotherapy barrier assessment and provision of interventions to overcome such barriers.

**Conclusions:** Results reveal that barriers to adherence can be paramount in preventing patients from attaining positive therapeutic outcomes. A better understanding of oral chemotherapy non-adherence and the barriers and challenges inherent in the process help guide patients to success and ultimately improve quality of life. Future plans include the development of assessment and education tools designed for use by nurses to assist patients to navigate through barriers, and contribute to improved, safe, oral chemotherapy adherence and treatment outcomes.

Keywords: Oral chemotherapy, adherence, barriers, nurse responsibility

#### Comparison of the National Comprehensive Cancer Network Distress Thermometer and Hospital Anxiety and Depression Scale among Gastrointestinal Cancer Survivors Elizabeth B. McGrath

**Background:** The diagnosis of cancer is often associated with symptoms of distress that can be due to a number of different psychological and physical factors. The overall incidence of psychological distress in cancer patients has been reported to be 24-59%. Significant distress levels occur at various stages of cancer including diagnosis, treatment, and survivorship. A survey of 1966 colorectal cancer survivors over 5 years found that the prevalence of high overall distress ranged between 32% and 44%. Symptoms of distress can impact the patient's ability to cope with their cancer and contribute to poorer quality of life (QOL). Prompt referral to support services when distress is identified can improve the patient's ability to cope and improve QOL outcomes. The use of a short screening tool that is easy for the patient to complete and the provider to interpret is ideal. The potential advantages of the NCCN-DT over other screening tools are brevity and ease of administration and scoring.

**Statement of the Problem:** The National Comprehensive Cancer Network Distress Thermometer (NCCN-DT) is a well-known tool for screening patients with cancer for distress. Much of the literature to date has focused on the utilization of the NCCN-DT to screen patients who are newly diagnosed or are undergoing active treatment for cancer. There are limited research studies on the use of the NCCN-DT in the cancer survivor population. Furthermore, the research that has been done has drawn conflicting conclusions about the sensitivity of the NCCN-DT as a tool to detect clinically significant psychosocial distress in the survivor population.

**Purpose:** The purpose of this study is to compare distress level scores measured using the NCCN-DT with depression and anxiety scores measured using the Hospital Anxiety Depression Scale (HADS) among gastrointestinal cancer survivors. Previous studies have used the HADS as a criterion measure to validate the National Comprehensive Cancer Network DT among cancer patients. This study will validate whether the NNCN-DT is as sensitive as the HADS in detecting clinically significant levels of distress in the cancer survivor population.

**Methodology:** This is a descriptive, comparative study that will utilize two self-administered questionnaires: the NCCN-DT, which takes approximately five to six minutes to complete, and the HADS, which takes approximately two to five minutes to complete. A sample of 30 adults who have completed curative treatment for gastrointestinal cancer and who are returning to the outpatient clinic for regular follow-up visits will comprise the study sample.

**Analysis:** Summary statistics for characteristics of patients (socio-demographics, cancer information), anxiety and depression (HADS) and distress (DT and PL) will be analyzed. Then, a 2x2 table will be constructed between classification from NCCN-DT and HADS, frequency and percentage in each cell of the table will be provided. Sensitivity and specificity of the NCCN-DT will be calculated. P-value from Chi-square test of associations will also be provided.

**Implications:** Distress screening is an evidence-based approach to assess patients for psychosocial distress and need for early intervention. With increasing numbers of cancer survivors in the United States, distress levels in survivors will need to be screened and processes put into place for effective referral for supportive services. Screening for distress in cancer survivors needs to be part of routine follow-up as nurses are uniquely situated to provide this care. This, in turn could positively impact patients QOL and ability to effectively cope with cancer.

