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ABSTRACTS

8th Annual Evidence-Based Practice/Research Conference Leveraging Innovation to Transform Healthcare

September 19, 2016 Ochsner Health System, Center for Nursing Research, Louisiana State University Health New Orleans School of Nursing New Orleans, LA

General Session Abstracts 1.1-4.4

Poster Abstracts P1-P24

1.1 Working Conditions and General Well-Being, Predictors of Overall Quality of Working Life of US Medical Surgical Bedside Registered Nurses Working in Acute Care Hospitals: A Secondary Data Analysis

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Background: Quality of working life (QoWL) issues (perceptions of poor working conditions and poor general health) for bedside nurses in acute care hospitals are associated with increased patient mortality, infections, number of patient falls, pressure ulcers, and medication errors. Medical surgical nurses encompass 73% of nurses in the hospital setting. In the American Nurses Association survey (2011), 74% of the nurses reported acute/chronic effects of stress and overwork. Among all occupations, nurses ranked fifth in musculoskeletal injury/illnesses that required days away from work. The purpose of this secondary analysis was to examine the relationships of working conditions (WC), general well-being (GWB), and overall QoWL of US medical surgical bedside registered nurses working in acute care hospitals.

Methods: Responses from 542 bedside medical surgical registered nurses from the Academy of Medical Surgical Nurses organization were used for this secondary analysis. Correlations of the variables WC, GWB, and overall QoWL were conducted using the Spearman rank order correlation, and ordinal logistic regression analysis was used to examine the association between the variables.

Results: Positive moderate to high correlations were identified among WC (r_s =0.72, P=0.001), GWB (r_s =0.66, P=0.001), and overall QoWL. With a 95% confidence interval, a one SD increase in working conditions has 3.90 times greater odds of a higher level of overall QoWL.

Conclusion: Future research is warranted to explore the impact of working conditions, nurses' health status, and QoWL of US bedside nurses in various healthcare settings. Nurses' perceptions of QoWL will provide the basis for developing strategies to improve nurse retention, organization cost, and quality patient care.

1.2 An Academic-Practice Partnership to Drive Improvement of Quality Outcomes Through Transitional Care Services

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Background: According to the Centers for Disease Control and Prevention, approximately 20% of Medicare patients discharged from hospitals are readmitted within 30 days of discharge at an additional cost of \$26 billion per year. Hospitalization and discharge planning have typically been the focus of quality care initiatives. Patients with chronic conditions and complex treatment regimens are particularly vulnerable to breakdowns in care during transitions. This project was aimed at providing appropriate interventions in the home setting to reduce hospital readmissions.

Methods: This partially grant-funded quality improvement project used an academic-practice partnership model in the home to provide interprofessional transitional care services to manage chronic diseases, improve the patient experience through better healthcare navigation, and provide quality of life improvements. The partnership established the Health Transitions Alliance (HTA) program, which included a physician, 2 nurses, a social worker, health coach, and student interns. From August 2013 to December 2015, 65 participants (mean age=69 years) were identified as high risk for readmission (acute myocardial infarction, heart failure, pneumonia, and chronic obstructive lung disease) and enrolled into the program. The majority of participants (n=58) were Medicare beneficiaries. Each participant received an in-home assessment and was evaluated for specific resource needs. Either in-home or telephone assessments continued weekly based on individual participant needs. Weekly interprofessional huddles focused on identifying individual participant needs and locating resources to minimize obstacles to the following: medication regimen adherence, accessing appropriate food sources to accommodate dietary restrictions, and mobility and safety (ie, building a ramp for home access).

Results: In the 65 program participants, the overall 30-day readmission rate was reduced by 42% at 7 months and by 72% at 18 months following project implementation.

Conclusion: Initial readmission rate outcomes support continuing the HTA program to reduce readmissions in high-risk Medicare beneficiaries.

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1.3 Impact of Stress on Sleep Quality Among Baccalaureate Nursing Students

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Background: Many baccalaureate nursing students reported having poor sleep quality during their professional studies, which might be attributed to their stressful academic life. While poor sleep quality influences performance, the relationship between stress and sleep quality among nursing students has not been adequately addressed. The purposes of this study were to (1) examine the general sleep quality and stressors among baccalaureate nursing students and (2) investigate the relationships between sleep quality and stress among participants.

Methods: This cross-sectional, descriptive, and correctional survey study was based on 4 measuring tools: Pittsburgh Sleep Quality Index (PSQI), Epworth Sleepiness Scale (ESS), Recent Life Changes Questionnaire (R-RLCQ), and Perceived Stress Scale (PSS). Informed consent forms and questionnaires were given to 136 participants from a 4-year baccalaureate nursing program. Participants recorded their overall sleep quality and self-evaluated stress level from October 1-30, 2015. Data were analyzed using descriptive statistics, Pearson correlation, independent sample *t* tests, and multiple regression.

Results: The majority of participants were female (76.47%) and single (77.2%), with an average age of 21.5 years. Most (80.88%) went to bed between 11 pm and 12 am, with 5.5-6 hours of sleep time. The majority of participants had a PSQI score >5, which indicated poor sleep quality. Most reported stresses from work, living arrangements, and personal relationships and social life. A significant number of participants reported feeling nervous and stressed but were confident in their ability to handle/control the situation.

Conclusion: Stress was found to impact the sleep quality of the participants. Many reported taking more than 30 minutes to fall asleep at least 3 times a week. The use of handheld devices to connect to the internet and social media may have had an unmeasured impact. The amount of time spent using a smart phone/handheld device prior to falling asleep was not investigated and warrants further investigation.

1.4 Challenges in Conducting Systematic Review

Marsha J. Bennett, DNS, APRN, ACRN, CNE; Louisiana State University Health Sciences Center School of Nursing, New Orleans, LA

2.1 Surviving Sepsis: Using Evidence to Design Workflows in the Electronic Health Record

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Background: Sepsis is a syndrome characterized by physiologic changes in response to systemic infection that can lead to septic shock and circulatory collapse. In October 2015, the Centers for Medicare and Medicaid Services classified sepsis a core measure. There was a need to develop a systematic and standardized approach to clinical care and data acquisition related to sepsis care.

Methods: The Modified Early Warning Systems (MEWS) was enhanced to detect septic patients through sophisticated algorithms in the electronic health record. Clinicians, nurse informaticists, and quality improvement experts came together to design a user-friendly system to automate data collection and reduce the burden of abstraction.

Results: Sepsis best practice alerts for providers and nurses have led to an increased awareness of patients who may be experiencing sepsis. Order sets, decision support tools, and timely reports can now be used in daily practice by bedside clinicians. The next step is to evaluate adherence to electronic prompts and link those activities with patient outcomes.

Conclusion: Leveraging technology is likely to enhance clinical efficiency and optimize patient outcomes.

2.2 Effects of Essential Oils on Sleep Among Cardiac Rehabilitation Patients

Patricia Newcomb, PhD, RN, CPNP; Health Resources, Fort Worth, TX Brenda McDonnell, BSN, RN; Texas Health Resources, Fort Worth, TX

Background: Sleep deficiency or poor-quality sleep have been linked to cardiovascular morbidity in epidemiological studies. Weak evidence supports the use of some essential oils for sleep improvement. The primary objective of this study was to determine if there was a significant difference between the sleep quality of cardiac rehabilitation patients exposed to the aroma of an essential oil mixture, including lavender, bergamot, and ylang-ylang, and those not so exposed.

Methods: This was a randomized, double-blind, crossover pilot study. Forty-two outpatient cardiac rehabilitation patients placed cotton balls infused with the intervention oils or an aromatic placebo mixture at their bedside for 5 nights. After a 1-week washout period, patients were switched to the opposing group and repeated the treatment procedure. Subjects completed the Pittsburgh Sleep Quality Index (PSQI) at the conclusion of each treatment week. Mean PSQI global scores after treatment and placebo conditions were compared using the Student *t* test.

Results: Lower PSQI scores indicate better sleep quality. The mean PSQI score when receiving intervention oils was 4.9, while the mean PSQI score when receiving placebo was 8. Sleep quality during treatment was significantly better than sleep quality during placebo (t=-6.386, P=0.0001). Hours of sleep were no different between the groups, but patient-reported sleep quality on a single item, "How would you rate your sleep quality overall during the past week?", was significantly better among the group exposed to essential oils (χ^2 =4.5, P=0.03) than the placebo group.

Conclusion: The effect of essential oil inhalation on sleep was substantial in this study (effect size: d=1). Furthermore, results indicated that quality of sleep, rather than sleep duration was affected. Essential oils may be an inexpensive and effective nursing strategy to improve sleep in cardiac rehabilitation patients.