Key Words: cancer, coping, survivor, anxiety

#### An Analysis of Retrospective Chart Reviews to Identify Code Team Training Needs at Spaulding Hospital Cambridge Macgregor Morgan

**Background and Significance:** The American Heart Association (AHA) first published guidelines for cardiopulmonary resuscitation (CPR) in 1974 (Cummins et al., 1997). The 2010 *Advanced Cardiac Life Support (ACLS) Cardiac Arrest Algorithm* is the current established standard for clinical inpatient cardiac arrest treatment recommended by the AHA. To achieve the recommended standard of care, the AHA (2010) recommends routine training in CPR, the core requirement for ACLS. To implement these guidelines, hospitals need to establish a systems wide approach to in-hospital resuscitation rather than depend on the skills of individual professionals (Peberdy et. al, 2007). Through direct observations, anecdotal reports from colleagues, and feedback from staff code responders, improvement opportunities for both the performance of code responders and the systems that support first responders' activities have been identified. Providing patients with optimized cardiac arrest care according to the AHA established algorithm (2010) should improve patient's outcome.

**Purpose:** The purpose of this Quality Improvement (QI) research project is to analyze retrospective code data collected from medical records and assess adherence to the AHA's established *ACLS Cardiac Arrest Algorithm* (2010) and *Joint Commission Resuscitation Standards* (2013). Information obtained from this review will be compared with the AHA 2010 *ACLS Cardiac Arrest Algorithm* and *Joint Commissions (JC) Resuscitation Standards* (2013). Opportunities for system wide improvement may be addressed through this guided review of policy and procedures as well.

**Methodology:** This is a retrospective review of 26 medical records conducted over a 2-month period in fall 2014. Medical records of all codes within the hospital were accessed from January 1, 2014. Inclusion criteria: Only medical records listed as cardiac arrest were included in this review. The review continued until the target sample of charts was reached. Exclusion Criteria: Medical records of code events since January 1, 2014 not diagnosed with a cardiac arrest will be excluded from this QI research project. Investigator developed data collection guide was informed by Spaulding Hospitals Cambridge (SHC) *Code Blue Arrest Record, Code Blue after Action Report* and *Utstein-Style Reporting* template (Peberdy et al., 2007).

**Results:** Both quantitative and qualitative descriptive statistics will be the basis for analyzing data gathered. Results will be used to inform quality improvement recommendations for staff education and review of current policies and procedures regarding cardiac code events within the designated institution. An analysis and review of data from the 26 charts is in progress.

**Conclusion/Implications for practice:** The goal of this QI project is to use results to provide a foundation for future targeted training programs. Successful resuscitation requires early recognition of cardiopulmonary arrest, early activation of trained responders, and early advanced life support (Cummins et al., 1997). It is the hope that this retrospective chart review will lead to both identified training needs as well as overall system wide review. In order to improve practice we must first identify code team members' learning needs. This thorough retrospective chart review will identify opportunities for quality improvement and provide a foundation for future targeted educational programs. This review can also significantly inform us about the need to review and make changes to our systems approach to managing codes. Identified system needs will be reported to the institutional code committee with recommendations for improvement. With ongoing assessment, evaluation, and re-evaluation of code team members' performance during cardiac codes, and a thorough systems review we will be able to continuously improve care provided to our patients at SHC and enhance nursing practice.

Key Words: Code Team, American Heart Association, Code Team Training Needs

#### Analysis of Knowledge and Competencies Required to Prepare Entry Level Nurses to Address Violence Prevention in Practice Cheryl Nadeau

**Background:** Youth violence is a complex and pervasive problem, and comes in many forms: child maltreatment, interpersonal violence, gang violence, adolescent dating violence, bullying, self-harm, suicide and homicide. Once weapons are introduced to the situation, what started as a fistfight may end in a funeral. Whether youth are victim of or witness to violence, the consequences are significant and may include anxiety, depression, self-harm, post-traumatic stress, learning problems, somatic complaints, and impaired psychosocial functioning that may carry into adulthood. Entry level nurses work in a variety of settings that provide care to youth, placing them in a distinct position to facilitate violence prevention and detection, however the education of nurses is central to their participation.

**Purpose:** to explore what entry level nursing competencies are necessary for violence prevention and detection, and therefore what undergraduate curricula content is needed to adequately prepare new nurses to address violence as a public health problem. The Ecological Model for Human Development was used as the underlying theoretical framework. This model views interpersonal violence as the outcome of interaction among many factors at four levels – the individual, immediate relationships, the community, and societal.

**Methods:** This qualitative study used a purposive convenience sample of 16 individuals from a variety of professions who work in primary, secondary, and tertiary levels of violence prevention. The selected design was premised on the fact that violence prevention is a complex issue that requires collaboration among many professions and community disciplines. Eight participants were professional nurses representing pediatric health, emergency departments, child protective services, school health, community and public health, homeless health services, and nurse educators. The other eight included individuals involved in youth violence prevention in other capacities and represented teachers, physicians, emergency responders, community activists, youth service providers, and violence prevention advocates who have been personally impacted by gun violence. Data were collected through individual interviews using a semi-structured investigator developed guide. Thematic analyses identified categories, patterns and themes.

Results: Preliminary results demonstrated consensus among key informants on many aspects of youth violence. All agreed that it is a significant public health issue that has far-reaching implications for individuals, families, communities and society as a whole in terms of lives lost, injuries requiring life-long care, quality of life, and economic impact on the health system. There was also agreement that the risk factors for violence are multifactorial and complex necessitating a multidisciplinary approach to the problem from both the health sector and community stakeholders, and that nurses should have a role within that team. The most common themes identified for the role of the nurse included preparing nurses to perform screening, education, counseling, advocacy, and to promote positive parenting skills. All participants agreed that nurses should screen for guns in the homes of children as part of anticipatory guidance about safe storage, but a common sub-theme within this topic was how to de-politicize the issue and make it objective. Themes that emerged for incorporating violence prevention into basic nursing education included the importance of threading the topic throughout the curriculum, addressing linkages between multiple forms of violence, and providing skills in communication when asking sensitive questions. Another theme was to give nurses the skills on how to respond when they identify a positive case of violence, and how to "connect the dots" - prepare nurses to be able to appropriately connect clients to services. Additional themes that emerged were the importance of educating nurses on personal safety, and giving them skills to assess the workplace environment to identify queues that may escalate to a violent situation. Participants also recommended that nurses know how to behavioral signs and somatic symptoms of violence exposure among youth.

**Significance for Practice**: As the largest group of health professionals, and often the first point of contact for actual or potential violence, it is imperative that the educational system provide entry level nurses with adequate knowledge and skills to prepare them to address violence in youth as well as prepare nurses to protect themselves in the workplace. The participants in this study identified and described the competencies or skills needed by entry level nurses to adequately address violence as a public health problem in practice.

Key Words: Violence prevention, violence screening, entry level nursing competencies

#### Implementation of the Day of Surgery Evaluation (DOSE): A Department of Anesthesia Quality Assurance Project at Tripler Army Medical Center

#### Maevelyn A. O'Donnell

**Background:** Optimizing patients for surgery is a facility-dependent process, based on the preoperative needs and resources available. The preoperative evaluation is a key component of this process, but it may also be a source of added stress to both the patients and their families. It is an interdisciplinary effort that should ensure all administrative and clinical information is completed thoroughly, expediently and in a cost-effective manner. It can otherwise result in operating room delays, surgical case cancellations, and decreased patient satisfaction. The impetus for streamlining the preoperative process was due to protracted patient visits to complete the necessary clinical and administrative requirements prior to surgery. In March 2014, the anesthesia department instituted a new day of surgery evaluation (DOSE) protocol for conducting the preanesthetic assessment. The purpose of this project was to assess the anesthesia providers' attitudes towards the DOSE protocol and to investigate whether DOSE shortened the preoperative assessment time.