2.3 Diabetes Distress in Type 2 Diabetes Hospitalized Patients

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Background: Diabetes is a chronic, progressive disease that requires lifelong self-management. Patients are required to attend multiple visits, adhere to medications prescribed, self-monitor blood glucose, follow a diabetic diet, and exercise. These tasks can easily become an overwhelming burden for those with diabetes. Patients may have concerns about development of complications, fear of hypoglycemia, and guilt of uncontrolled blood glucose that contribute to a down or depressed mood. As a result, motivation for self-care may be impaired. There is limited evidence about diabetes distress levels in the type 2 hospitalized patient.

Methods: The purpose of this study was to assess diabetes distress (DD) in inpatients admitted to a quaternary facility with type 2 diabetes mellitus (DM). Subjects >18 years, English literate, and on insulin or sulfonylurea at home were consented. A 17-item Diabetes Distress Scale (DDS17) with 4 subscales (emotional burden, physician distress, regimen distress, and interpersonal distress) was administered to a sample of 220 patients.

Results: Sample characteristics were compared using independent t tests. Chi-square tested DD subscale comparisons and linear regression tested a model of demographic characteristics, admit A1c, and DD. Subjects with DD (n=42) were significantly younger, had a longer history of DM, and had higher A1c than those with no DD (n=172). Subjects with DD had significantly greater scores across all 4 subscales; however, those with no DD reported emotional burden and regimen distress.

Conclusion: A1c (P<0.010) and length of DM (P<0.050) were significant independent predictors of DD. Results identify opportunities for future post discharge program development that should target strategies to reduce emotional burden and regimen distress, especially, or particularly, for patients with elevated A1c and a long history of DM.

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2.4 Canines for Kids: An Evidence-Based Inpatient Pediatric Animal-Assisted Therapy Program

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Background: Children's animal-assisted therapy (AAT) program provides emotional support to patients and their families within our pediatric healthcare organization and provides an environment conducive to healing and reducing stress and anxiety. Evidence supporting the benefits of AAT is well-documented. Children's organizational policy has adapted over time to support our unique resident canine therapy program, Canines for Kids. Our AAT program works collaboratively with Canine Assistants, a respected organization in Georgia that breeds specialized medical service dogs and trains both handler and canine. Pediatric facility resident dogs receive extensive training and are at ease in the hospital environment. Evidence-based policies help overcome concerns about possible adverse events and help safeguard both patients and animals. During 10 years, Canines for Kids has evolved into a model program consisting of 11 facility dogs. Our ongoing collaboration with Canine Assistants also provides experience to dogs in training to ensure availability of the next generation of AAT dogs in pediatric healthcare settings across the United States.

Methods: Evidence related to benefits and potential barriers for an inpatient AAT program was reviewed. Key stakeholders described the current program.

Results: Evidence-based guidelines provide a sound basis for hospital policies to reduce possible risk for either patient or service animal.

Conclusion: Collaboration of organizational leaders, expert dog breeders/trainers, and dedicated handlers in the pediatric setting can create a sustainable facility dog program based on sound guidelines to optimize patient safety and benefit patients, families, and healthcare providers.

3.1 Transforming Infant Safety Through Nursing Innovation: Implementing an Infant Safe Sleep Bundle

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Background: Sudden infant death syndrome (SIDS) is a leading cause of infant death. SIDS rates declined following back-to-sleep campaigns, yet deaths related to unsafe sleep environments continue to rise. This led to recommendations for infant sleep environments. An ABC's mnemonic for teaching safe sleep is widely reported, despite not reflecting current standards and not being tested for effectiveness. This project updated the ABC's mnemonic and tested its effect on nurses' and parents' safety practices.

Methods: This quasi-experimental pretest/posttest study used a convenience sample of 24 mother-baby (MB) nurses and 200 parent-infant dyads on an MB unit. Interventions included nurses (1) completing a 1-hour online SIDS risk reduction program and training on the ABC's mnemonic, (2) reviewing an ABC's crib card with parents, (3) posting the ABC's in the room, and (4) eliminating blankets and swaddling. Data analysis included descriptive statistics, paired *t* tests, and chi-square tests. Ongoing research will include results from 3 additional hospitals and neonatal intensive care units.

Results: There were statistically significant improvements on all measures. Highlights include infant supine position increased from 81% to 100%, $\chi^2(1)$ =20.79, P<0.001 (23-fold improvement); parents recall of safe sleep components increased from 20% to 85%, $\chi^2(1)$ =69.62, P<0.001 (15-fold improvement); no cosleeping (infants with parents) changed from 89% to 99%, $\chi^2(1)$ =8.87, P<0.003 (12-fold improvement); no soft objects/loose blankets in cribs increased from 55% to 80%, $\chi^2(1)$ =14.25, P<0.001 (3-fold improvement); no swaddling increased from 21% to 97%, $\chi^2(1)$ =119.39, P<0.001 (22-fold improvement).

Conclusion: A quick simple mnemonic significantly improved nurses' and parents' knowledge and behaviors. Consistent messaging and role modeling of national standards were highly effective strategies that improved infant safety.

3.2 Integrating Trauma-Informed, Age-Appropriate Care Evidence-Based Practices in a Surgical Neonatal Intensive Care Unit

Myra Rolfes, MN, BSN, RNC-NIC; Children's Healthcare of Atlanta, Atlanta, GA Mary Coughlin, MS, NNP, RNC-E; Caring Essentials Collaborative, LLC, Boston, MA

Background: The purpose of this project was to translate and integrate the National Association of Neonatal Nurses (NANN) Practice Guidelines for Age-Appropriate Care of the Preterm and Critically III Hospitalized Infant into the culture of care in a Level 4 children's hospital referral neonatal intensive care unit. Trauma-informed age-appropriate care aims to mitigate the deleterious effects associated with early life adversity in the intensive care setting. Integration of best practices in age-appropriate care is therefore a quality and patient safety priority, impacting infants' developmental trajectory and their lifelong health and well-being.

Methods: This 3-year project began with the creation of an interdisciplinary strategic planning group and contact with key partners throughout the organization. Education for all bedside care providers aimed to raise awareness of the importance of practice changes and their impact on the developing infant. Champion teams of volunteer staff representing nursing, respiratory therapists, and rehabilitation specialists used the model for improvement (Plan-Do-Study-Act) to plan and implement specific practice changes.

Results: First, this project improved staff perceptions across 30 of 53 project indicators (up from 14 at baseline) (P<0.05). Second, it decreased sound levels (P<0.05) and sustained this gain over time. Third, it improved correlation of Neonatal Pain, Agitation, and Sedation Scale (NPASS) scores with big data (P<0.05) and increased utilization of appropriate pain prevention strategies (P<0.05). Finally, it increased the frequency of and time spent in skin-to-skin infant-parent contact (P<0.05).

Conclusion: The use of the NANN Guidelines for Age-Appropriate Care of the Preterm and Critically III Hospitalized Infant provided a useful construct to guide practice change by recognizing the disease-independent needs of this unique and vulnerable population.

3.3 Expertise in the Delivery Room—An Innovative Way to Improve Exclusive Breastfeeding Rates

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Background: In today's modern world, breastfeeding is the gold standard in caring for a newborn. To facilitate improvement in the care of newborns and overall exclusive breastfeeding rates, an investigation of the presence of an international board-certified lactation consultant (IBCLC) in the delivery room and its impact on exclusive breastfeeding rates was performed.

Methods: The project used a quasi-experimental design in which the IBCLC assisted mothers with uninterrupted skin-to-skin (STS) placement immediately after birth to educate and ensure an effective first latch. The project setting was a labor and delivery unit (L&D) located in a 325-bed acute care facility in central Texas with an overall exclusive breastfeeding rate of 47.5%. With institutional review board approval, between October 19, 2015 and December 2, 2015, a total of 20 women with low-risk singleton pregnancies at term gestation who declared an intent to exclusively breastfeed (EBF) or to breast and formula feed consented to participate. Using a data collection tool, exclusive breastfeeding rates were measured from birth to discharge.

Results: The data showed an overall EBF improvement to 57.7%, equating to a relative increase of 21.6%, with P=0.01.

Conclusion: The presence of an IBCLC at delivery has the potential to help improve overall breastfeeding percentages from birth to discharge. Limitations included the small sample size and minimal availability of resources; therefore, sustainability is challenged. Although limitations are present, replication on a larger scale is possible. In addition, to facilitate potential sustainability and institute practice change, future research measuring EBF rates after focusing on uninterrupted STS education and L&D staff competency is needed.

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3.4 Conceptual Model of Subjective Distress Following Adolescent Birth: Predisposing, Precipitating, and Maintaining Factors

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Background: Significant subjective distress can result from childbirth and is understudied among adolescents. Experiences of prior trauma, as well as other predisposing, precipitating, and maintaining factors, can contribute negatively to the childbearing woman's birth experience.

Methods: This study employed path analysis to test Slade's conceptual model using recognized risk factors for birth trauma among adults in an effort to describe the birth experience of adolescents. Birth trauma was defined in terms of 2 outcomes: birth appraisal and subjective distress measured via the Impact of Event Scale (IES). A final sample of 282 adolescents, 13-19 years of age, provided the data for the study within 72 hours of birth.

Results: The revised model illuminated links among 10 recognized risk factors related to birth trauma and early postpartum subjective distress following childbirth by an adolescent. While all hypothesized effects in our conceptual model were not supported by our analysis, several were supported. The model explained 30% of the variation in birth appraisal and 33% of the variation in subjective distress. Risk factors found to increase the likelihood of a negative birth appraisal were not the same as for increased IES scores. Multiple risk factors in combination increased the likelihood of birth trauma.

Conclusion: Recognized risk factors for adults can describe an adolescent's signs of birth trauma within 72 hours of birth. Significant risk factors for birth trauma (including predisposing abuse and depression, precipitating factors of limited prenatal care, unplanned pregnancies, and cesarean births) and maintaining factors (such as infant complications) occur more often among adolescents than adults, increasing their potential for birth trauma. Best practice includes increased attention with assessment, education, and referrals for counseling or treatment as needed. The likelihood of a combination of risk factors signals comprehensive assessments and targeted care during pregnancy, prior to discharge home, and in the extended postpartum period.

3.5 Body Mass Index and Childhood Obesity: Misconceptions and Science

Julia Tipton, DNS, RN, CPN, CNE; Louisiana State University Health Sciences Center School of Nursing, New Orleans, LA

Background: Skyrocketing rates of childhood obesity coupled with its serious comorbidities underscore the urgency to screen large populations of children for obesity. Body mass index (BMI) is the most common method used to identify childhood obesity. Many healthcare professionals question the use of BMI assessments due to controversy among experts concerning the best method to detect body fat among children. Lack of understanding about the difference between childhood obesity screening and diagnosis may perpetuate skepticism toward BMI measurements.

Methods: A comprehensive review of the literature was conducted to assess the state of the science in childhood obesity screening. PubMed, CINAHL, and PsychInfo databases were searched for peer-reviewed research articles and professional organization publications published from 2006-2016 using keywords related to childhood obesity screening and diagnosis.

Results: Numerous physiologic instruments are available to measure obesity among children. An ideal instrument would be precise, accurate, and available for screening large populations of children. However, no existing method meets all of these criteria. Magnetic resonance imaging, ultrasonography, and dual-energy x-ray absorptiometry are considered the gold standard but are very costly. Less expensive but less accurate methods for detecting childhood obesity include skinfold measurements, BMI, weight, waist circumference (WC), and waist to height ratio (WHR). BMI and WC are the preferred instruments for screening for obesity in large samples of children. However, limited research addresses the reliability and precision of WC.

Conclusion: BMI is the most widely accepted screening tool for childhood obesity. Because it is an inexpensive and simple procedure, it is ideal for screening large numbers of children. BMI is associated with increased adiposity and obesity-related health risks.

3.6 Early Mobility: A Method to Liberate Patients From Mechanical Ventilation

Fiona Winterbottom, DNP, MSN-APRN, ACNS-BC, CCRN; Ochsner Clinic Foundation, New Orleans, LA

Background: Post-intensive care syndrome is often a complication after mechanical ventilation. Patients on ventilators are often highly medicated and immobile, resulting in neuromuscular weakness, functional limitations, and cognitive decline. Studies have shown that implementation of evidence-based intensive care unit (ICU) liberation bundles can improve patient outcomes.

Methods: In 2015, a series of projects was launched to implement targeted sections of the ICU liberation bundles. An existing comprehensive unit-based safety group was used as a steering committee for the projects. The interdisciplinary team worked together to establish an algorithm for daily safety screens, interdisciplinary communication, and patient progression through a mobility pathway.

Results: Staff surveys allowed for barriers to program success to be identified prior to project implementation. The program has resulted in patients being mobilized more than ever before. Patients are being moved safely with ventilators, intraaortic balloon pumps, and a variety of other devices. This is providing a culture change of decreased sedation, increased comfort with mobilization of the critically ill patient, and enhanced interdisciplinary teamwork. The ICU liberation project has become a system critical care collaborative for ICUs throughout the Ochsner Health System.

Conclusion: Encouraging front-line staff to assess evidence-based practices and implement them in a structured way can produce positive patient outcomes and culture change.

3.7 Proven Tactics to Promote Better Patient Outcomes for the Septic Population Using Evidence-Based Practice and Research

Theresa Posani, MS, RN, ACNS-BC, CCRN; Texas Health, Dallas-Fort Worth, TX

Background: Sepsis is on the rise in the United States and across the globe. Affecting an estimated 750,000 Americans annually, it is the number one cause of death in many intensive care units. Sepsis is ranked as the 10th cause of death worldwide. In 2012, our tertiary care center had a sepsis mortality rate >15.6% with a throughput time in the emergency department of 4.1 hours. The physicians were not using sepsis order sets or complying with the surviving sepsis campaign bundles for management of the septic patient. No standard of care was in place for the care of the potentially septic patient in either the outpatient or inpatient units.

Methods: The sepsis teams used a combination of FOCUS-PDSA and Lean Six Sigma to work on establishing a baseline and process improvement interventions. The sepsis coordinator assisted in facilitating multiple team efforts in the emergency department, critical care units, and the inpatient medical-surgical units. Hospital leadership involvement was another significant key to success.

Results: The results look promising in that mortality due to sepsis has been significantly reduced. The length of time in the emergency department has been reduced >50%, with a goal of 210 minutes being easily reached. The use of sepsis order sets is averaging 70% vs 0% initially.

Conclusion: Working through quality improvement processes to include Lean Six Sigma and FOCUS-PDSA, the interdisciplinary teams have improved the care and outcomes for sepsis patients at this tertiary care facility.

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3.8 Pilot Study to Assess the Feasibility of Implementing Noncontact Low-Frequency Ultrasound in the Management of Suspected Deep Tissue Injuries: Interim Report

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Background: Acute care patients are at increased risk of deep tissue injury (DTI) due to unstable tissue perfusion. A DTI is a purple/maroon localized area of intact skin or blood-filled blister due to underlying damage of soft tissue from pressure/shear. The purpose of this project was to pilot the feasibility of the noncontact low-frequency ultrasound (NCFU) treatments to reduce the progression of DTIs to stage 4/unstageable pressure ulcers among hospitalized acute care patients.

Methods: This project began in December 2015. All nursing staff were educated on the identification of DTI and instructed to consult the wound care team within 3 days of sacral DTI appearance. The wound care team initiated NCFU within 24 hours of assessing the patient. Treatments were given 5 consecutive days then 3 times per week for the duration of the DTI or until discharge. Data collection included demographics, diagnosis, comorbidities, number of treatments, skin assessment (initiation and discontinuation of treatment), and barriers to treatment. Interim analysis includes descriptive summaries of DTI consults, treatments, and barriers to NCFU treatment encountered.

Results: To date, 25 wound care team consults were initiated for suspected DTI. Nine were treated with NCFU with complete resolution of the DTI. Four consults were initiated past the 3-day window for NCFU treatment initiation, 7 were not a DTI, 4 patients could not be turned for treatment, and 1 consult could not receive NCFU treatment due to insufficient wound care team staffing.

Conclusion: Preliminary data suggest that NCFU treatment is safe and feasible with the potential to reduce pressure ulcer formation in acute care patients. Barriers to resolve are delays in wound care team consults and insufficient wound care staffing.

3.9 Use of Spirometry to Measure Asthma Control in Patients With Sickle Cell Disease

Laurie Duckworth, PhD, ARNP; University of Florida College of Nursing, Gainesville, FL Jeannette Green, PhD, ARNP; University of Florida College of Nursing, Gainesville, FL

Background: The incidence of asthma in African Americans is 11.2%. Sickle cell disease (SCD) is an inherited blood disorder that affects approximately 1 in 350 African Americans in the United States. SCD, combined with a diagnosis of asthma, increases the risk for acute chest syndrome (ACS) and increased morbidity and mortality. Patients with asthma and SCD should be followed by a pulmonologist to ensure proper management. Spirometry/pulmonary function tests (PFTs) are needed to evaluate the effectiveness of the treatment plan. Early detection of a decrease in pulmonary function could lead to changes in management, possibly decreasing development of ACS. Electronic medical records (EMRs) will identify pulmonary referrals for patients with SCD and asthma. These data should be available by a query of an EMR to cross-reference patients with comorbid asthma and SCD with the CPT code for PFT.