**Methods:** A survey with 14 likert scale and one open-ended question was designed, piloted and administered in October 2014 to assess the knowledge, attitudes, and reported behaviors of the anesthesia providers related to the DOSE protocol change. Survey results were analyzed comparing selected variables such as the type of provider (anesthesiologist/CRNA), military service (civilian/active duty), educational attainment, years of clinical experience, and length of time at the study site. Univariate and bivariate analyses were used applying appropriate parametric and nonparametric statistical tests.

The impact of the DOSE protocol on the preanesthetic assessment time was evaluated using a pre-post analysis of the documented minutes of service (MOS) defined as time spent by each patient for their preoperative evaluation. Extant MOS data were analyzed from April to June of 2013 and April to June of 2014. Comparison of these specific time periods was done to control for yearly changes in the experience and staffing of anesthesia providers including the transition of surgical residents in July. Mean MOS by service and type of surgery were analyzed for the pre and post-DOSE time periods. Statistical significance was set at p<0.05. NCSS version 9.0.15 statistical software was used for the analyses.

**Results:** The survey response rate was 93% as 26 of the 28 eligible anesthesia providers completed the survey. Of the respondents, 69% (18) were CRNAs and 31% (8) were anesthesiologists; 46.2% were active duty military; the mean years of experience was 10.4 (sd 9.4), median of 6.5, and range of 0.9 to 30; the mean years of employment at the project site was 5.6 (sd 4.7), median of 3.8, and range of 0.9 to 20. There were no statistically significant differences in the distribution of responses by type of anesthesia provider for any of the questions. All providers agreed that a change in protocol was needed and that patient satisfaction improved after the protocol change. A majority of providers agreed that productivity and staff utilization had also improved. More providers agreed that turnover time (i.e. the time between cases) can be prolonged, as sub-optimized patients arrive on their day of surgery requiring additional follow-up before proceeding with their surgery. Trends were observed for years of experience and employment. The mean MOS compared before and after the DOSE protocol implementation revealed statistically significant decreases (each p<0.0001) for April (162.4 vs 136.8), May (136.7 vs 82.2), and June, (155.1 vs 87.2). The data collected included all surgical subspecialties, stratified into in-patient and ambulatory surgery patients.

**Application to Clinical Practice**: Improving efficiency within a department is a major goal throughout health care systems, particularly given the escalating costs and importance of achieving the Triple Aim. Quality assurance projects like this one that assess the impact of the attitudes and perspectives of providers combined with analyses of outcome measures regarding a change in protocol provide useful data to determine if additional changes or resources are needed. The process we applied to assess DOSE can also be applied to other protocols in the anesthesia department and other departments to facilitate appropriate changes and improve clinical and administrative practices.

Key Terms: preoperative, preanesthetic, evaluation, assessment, provider survey

## An Education Intervention for Improving Utilization of a Rapid Response Team

## **Kimberly A. Smith**

**Background:** Rapid response teams arose from research which revealed the early signs of clinical deterioration in some hospitalized patients were evident prior to serious adverse events, such as cardiac arrests (Jones, DeVita, & Bellomo, 2011). A delayed recognition and response of the clinical team in these circumstances was viewed as a "failure to rescue", so early crisis detection, effective response triggering, and expert clinical team activation has become part of standard hospital care in the United States and many other countries (Jones et al., 2011). The arrival of a rapid response team to a patient's bedside brings additional knowledge, skills, and decision making to promote optimal outcome for the patient. Despite the availability of advanced clinical expertise, clinicians often either fail to recognize the signs of clinical deterioration or hesitate to respond through activating the rapid response team (Schein, Harzday, Pena, Ruben, & Strung, 1990; Winters, Weaver, Pfoh, Yang, Pham, & Dy, 2013).