Methods: The EMR database for the University of Florida Health Hospital was queried for patients 5-34 years of age seen between December 1, 2005 and December 1, 2015, and having comorbid diagnoses of asthma and SCD. A query to cross-reference those patients with the CPT code for PFT was then performed.

Results: Five hundred thirty-five patients were identified. One hundred twenty patients (22%) had a diagnosis of asthma. Seventy-seven patients (14%) with SCD were treated for ACS. Only 8 patients had a documented PFT.

Conclusion: In patients with asthma and SCD, few are being tested for changes in pulmonary function, or the tests are not being documented. A better system for tracking PFTs will allow providers to utilize test results for asthma management. If testing is not being done, further research is needed to determine barriers.

3.10 Reducing Avoidable Transfers to Acute Care: A Quality Improvement Project

Sylvia M. Laudun, DNP, MBA, RN; Ochsner Clinic Foundation, New Orleans, LA

Background: As the cost of healthcare continues to escalate, regulations are being implemented to compensate institutions that practice quality initiatives to improve patient safety and outcomes and to reduce medical cost. One of the quality initiatives for nursing homes is to reduce acute care transfers (ACTs) back to the hospital within 30 days of admission.

Methods: Three cycles of Plan-Do-Study-Act (PDSA) were used to complete this quality improvement project. The project began with a retrospective review and analysis of ACTs within 30 days during a 12-month period. Resource utilization group (RUG-III) data were used to determine if the acuity of the residents and the level of staffing at the nursing home matched the recommended staffing from the Staff Time and Resource Intensity Verification (STRIVE) Project, followed by an in-service for the bedside staff on the Stop and Watch and Care Path tools from the Interventions to Reduce Acute Care Transfers (INTERACT) program. These tools encouraged staff to communicate changes in the residents' conditions to providers for early medical intervention and medical management in the nursing home environment.

Results: PDSA cycle I found most ACTs occurred within the first 7 days of admission (43%), on Mondays (20%), and between 7 am and 3 pm (46%). PDSA cycle II found that acuity and staffing matched the STRIVE Project. Following the in-service, PDSA cycle III, clinical staff were able to state subtle changes in residents' conditions that can lead to an ACT within 12-48 hours.

Conclusion: Early communication with providers on status changes in residents' conditions can lead to early nursing and medical intervention. Early intervention is linked to improved patient safety and decreased cost and allows the residents to remain in the nursing home to receive care for minor illness, therefore reducing ACTs by preventing acute illnesses that require hospitalization.

4.1 HbA1c Outcomes in an APRN- and Diabetes Educator-Led Multidisciplinary Diabetes Empowerment Program

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Background: Approximately 8,497 patients with diabetes in the Ochsner Center for Primary Care and Wellness are at increased risk for microvascular and macrovascular complications if their HbA1c is uncontrolled. A diabetes empowerment program (DEP) was developed to improve outcomes in these patients. This APRN-led clinic works with certified diabetes educators to expand accessibility to diabetic management within the patients' medical home. The purpose of this retrospective study was to (1) explore the glycemic outcomes in type 2 diabetes mellitus patients enrolled in the DEP and (2) describe the patients who complete the DEP.

Methods: Data were mined from the electronic health record to identify all patients aged \geq 18 years who completed the DEP. Demographics and HbA1c at baseline and at program completion were abstracted from records.

Results: During a 17-month period, 124 patients were discharged from the program; the mean HbA1c was 9.74% (SD=1.92) at program entry and 6.75% (SD=0.75) at completion (t[85]=13.91; P<0.0001). The majority of patients who completed the program (80/85, 94%) met the HEDIS goal of HbA1c <8%, and 68% (58/85) achieved \leq 7%. At program discharge, patients were transferred to either their primary care provider (85/124, 69%) or to an endocrinology APRN (39/124, 31%).

Conclusion: The DEP kept participating patients in their medical home and resulted in significant improvements in HbA1c. Longitudinal analyses are warranted to determine whether glycemic outcomes in this patient group are sustainable in primary care.

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4.2 Nurse-Manager Role Stress: A Qualitative Study

Stephanie Loveridge, DNP, NEA-BC, RN-BC; Centra Health, Lynchburg, VA

Background: The purpose of this study was to examine nurse-manager role stress in the current healthcare environment. Nurse-manager role stress has increased greatly since the advent of the Patient Protection and Affordable Care Act (PPACA) of 2010. Nurse-manager turnover affects staff nurse turnover, staff engagement, and quality patient outcomes.

Methods: This study examined nurse-manager role stress in 12 nurse-managers from 3 hospitals in Virginia. One-hour qualitative phone interviews were conducted, transcribed, and analyzed.

Results: All participants were female, ranging in age from 34-62 years (median age of 50 years). More than three-fourths (83%) held a master's degree or higher. Four essential themes emerged from the interviews: sink or swim, there's no end, support me, and finding balance. Subthemes also emerged.

Conclusion: Given the aging nursing workforce, it is essential that organizations seek to retain qualified nurse-managers. Recommendations for organizations include creating a comprehensive orientation and mentorship program to support new nurses to achieve success in the role. In addition, exploring alternatives to decrease nurse-manager stress, such as smaller span of control, comanager models, and unit leadership teams should be explored.

4.3 A Multidisciplinary Approach Using Cognitive Functional Independence Measure Scores to Prevent Falls

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Background: In 2014, the inpatient rehabilitation unit's fall rate increased from 4.9 falls per 1,000 patient days to 5.99 falls per 1,000 patient days. Since 2011, the inpatient rehabilitation unit multidisciplinary team had consistently utilized a multifactorial approach for fall prevention. Nurses assessed each patient each shift and intervened based on modifiable risk factors. The physical therapists and occupational therapists assessed each patient for unsteady gait, poor balance, and postural hypotension. The speech therapist assessed each patient for cognitive deficits, as well as speech and swallowing deficits.

Methods: Team members conducted a retrospective review of all falls that occurred during the year 2014. Each fall occurrence was reviewed and trended based on diagnosis, functional independence measure (FIM), and patient activity at time of the fall.

Results: Of the 14 patients who fell in 2014, 10 had a diagnosis of cerebrovascular accident, 7 had an expression FIM score of \leq 4 on admission, and 13 of the 14 patients had a problem solving FIM score of \leq 4 on admission. Nine of the 14 falls were related to toileting. The inpatient rehabilitation unit multidisciplinary team revised the fall prevention protocol to reflect the use of the cognitive FIM score to determine those patients at the highest risk for falls and to include consultation with the speech therapist.

Conclusion: The 2015 fall rate for the inpatient rehabilitation unit decreased from 5.99 falls per 1,000 patient days to 2.99 falls per 1,000 patient days. Working together was critical to decreasing the fall rate.

4.4 Bundling Interventions To Enhance PAIN Care Quality: 18-Month Outcomes

Karen Rice, DNS, APRN, ACNS-BC, ANP; Ochsner Clinic Foundation, New Orleans, LA Margaret Redmond, MN, APRN, ACNS-BC, OCN; Ochsner Clinic Foundation, New Orleans, LA

P1. Implementation of Centers for Disease Control and Prevention Guidelines for Human Immunodeficiency Virus Screening in the 13- to 64-Year-Old Population in a Rural Outpatient Primary Care Clinic: A Knowledge-to-Action Project

Ashley Crain, BSN, RN; Louisiana State University Health Sciences Center School of Nursing, New Orleans, LA Jessica Landry, DNP, APRN, FNP-BC; Louisiana State University Health Sciences Center School of Nursing, New Orleans, LA

Background: Current national guidelines as set by the Centers for Disease Control and Prevention (CDC) and the United States Preventative Services Task Force (USPSTF) recommend the screening of all patients ages 13-64 years old for the human immunodeficiency virus (HIV). A rural primary care clinic in Southeast Louisiana is currently not carrying out these guidelines, as evidenced by personal communications with staff. A literature review was conducted to discuss evidence concerning current guidelines and improved testing efforts. Eight research articles were utilized in this review of the literature, all supporting current guidelines and the need to increase HIV screening in the United States.

Methods: This Knowledge-to-Action project aims for the successful implementation of CDC guidelines. Project implementation will include the education of stakeholders utilizing the proven methods of the Registered Nurses Association of Ontario for implementation of best-practice guidelines. Data extraction will be performed utilizing the Aprima electronic medical record system.

Results: Data collection will include the number of HIV tests ordered in the previous year and each week after project implementation. Statistical analysis will include 2-sided *t* tests to compare before and after rates, and run charts will be utilized to provide a visualization of results to key stakeholders.