**Purpose:** The purpose is to implement a quality improvement project through the provision of nursing education about early recognition of patient clinical deterioration and rapid response activation. The goal of this educational intervention is to increase the number of rapid response activations on the subject medical inpatient unit.

**Methodology:** A convenience sample of 15 Registered Nurses (RNs) employed on a selected medical inpatient unit within a community hospital volunteered to participate in this pre and post educational intervention designed project. A face-to-face 30 minute education session was provided to each group of participants, repeated five times to accommodate the schedule of all 15 nurses. A pre and post 20 yes or no item paper test was administered for each session to assess nurse's knowledge about rapid response trigger criteria, taking 5 minutes of less to complete.. This pre- and post- test had the same content each session but was given in a different item order.

**Results:** The total number of activations per month on the study unit were tracked for two months prior to the first education session as were the total number of activations per month for two months after the last educational session. Data is currently in analysis stage.

**Implications for Practice:** The expectation for this project is the timely identification of significant clinical signs and symptoms, quick response triggering, and prompt team arrival will be improved and, therefore, the risk of further clinical decline will be reduced for some patients. In addition the quality improvement design of the study will contribute to the hospital's evaluation of the effectiveness of the current rapid response system.

**Key Words:** Rapid Response activation, effective response trigger criteria, Early identification of clinical deterioration

## Exploratory Study to Gather Data as to why Masters of Science in Nursing (MSN) Prepared Nurses Chose to Pursue a Graduate Degree, and why They Have Remained in the Same job as Before Their Educational Advancement

## Kathleen Murphy Spinello

**Background**: The Institute of Medicine released in 2010 *The Future of Nursing: Leading Change, Advancing Health.* It was identified that the United States will be reaching a critical shortage of nurses in the next ten years, and it is important to begin recruiting the next generation of nurse leaders, and to encourage nurses to obtain graduate degree education in nursing. As health care systems begin the process of identifying future needs and how their nursing departments will be effected, it is also important to identify how many nurses are already employed within a given health care system that have earned master's degrees in nursing (MSN), yet are still practicing at a level of a bachelor's degree nurse (BSN).

**Purpose:** To determine how an organization can best utilize MSN prepared nurses, and to create avenues to maximize the educational expertise of the nursing staff in innovative ways to improve nursing practice and contribute to quality patient care.

**Methods**: An exploratory study using a phenomenological qualitative approach with semistructured one on one interviews with a purposive convenience sample of staff nurses at an urban medical center who meet the inclusion criteria. Appreciative Inquiry (AI) will be the approach used while planning and performing the project.

**Results**: Content analyses will be performed by the study team to identify themes. There are no presumptions going into the interview process, therefore it is not possible to know in advance what the outcomes might be. Results could implicate practice because nursing leadership within a hospital can understand how to best utilize nurses already employed within the organization.

**Implications for Practice**: As nurses in a healthcare center are identified as having earned a master's degree in nursing, it is important for nursing leadership to determine what the facilitators and barriers are that the individual nurse faces in obtaining a leadership position within that institution, whether the degree has a focus on education or leadership. It is the intent that this data will contribute to the development of a staff mentoring and development initiative within this institution to address this issue and better utilize these valuable often untapped resources.

Key Words: Appreciative Inquiry, Nursing Education, Future of Nursing

## Evaluation of a pilot project on group visits for well-baby care in a rural pediatric practice

#### Susan O. Sykas

**Background:** Use of Group Medical Visits (GMV) or Shared Medical Visits (SMV) has gained interest since first proposed in 1999 by Noffsinger as a solution to delays in access to care. In addition to improving access to care and cost saving benefits, group visits were found to increase both patient and provider satisfaction. GMV/SMV's have recently gained acceptance in areas beyond the original adult chronic care model situations, increasing understanding and fostering empowerment in self care management (Mackey, 2009; Noffsinger, 2002; Page, Reid, Andrews & Steiner, 2013; Trotter, 2013).