Conclusion: Increased staff education and improved HIV testing rates are the primary goals of this project. The review of current guidelines and literature supports these increased efforts in HIV testing.

P2. Synthesizing Rapid Response Data to Reduce Failure to Rescue

Fiona Winterbottom, DNP, MSN-APRN, ACNS-BC, CCRN; Ochsner Clinic Foundation, New Orleans, LA

Background: Rapid response teams have been recommended as an intervention mechanism for deteriorating patients that brings critical care clinical experts to the patient's bedside. Due to inconsistent team makeup and nonstandard outcomes, evidence supporting rapid response team outcomes is limited.

Methods: Data on rapid response team calls were abstracted from the electronic health record (EHR) to assess temporal trends for calls and patient characteristics.

Results: In 2015, 963 rapid response calls were documented in the EHR. Of those calls, 3% were documented as related to the heart, 4% were possible stroke, 6% were respiratory failure, and 15% were sepsis related. The largest group of patient calls (62%) was classified as unknown or other organ dysfunction. This group required detailed analysis to identify the real cause of patient decompensation and opportunities for early intervention.

Conclusion: More detailed analysis is needed to establish the benefit of rapid response teams on patient safety; however, it seems logical that unaddressed deterioration in a patient's condition is a patient safety problem.

P3. Utilizing Disciplinary Trends to Perpetuate Improvement Initiatives

Robin M. Huet, MSN, RN; Louisiana State Board of Nursing, Baton Rouge, LA Karen Lyon, PhD, APRN, ACNS, NEA; Louisiana State Board of Nursing, Baton Rouge, LA

Background: The National Council of State Boards of Nursing (NCSBN) recommended the design of uniform processes to distinguish human errors from willful negligence and intentional misconduct. The collection of standardized and comprehensive information can assist boards of nursing (BONs) in analyzing error and demographic trends. The purpose of this project was to identify the Louisiana State Board of Nursing (LSBN) disciplinary hearing trends to aid in the development of methodologies leading to error reduction.

Methods: The Recommended Quality of Care Framework was utilized because it presents a broad approach to situational analysis and creates an agenda for fundamental reform. Stakeholders are regulators, consumers of healthcare, licensees, nursing students, and schools of nursing. An LSBN disciplinary hearing database was compiled from January 1, 2014 through December 31, 2015, identifying for each disciplinary matter decided by the BON, the respondent's age, gender, years in practice, educational preparation, violations, outcomes, fines, and hearing costs.

Results: Eighty-six hearings were conducted. Eighty-three percent of the respondents were female, with 37.4% ages 36-45 years. Twenty-two percent of respondents were licensed for 6-10 years. Fifty-two percent of respondents were associate degree prepared. The highest percentage of primary violations was substance use/abuse related, and the outcome reported most frequently to the National Practitioner Database was summary suspension.

Conclusion: A shift needs to be promoted within BONs to move from purely punitive action to assisting in the perpetuation of change in behavior. This project quantifies trends requiring attention, such as encouraging a new model of education wherein a baccalaureate degree is the minimum educational preparation required for licensure, and nurse administrators are educated about identifying and reporting suspicions of substance abuse and diversion. Additional analysis for January 1, 2012 through December 31, 2013, is recommended to validate statistical significance.

P4. Just Culture in Nursing Regulation Through Deferred Discipline

Kristin K. Benton, BSN, MSN, RN; Texas Board of Nursing, Austin, TX Nina Almasy, MSN, RN: Texas Board of Nursing, Austin, TX

Background: One role of a board of nursing (BON) is to ensure public protection by administering the nurse practice act (NPA) and addressing practice errors. Traditionally, in Texas, nurses who violated the NPA were issued a standard disciplinary order (SDO) and had a permanent public record. There were delays in processing and ratifying the SDOs, as well as noncompliance issues. In 2009, the Texas BON was authorized to pilot a quality improvement program to evaluate the effect of deferring the disciplinary action by removing the order from public record 5 years after completion of the order. The question was, "Would this less-punitive approach improve the compliance of the nurses with the board order and the efficiency of the staff?"

Methods: Texas nurses with violations who met specific criteria were offered a deferred discipline order (DDO) instead of the SDO from February 2011 through April 2012. Outcome measures included compliance with the order and the number of days taken by the nurse to sign the DDO. Process measures included the number of days taken by staff to offer the order to the nurse and the number of days required for order ratification by the BON.

Results: Of the issued DDOs (n=130), 0.05% of nurses were noncompliant compared to 5.2% of the nurses with SDOs (n=992). Nurses took an average of 54 days to sign a DDO compared to 95 days for an SDO. BON staff took an average of 579 days to offer a DDO compared to 558 days for an SDO. The DDOs were ratified in an average of 19 days compared to 28 days for SDOs.

Conclusion: The deferred disciplinary action pilot improved the ability of the BON to effectuate its mission of public protection through an efficient and less-punitive approach.

P5. Texas Newborn Screening Improvement Program

Judith Joiner, BSN, RNC-MNN; Baylor University Medical Center, Dallas, TX Olha Prijic, BSN, RNC-MNN; Baylor University Medical Center, Dallas, TX

Background: Texas law requires all newborns to receive a newborn screen in the first 48 hours of life to screen for more than 50 metabolic disorders. Early detection and treatment of some of these metabolic disorders will prevent debilitating disabilities and possible newborn deaths. Early detection facilitates best nursing outcomes. The Texas Department of State Health Services mandates proper timing and quality requirements for all blood specimens. Screens that fall outside of these measures are rejected and place newborns at risk. Every month, our large hospital had newborn screens rejected because of poor quality or timing.

Methods: A quality improvement project began in 2014 to reduce rejected newborn screens. Top performing hospitals were contacted to determine best practices in screen collection. Numerous interventions focusing on a culture of staff accountability evolved, including staff education, formation of a Newborn Screen Team, individual follow-up of each rejected screen, and multidisciplinary collaboration with lab personnel. Huddle boards included the monthly Texas State Report Card of rejected screens. Service line goals and individual staff performance goals mandated improvement. Dashboards were utilized to hold management and staff accountable for sustained improvement.

Results: Our hospital remains committed to quality outcomes, and our rejection rate remains at or below 1%. Collecting a quality newborn screen is now perceived by nursing staff as a necessary skill to protect all newborns. Parents no longer have to worry that their newborn missed the benefits of the crucial findings of the initial newborn screen due to specimen rejection.

Conclusion: Clinical excellence and optimal outcomes are provided to newborns through the support, true collaboration, and skilled communication of the healthcare team. High quality (not rejected) newborn screens have a high financial impact on healthcare costs. The consequences of not detecting and treating metabolic disorders identified in the newborn screening process are more costly than early detection and treatment.

P6. Nurse Martyrdom: A Concept Analysis

Elise Jordan, BSN, RN; University of Southern Mississippi, Hattiesburg, MS

Background: Studies highlight self-sacrifice as a prominent trait among nurses. While self-sacrifice frequently appears as a staple characteristic of a nurse's work ethic, research suggests that this behavior contributes to professional role strain and accelerated burnout. The concept of nurse martyrdom represents unregulated self-sacrifice to the point of perceived victimization and burnout. This concept analysis explores the origins and characteristics of the nurse-martyr behavior pattern and the subsequent professional implications.

Methods: Walker and Avant (2011) provided the framework for concept analysis.

Results: Nurse stereotypes glorify martyr behavior through recurring descriptions of nurses denying their own basic personal needs as a demonstration of their commitment to patient care. Lack of willingness to make such sacrifices often reflects poorly on the nurse who may, as a result, experience horizontal workplace hostility. Research indicates a strong correlation between professional identity and job satisfaction. Nurse satisfaction, role perception, and retention relate directly to patient care quality.

Conclusion: Increased awareness of ineffective nurse behavior patterns allows for constructive professional evolution and improved quality of care.

P7. Improving the Discharge Process of the Pediatric Progressive Care Patient

Irma Sonnier, BSN, RN, CCRN, CPN; Our Lady of the Lake Regional Medical Center, Baton Rouge, LA Melissa Catalanotto, BSN, RN, CPN; Our Lady of the Lake Regional Medical Center, Baton Rouge, LA

Background: The complex pediatric patient demands an efficient discharge process. These patients have an increased need for home medical equipment, supplies, medications, and coordinated home nursing care. The current discharge process for the complex pediatric patient lacks multidisciplinary collaboration and coordination.

Methods: A survey to assess the current discharge process, educational tools, barriers, and effectiveness of the current collaboration of multidisciplinary teams was distributed to all nurses on the progressive care unit at Our Lady of the Lake Children's Hospital. The needs survey identified opportunities for improvement in the following areas: the rate of current discharge effectiveness, the rate of efficiency of the current discharge process, and the rate of collaboration between multidisciplinary team members.

Results: A predischarge checklist was devised based on the survey results. All team members were educated on how to use the predischarge checklist. The predischarge checklist was implemented upon transfer of the complex pediatric patient to the progressive care unit and was utilized during daily multidisciplinary huddle. A follow-up survey was distributed to all the nurses on the pediatric progressive care unit to evaluate the effectiveness of the predischarge checklist. These results were used to modify the checklist to better encompass other needs not previously included.

Conclusion: After implementation of the predischarge checklist, the rate of discharge effectiveness and the timeliness of the discharge process increased. The collaboration between multidisciplinary team members also improved. In addition, patient satisfaction improved as evidenced by Press Ganey scores.

P8. Telephonic Transitional Care Intervention to Reduce 30-Day Readmission Rates in Adults With Heart Failure Jennifer Burtch, DNP, MSN, ANP-C; Ochsner Medical Center Northshore, Slidell, LA

Background: Heart failure (HF) is a prevalent health problem associated with increased 30-day hospital readmission rates and healthcare costs. Approximately 25% of patients hospitalized for HF are readmitted within 30 days, and 30% are readmitted within 60-90 days post hospital discharge. Implementation of a transitional care intervention that combines predischarge HF protocols and telephonic support within 48-72 hours of discharge has been shown to reduce 30-day readmission rates and to improve quality of care. The purpose of this project was to implement a telephonic transitional care intervention within 48-72 hours of hospital discharge in conjunction with standard HF guidelines in an effort to reduce readmission rates for HF patients.

Methods: The project was implemented in an acute care hospital. HF patients (n=19) received a 48- to 72-hour telephonic follow-up call. The American Heart Association's evidence-based HF telephonic follow-up template was used to collect data. To evaluate self-care management, patients completed the Self-Care of Heart Failure Index prior to discharge.

Results: The number of HF readmissions was 10.5% (n=2). The telephonic transitional care intervention was completed within 24-48 hours for 52.5% of participants. The Self-Care of Heart Failure Index found that more that than half (51.76%) of the patients were able to identify early symptoms of HF, implement a treatment, and evaluate their actions.

Conclusion: The results indicate that the implementation of a 48- to 72-hour transitional care intervention, in addition to a standard HF protocol, has a positive impact on the reduction of 30-day hospital readmissions. Results of the Self-Care of Heart Failure Index indicate the need for improved HF education for patients and caregivers during hospitalization and posthospitalization.

P9. Providing Zika Virus Information to Staff and Veterans

Jennifer Frisch, BSN, RN, CIC, CPPS; Southeast Louisiana Veterans Health Care System, New Orleans, LA

Background: No vaccines or treatments are in advanced development for the Zika virus at this time. The United States Food and Drug Administration (FDA) stands ready to work with medical product developers to clarify regulatory and data requirements necessary to move products forward in development as quickly as possible. Zika virus is spread to people primarily through the bite of an infected *Aedes* species mosquito. Mosquitoes that spread the Zika virus bite mostly during the daytime. An estimated 4 of 5 people with Zika virus infections have no symptoms at all. When symptoms do occur, the most common are fever, rash, joint pain, and conjunctivitis (red eyes). Even in those who develop symptoms, the illness is usually mild, with symptoms lasting from several days to a week. During the first week of infection, Zika virus can be found in the blood and can be passed from an infected person to a mosquito through mosquito bites. An infected mosquito can then spread the virus to other people. Zika virus can be prevented by avoiding mosquito bites.

Methods: At Southeast Louisiana Veterans Health Care System (SLVHCS), the Infection Control Committee, Emergency Preparedness, and Public Relations groups collaborated to provide all staff with Zika virus education. This education was provided by placing a scrolling banner on the SLVHCS intranet homepage.

Results: Clicking the banner brought the user to an intranet page that provided links to information regarding the Zika virus on the Centers for Disease Control and Prevention (CDC) website. Information was also included in the facility's employee bulletin that is emailed to all staff weekly.

Conclusion: Providing all staff with recent information regarding Zika virus allowed them to be educated and share that education with the SLVHCS community, helping to ensure their safety.

P10. Antimicrobial Stewardship: 2015 Antibiogram Analysis

Jennifer Frisch, BSN, RN, CIC, CPPS; Southeast Louisiana Veterans Health Care System, New Orleans, LA

Background: The ideal method for accurate tracking of antimicrobial-resistance patterns in a community may be active, laboratory-based surveillance systems that collect strains for susceptibility testing in a reference laboratory. Aggregating antibiogram data appears to be an easy, inexpensive, and effective way of accomplishing goals of decreasing resistance.

Methods: The purpose of this project was to report the most frequently isolated bacteria recovered in clinical cultures at Southeast Louisiana Veterans Health Care System (SLVHCS) in 2015 (January through December) and compare them to the facility's 2014 antibiogram to determine trends. The 2015 antibiogram is a collaboration between Pathology & Laboratory Medicine Service and Pharmacy Service to report the most frequently isolated bacteria recovered in clinical cultures. Stakeholders were all staff involved in the continuum of patient care.

Results: The 2015 antibiogram for urine isolates showed that *Pseudomonas aeruginosa* exhibited an 11% increase in resistance to amikacin, a 38% increase in resistance to cefepime, a 37% increase in resistance to ciprofloxacin, and a 30% increase in resistance to meropenem; *Proteus mirabilis* exhibited a 6% increase in resistance to ampicillin, aztreonam, cefazolin, cefepime, and ceftriaxone. The 2015 antibiogram for nonurine isolates exhibiting *E coli* had an increased resistance of 8% to the aminoglycosides (gentamicin and tobramycin) and 15% to trimethoprim/sulfamethoxazole; *Serratia marcescens* increased resistance to tobramycin by 20%; methicillin-resistant *Staphylococcus aureus* (MRSA) increased resistance to levofloxacin by 11%.

Conclusion: By analyzing and comparing the 2014 and 2015 antibiograms, the facility was able to make improvements to antibiotic effectiveness and help address problems with antibiotic resistance by teaching about antimicrobial resistance and educating providers that the antibiogram can be found on the intranet site.

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P11. Effects of Implementing a Nurse-Driven Urinary Catheter Removal Protocol on Urinary Catheter Utilization and Catheter-Associated Urinary Tract Infection Rates

Jennifer Frisch, BSN, RN, CIC, CPPS; Ochsner Baptist Medical Center, New Orleans, LA

Background: Prevention of infection with any invasive device relies on the key elements of appropriate indication and inserting, caring for, and removing devices promptly. Indwelling urinary catheters are no exception. Unnecessary urinary catheterization puts patients at risk for urinary tract infections and may cause other complications such as multidrug-resistant organisms, additional antibiotics leading to increased risk of Clostridium difficile infection, and immobility. When feasible, providing performance feedback to staff on what proportion of catheters they have placed meet facility-based criteria and other aspects related to catheter care and maintenance is helpful. It is well established that the duration of catheterization is directly related to risk for developing a urinary tract infection. A multidisciplinary approach involving physicians, nurses, leaders, and experts in infection prevention and urological care is crucial. Catheter-associated urinary tract infection (CAUTI) prevention is also tied to the bottom line, with potential financial implications associated with value-based purchasing and population health.

Methods: The aim of this project was to assess the effects of implementing a nurse-driven urinary catheter removal protocol on urinary catheter utilization and CAUTI rates from January 2014 through April 2016. A nurse-driven urinary catheter removal protocol was implemented in May 2015. Urinary catheter utilization and CAUTI rates were tracked from January 2014 through April 2016.

Results: A decreasing trend was observed in the urinary catheter utilization rate: 2014–0.14, 2015–0.13, 2016 year to date=0.12. A decreasing trend was observed in the CAUTI rate: 2014–0.14, 2015–0.13, 2016 year to date=0.00.

Conclusion: The implementation of a nurse-driven urinary catheter removal protocol empowers nurses to remove urinary catheters that are not medically necessary, decreasing urinary catheter device days and, in turn, decreasing the CAUTI rate.

P12. Decreasing Central Line-Associated Bloodstream Infections

Jennifer Frisch, BSN, RN, CIC, CPPS; Ochsner Baptist Medical Center, New Orleans, LA

Background: A central line-associated bloodstream infection (CLABSI) is a laboratory-confirmed bloodstream infection related to the presence of a central line or umbilical catheter that is in place either at the time of or within the 48 hours before the onset of an infection; it is not related to an infection at another site. Signs and symptoms of CLABSI can include soreness or redness at the insertion site, fever, chills, and hypotension; infants and neonates may have fever, hypothermia, apnea, or bradycardia.