**Purpose:** The purpose of this initiative is to evaluate the feasibility of incorporating group visits into routine well-baby care in a rural pediatric practice. The objectives are to assess parent/caregiver satisfaction and potential benefits of a group visit format for routine well baby visits as an alternative option to standard individual visits with families. The primary goal is to offer parent(s)/caregiver(s) flexibility in scheduling well baby care and enhance satisfaction to promote healthy families and infants; hence, improved outcomes in the quality of care.

**Methodology:** This quality initiative is offered during a 6-month period beginning in fall 2014. The purpose is explained to parent(s)/caregiver(s) by a healthcare provider at the first newborn visit or at any office well visit before the infant reaches 9 months of age. Participating families are recruited from families whose infants receive pediatric primary care at a pediatric practice in rural Vermont. The group visit option is presented as a voluntary option to standard individual well-baby care visits, which occur at ages 2 weeks to 9 months. There are typically 5 or 6 visits during those months, at 1-, 2-, 4-, 6-, & 9months with an additional visit at 2 weeks for young or first time parent(s)/caregiver(s). Parent(s)/caregiver(s) are given the option to attend one or more group visits during the pilot. A convenience sample of 10 volunteer families for the group visit intervention will be compared to 10 families with age matched well-baby visits receiving standard individual appointment care during the same duration of this pilot initiative. Inclusion criteria for the intervention group: parent(s)/caregivers(s) of healthy babies, single infant or twins, ages 2 weeks to 9 months. Exclusion criteria: caregivers of infants younger than 2 weeks, ill infants, or any infant with a complex condition that requires specialty care. Anonymous pre- and post- initiative surveys are completed at each visit from both the group visit and the individual visit families. The same written informational invitation letter was shared with the practice office staff. The entire pediatric practice staff are asked to complete a brief post-initiative evaluation satisfaction survey.

**Preliminary Results**: Initial response to this pilot has been guarded optimism on the part of participants that group visits will offer more contact time with nursing and medical staff. Benefits noted thus far include positive response to the concept of the visit occurring at a time without exposure to other ill children and appreciation of networking with other families in similar circumstances. Group visit intervention satisfaction rates will be compared to the satisfaction rates of families receiving individual care visits during this same time period. Staff evaluation results will be analyzed.

**Implications for practice:** Primary care practices continually seek ways to improve access and patient satisfaction while providing high quality care. Reports of group visit initiatives over the past 5 years have documented improved access, improved outcomes, and increased patient understanding about the care provided. Additionally patients and families have reported a sense of empowerment, more peer support, and increased adherence to treatment regimens (Mackey, 2009; Rijswijk et.al, 2010; Trotter, 2013).

Key Words: Group Medical Visits, Shared Visits, Anticipatory Guidance, Infant Care

## Leadership Perspectives from Two Regional Professional Nursing Organizations on the Impact of Advocacy Initiatives on Nurses' Motivation to Sustain Momentum in Public Policy Advocacy

## **Melissa Taylor**

**Background:** There are approximately 3.1 million registered nurses in the United States (ANA), 2014). Nurses are the largest group of healthcare providers and, when working collectively, could garner enough power to reform the nation's health system (Abood, 2007). Many educational opportunities, learning tools and advocacy strategies exist for nurses through professional nursing organizations, undergraduate and graduate nursing programs, yet a significant number of nurses remain disengaged from the process of public policy advocacy. Sustained participation in public policy advocacy is necessary to develop nursing's expertise, knowledge and impact in the policy arena.

**Purpose**: The purpose of this study is to elicit insight from the health and legislative policy leaders of 2 regional professional nursing organizations on key qualities of their current advocacy initiatives that motivate nurses to sustain momentum in public policy advocacy beyond a single episode. The goal is to inform quality improvement in the development of future advocacy initiatives to increase sustained engagement of nurses.