Methods: The aim of this project was to provide ongoing CLABSI incidence data to the stakeholders to improve buy-in and engage the staff to continue to strengthen efforts to prevent CLABSIs. The incidence of CLABSI, as well as central line-device days, was tracked from January 1, 2012 through December 31, 2015.

Results: Although a zero CLABSI rate has not been sustained, an overall decreasing trend was observed and communicated to stakeholders. Baseline was 1 CLABSI per 176 central line days; the goal was a 40% reduction at a cost of \$17,000 per CLABSI. Data were collected for 48 months, and 16,665 central line days were collected, with an average of 0.2 CLABSIs per 1,000 patient days per month and an average of 347 central line days per month, for a savings of \$1,642,000 from January 1, 2012 through December 31, 2015.

Conclusion: Providing ongoing feedback to stakeholders concerning CLABSI rates can have a significant impact on CLABSI prevention efforts by validating their practice. Interdisciplinary teams are integral to achieve and sustain a zero CLABSI rate.

P13. Applying a Student-Centered Model When Assisting a Nursing Student With Attention-Deficit/Hyperactivity Disorder

Chin-Nu Lin, PhD, RN; University of Southern Mississippi, Hattiesburg, MS

Background: Attention-deficit/hyperactivity disorder (ADHD) affects 4.4% of adults, equivalent to 8 million people in the United States. Approximately 2%-8% of the college population has ADHD, with at least 25% of students with disabilities being diagnosed with ADHD. While many studies have addressed ADHD in children and adolescents, less attention has been paid to a specific patient population, such as college nursing students who encounter high levels of stress during their professional study. Such stressors may further exacerbate symptoms for those diagnosed with ADHD.

Methods: The student-centered model places the student in the center of the learning environment. In this case study, a student with ADHD was identified and agreed to participate in the individualized learning strategies to promote the student's academic performance. Outside regular class hours, the course coordinator/faculty provided tutoring and counseling in study techniques, test-taking strategies, behavior adjustment support, and references to professional medical personnel. During this period, the student's response and adjustment to counseling were monitored.

Results: With this model and through the conversations and interactions with the course coordinator/faculty, the student was able to identify learning difficulties, causes of low academic performance, and time management challenges attributed to ADHD.

Conclusion: The student-centered model provides an alternative pedagogy and may produce promising results when assisting nursing students with ADHD. Such assistance is particularly important in a stressful academic environment in which students with learning disabilities or difficulties, especially those not properly diagnosed, rely on their class instructors for mentorship and guidance.

P14. Blood Culture Contamination Reduction

Scott Stover, MSN, MBA-APRN, NEA-BC, ACNS-BC, CEN; Houston Methodist Sugar Land Hospital, Houston, TX Vanessa Shepherd, BSN, RN; Houston Methodist Sugar Land Hospital, Houston, TX

Background: Staff at Houston Methodist Sugar Land Hospital noted that their level of contaminated blood cultures trended above the benchmark. The emergency department (ED) draws more than 60% of all blood cultures and, of all contaminated blood cultures, the ED accounts for >80%. The baseline ED blood culture contamination percentage rate was 7%.

Methods: The ED Clinical Practice Council (ED CPC) initiated a blood culture contamination reduction project. Nurses collaborated with the laboratory and microbiology staff while conducting a literature search to determine current best practice. A survey of the ED staff was conducted to determine their knowledge of the current policy and procedure. The survey showed that >60% of the staff were unable to correctly identify all the steps of the process. Thus, the ED CPC created an education module that each nurse completed. This module addressed (1) aseptic technique, (2) policy and procedure, and (3) skill validation. This activity not only addressed the nurses' knowledge of the process but also evaluated their skills through return demonstration. The ED CPC worked with the laboratory to obtain patient-level data on the contaminated blood cultures. This enabled assigning accountability for the contamination to the staff member who drew the blood cultures. After analyzing the previous 3 months of patient-level data, the 10 nurses with the highest number of contaminations attended one-on-one training.

Results: Immediately following the educational intervention, the percentage of contaminated blood cultures began to decline. The ED blood culture contamination rate has continued to decrease, with the majority of months being well below the benchmark of 3%.

Conclusion: The educational intervention improved the practice of drawing blood cultures in the ED by improving the knowledge and the skill of the nurses. This improvement has been possible through strong interprofessional collaboration.

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P15. Will Education Related to the Importance of Terminal Cleaning Improve Compliance to AORN Standard of Care?

Megan Allen Mayhew, RN, CNOR; Our Lady of the Lake College, Baton Rouge, LA

Background: Operating room terminal cleaning is a basic practice in surgery that if not followed appropriately can result in grave consequences. The latest research in operating room terminal cleaning has a focus on improving compliance of cleaning policies.

Methods: The John Hopkins model was used for this research literature review.

Results: According to 5 research articles identified in a literature search, the constant need in healthcare to research and implement improvements and changes in various areas, including cleaning, disinfecting, and terminal cleaning of specialized areas is evident.

Conclusion: A multidisciplinary team approach proves most effective in a hospital environment to promote success. The first step with any institution is to research current standards on cleaning practices and then to implement changes to policy and procedure. AORN offers a wealth of knowledge in regard to operating room terminal cleaning. Education is a key component to making such an endeavor successful. Administration needs to commit to education and follow-up of new and improved policy and procedures. The most vital aspects of process changes are teamwork and a patient-based care focus.

P16. Experiences of Direct Care Registered Nurses Using a Professional Practice Model

Rhonda Kitchen, MSN, RN, CPHQ; Memorial Hermann Greater Heights, Houston, TX

Background: The objective of this descriptive phenomenological study was to explore the experiences of direct care with inpatient registered nurses working within the framework of a nursing professional practice mode (PPM). A PPM has been shown to improve nursing quality and promote patient safety and is the fundamental underpinning required to obtain the prestigious and highly sought after American Nurse Association's Magnet designation. Hospitals with implemented PPMs demonstrate higher nurse/patient satisfaction and decreased patient morbidity and mortality. This descriptive phenomenological research will be of interest to facilities striving to implement a professional practice model.

Methods: The philosophical underpinnings of Husserl guided this study. A purposive sample was obtained from nurses practicing at a large urban community hospital. A snowball sampling strategy was employed. Potential risks were identified and safeguards were incorporated into the study design/procedures to minimize those risks. Data were collected via focus groups using semistructured interview questions. Demographic data were collected. The sample size was 6 participants. Analysis was completed via Colaizzi's method. An audit trail was established to ensure credibility of the findings. Member checking was employed for validation and confirmation of the research findings.

Results: Four major themes were identified related to model adoption and use (simplicity, roadmap, synergy, and reflective practices). Additionally, 8 subthemes were identified (visual guide, ease of use, universality, practice guide, compass, practice outline, whole greater than the sum of parts, and a completed puzzle).

Conclusion: This study illuminated the experiences of direct care inpatient registered nurses who utilized a PPM. The study gave direct care nurses a mechanism to describe and share their experiences of implementation and utilization of a PPM. A larger future study is planned. Participants will be recruited until saturation has been obtained and analysis provides no new information or identification of themes.

P17. A Team Approach to Reducing Immediate Use Steam Sterilization

Teresa Aycock, MSN, RN; Ochsner Medical Center, Kenner, LA

Background: In August 2014, the Centers for Medicare and Medicaid Services issued a memorandum changing the terminology for flash sterilization to immediate use steam sterilization (IUSS). The memo also updated acceptable standards for IUSS, including stating that IUSS is to be reserved only for emergent situations in which no alternative is available. Infection prevention staff at Ochsner Medical Center, Kenner reviewed IUSS usage and procedures finding an average IUSS rate of 17% that increased to as high as 27%.

Methods: An audit of IUSS, beginning with 2014, was done that included all cases in which IUSS occurred, noting the cases with surgical site infections (SSI), listing instruments being processed via IUSS, and giving the reasons for IUSS. The audit revealed the majority of IUSS was done in orthopedic cases. Many orthopedic cases require the use of loaner trays from instrument companies. Turnover was most often listed as the reason for IUSS in these cases. We found a lack of vendor compliance in bringing loaner instruments to the facility in a timely manner, as well as too few trays brought for the cases scheduled.

Results: On June 30, 2015, a detailed plan to reduce IUSS was presented, including recommendations for the purchase of certain instruments, a standard procedure for the use of loaner trays, front-line staff involvement in IUSS reduction, and other recommended measures. A sharp decrease in IUSS occurred within a month of plan implementation. In July 2015, the IUSS rate was 20%, but a sharp drop occurred in August to a rate of 7% followed by continual decreases each month until December, when there was no IUSS for the entire month.

Conclusion: There was a consistent reduction in SSI between August and December of 2015. Low rates of IUSS have been maintained, and overall SSI rates continue to decline.

P18. Supporting Youth Engagement With Transition Planning and Health Promotion

Patti Barovechio, DNP, MN, CCM, PCMH-CCE; Louisiana State University Health Sciences Center School of Nursing, New Orleans, LA

Background: The transition from pediatric to adult healthcare systems is identified as a critical juncture for all youth. In the population of youth with special healthcare needs (YSHCN), unsupported health transition is associated with negative sequelae, affecting lifelong health outcomes. The 2009-2010 National Survey for Children with Special Health Care Needs revealed that only 40% of YSHCN in the United States received the services necessary to make appropriate transitions to adult healthcare, work, and independence. Best-practice guidelines recommend supported youth health transition (YHT) for all youth.

Methods: This doctoral project deployed and evaluated a health information website targeting youth 14-17 years old. A synthesis of youth transition research and best-practice guidelines for YHT directed content formation. The website showcased transition tools developed by experts across the country, as well as Smooth Moves YHT mini-topics and skill-building activities. Project evaluation included assessment of website functionality and content using 2 survey instruments. The Agency for Healthcare Research and Quality's Patient Education Materials Assessment Tool provided an understandability score and the Functionality and Content Review Survey, a project-specific instrument, measured website functionality and captured qualitative reviewer feedback.

Results: A multidisciplinary group of 14 content experts completed the online surveys following a self-directed review of the website. Twelve of 14 understandability scores achieved 100%. The 8 quantitative categories of the Functionality and Content Review Survey received rankings of 4.14-4.57 of a possible 5.0, exceeding project targets.

Conclusion: Evidence-based health education can serve to prepare and support youth as they navigate the transition from pediatric to adult healthcare systems. SmoothMovesYHT.org provides an understandable, evidence-informed resource for teens seeking web-based health information and offers healthcare providers a user-friendly tool to support clinic-based YHT programs. Next steps include collaborations with Louisiana programs and providers charged with providing YHT supports and services.

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P19. Endotracheal Tube Cuff Pressure: Best Practice to Minimize Tracheal Tissue Injury

Julie E. Duke, BSN; Louisiana State University Health Sciences Center School of Nursing, New Orleans, LA

Background: The most common complication reported due to intubation is a high intracuff pressure. The ideal intracuff pressure is 20 to 30 centimeters of water; at this pressure, adequate tracheal tissue perfusion can occur. When pressure within the endotracheal tube cuff exceeds 30 centimeters of water, the patient is at risk for tracheal damage, including tissue necrosis, tracheoesophageal fistula, recurrent laryngeal nerve damage, hoarseness, sore throat, dysphagia, persistent cough, and bloody expectorant. Tracheal tissue damage can be seen within 15 minutes after cuff pressures exceed 30 centimeters of water. This evidence-based project's purpose was to enhance patient safety through increasing anesthesia providers' awareness of the best endotracheal intracuff pressure inflation technique.

Methods: The project design follows the Registered Nurses' Association of Ontario Knowledge-to-Action toolkit. A literature review indicates that an anesthesia provider's method of endotracheal intracuff pressure measurement impacts patient safety. Studies demonstrate a connection between estimation techniques, finger-palpation and no-leak method, and increased incidence, up to 65 percent, of elevated intracuff pressure. An education session was given to the anesthesia providers at a New Orleans hospital on the current evidence-based literature analyzing patient outcomes when comparing estimation techniques to the aneroid manometer. The goal was to accomplish an 80% adherence to postinflation manometer use in effort to provide patients with safe intracuff pressure levels. Key stakeholders for this project include CRNAs, SRNAs, MDAs, respiratory therapists, hospital administration, quality improvement personnel, surgeons, and general anesthesia recipients.

Results: Data are currently being gathered regarding post evidence-based educational session adherence to manometer use to provide safe intracuff pressure levels.

Conclusion: Data retrieved will be statistically analyzed.

P20. Decreasing Clostridium difficile by Utilizing Infection Prevention Methods Outside the Walls of the Hospital

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Background: Clostridium difficile continues to be a major cause of patient mortality and morbidity. Even with infection prevention and antibiotic stewardship programs, the incidence of Clostridium difficile at our 223 bed community-based facility has not decreased to our goal standardized infection ratio of 0.50. Our investigation revealed a high incidence of readmission of our oncology patients related to Clostridium difficile. Our objective was to decrease the number of admissions related to Clostridium difficile in oncology patients.

Methods: An analysis performed with key stakeholders, oncology physician practices, and outpatient infusion centers revealed a lack of knowledge pertaining to *Clostridium difficile* diagnosis, treatment, and infection prevention methods. A formal education program was developed and provided to employees, physicians, patients, and their families. The outpatient office practices revised their patient assessments to include questions regarding *Clostridium difficile*, as well as cleaning processes (including products) used between patients and at the end of day. Patient and family education now begins in the outpatient arena and includes how to clean the home environment. A secondary process improvement included a multidrug-resistant organism alert being included in the outpatient electronic medical record. This allows physician offices and infusion centers to be aware of new diagnoses.

Results: In 2014, the incidence of oncology patients being admitted for *Clostridium difficile* was 38 patients, and as of November 1, 2015, there have been 12 admissions.

Conclusion: As a result of our process improvement and increased education for healthcare providers and patients, we are decreasing the number of oncology patients admitted for *Clostridium difficile*. Furthermore, we will be moving the education program further outside the walls of our hospital to educate nursing homes in our community in order to continue to decrease this healthcare burden among our geriatric population.

P21. A Strategy to Promote Successful Transition to School Nursing

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Background: Our standardized, blended approach to school nurse orientation includes using classroom training, mentor/supervisory support, and skills laboratories to ensure specific competencies for new nurses to successfully transition into the independent setting of school nursing. School nurses care for complex cases. For example, students who were once homebound requiring tube feedings, ventilator, and tracheostomy care are now attending schools. Nurses are responsible for triaging students with diverse needs, requiring critical thinking skills. They case-manage students with chronic diseases including diabetes, asthma, life-threatening food allergies, and seizures. School nurses also manage students with risky behaviors related to drug usage, bullying, and unprotected sex resulting in pregnancy.

Methods: The newly designed blended orientation program included a program evaluation by the participants. A comparison of the differences between the 2014-2015 new nurse evaluations and the 2015-2016 blended approach orientation program was completed.

Results: Three areas showed a significant increase: mentor support, confidence level, and overall quality of the standardized blended approach orientation program. Mentor support was improved by having mentors and new nurses meet face to face at a luncheon before school started. Previously, new nurses were assigned to mentors and were encouraged to meet and talk on their time schedule. Confidence levels increased due to skills labs and mentor support.

Conclusion: The overall quality of the standardized, blended new nurse orientation increased significantly from year 2014-2015 to year 2015-2016.

P22. Use of a Secure, Direct Texting Platform and Handoff Tool to Increase the Efficiency and Safety of Night Shift Nurse-to-Provider Communication

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Background: Hospitals are 24/7 operations designed to take care of patients with illnesses that do not respect the time of day. As evidenced in the literature, inpatient hospital outcomes outside of regular hours are worse than those during daytime hours, with one possible reason being the gap in nurse/provider communication. The goal of this project was to evaluate and improve the current process. After attempting to problem solve with huddles as well as operator system revision, an alternative method was explored: to simplify the system with direct nurse-to-provider communication and a day-to-night Epic-built handoff tool.

Methods: The project was implemented in an approximately 500-bed acute inpatient facility. The project involved the hospital medicine night shift service as well as night shift nurses on 4 units. A provider-kept call log, survey, and personal interview were the methods of data collection. A handoff tool was implemented to provide continuity of care. The Spok mobile secure direct texting platform allowed nurses on the units to communicate with providers.

Results: The total paging and Spok mobile wrong provider/error percentage decreased from 11%-12% to 8%. However, Spok mobile alone only showed 2.7% of wrong provider/errors. In interviews, providers and nurses reported increased satisfaction with using Spok mobile instead of the traditional paging process in spite of having encountered several technical challenges. Providers reported 3 specific patient care saves in which the handoff tool positively impacted the care of the patient.

Conclusion: The Epic handoff tool is easily implemented and would benefit any inpatient service with day-night coverage. The Spok paging process eliminated numerous steps and rework in the communication process and allowed providers to prioritize pages. It is clear that secure, direct texting between nurses and providers is best practice for the future; however, the pilot indicates further work is needed to improve technology barriers for providers.

P23. Milk Immune Components Among African American Women With and Without Medicaid

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P24. A Pilot Randomized Controlled Trial of the Feasibility of a Multicomponent Delirium Prevention Intervention vs Usual Care in Acute Stroke

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