**Methods**: Social Cognitive Theory was used as the rationale for this qualitative, descriptive study. A purposive convenience sample of Executive Leadership and Board committee members from 2 regional professional nursing organizations were recruited to complete an initial web-based electronic survey, followed by separate semi-structured interview focus groups. One organization was composed primarily of advanced practice registered nurses (APRN) and the other group composed of a diverse, multi-specialty nursing membership of varying educational levels.

**Results**: Nine themes emerged, categorized as facilitators or challenges to the positive impact of advocacy initiatives on nurses' motivation.

**Implications for Practice**: Highlighting and marketing facilitators to the positive impact of advocacy initiatives on nurses' motivation may help sustain momentum in public policy advocacy. It is also critically important to design, and test new initiatives that address the challenges to that positive impact. Updating and refining advocacy initiatives may serve to increase the number of nurses who sustain engagement in the policy advocacy process.

Key Words: public policy advocacy, political activism, political competence

## Evaluating the Impact of a 360-degree Survey and Feedback Quality Improvement Process on the Workplace Environment in a Community Hospital Operating Room

## **Mary Wiggin Loux**

**Background and Significance:** Since the publication of *To Err is Human: Building a safer health system* in 2000, much attention has been paid to the underlying causes of error in health care, resulting in growing recognition of the relationship between teamwork and safety. (Clancy, 2009) Teamwork is increasingly viewed as resulting from a cluster of behavioral characteristics such as leadership, communication style and technical competencies. The PULSE (P.hysicians/Professionals U.niversal L.eadership S.kills E.ducation Survey provides 360 degree assessments of individuals' "people skills". Personal feedback is then provided to facilitate self-improvement. (Physician's Development Program, 2014) Originally designed for use with physicians, the PULSE 360 process has proven to be a valuable tool for transforming negative behavior patterns. (LaPenta et al, 2011; Harmon et al, 2008) More recently a PULSE 360-Nursing tool has been adapted to assess workplace behaviors of nurses and other health care professionals. This project's is intended to determine if the improvements noted with physicians are replicated when the modified tool is used with a group of nurses and surgical technologists.

**Purpose:** The purpose of this project was to assess the sustainable impact of PULSE 360 feedback on workplace behaviors exhibited by (OR) Nurses and Surgical Technologists working in a single community hospital Operating Room.

**Methods:** This descriptive study used an abbreviated web-based survey tool, the Improvement PULSE-Nursing to evaluate the sustainable impact of a Fall, 2013 quality improvement (QI) initiative, which used the PULSE 360-Nursing to assess peer perceptions of co-workers' behaviors. During October of 2014 each rater who had completed an initial PULSE 360-Nursing Survey received electronic requests to complete one Improvement PULSE-Nursing, for each original PULSE 360-Nursing survey they had filled out. The follow up survey consisted of three improvement questions to assess behavioral changes, and one familiarity question to assess how well the rater knew the subject. A 1-5 Likert scale was used to determine degree of observed change. A score of three indicated no change while a score of 5 indicated great improvement.

**Results:** Statistically significant improvement was noted in all categories measured. The overall mean score was 3.59. The two-tailed P value was less than 0.0001. The 95% confidence interval ranged from 0.3565 to 0.8235.

**Implications for Practice:** Hostile or aggressive behavior (horizontal violence) displayed by health care workers toward each other has been linked to negative outcomes such as depression, anxiety, decreased work performance, and increased turnover. (Becher & Visovsky, 2012) In addition the Joint Commission on the Accreditation of Healthcare Organizations has reported that disruptive behavior among team members can negatively impact patient safety and contribute to sentinel events. (JCAHO, 2003) This data suggests that providing healthcare workers with 360-degree behavioral feedback may improve patient outcomes, as well as overall satisfaction among team members. Further research is indicated in order to determine if the behavioral improvements associated with the process correlate with improved patient outcomes and staff satisfaction.

Key Words: Patient Safety, Horizontal Violence/Healthcare, 360 degree evaluations.