

# ABSTRACTS

## 11th Annual Evidence-Based Practice/Research Conference Shifting Safety From “Priority” to “Purpose”: Accelerating Safety of Patients, Families, and Our Workforce

September 27, 2019

Podium Abstracts

1.2-3.2

Poster Abstracts

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Ochsner Health System, Center for Evidence-Based Practice and Nursing Research  
Louisiana State University Health New Orleans, School of Nursing  
New Orleans, LA

## PODIUM ABSTRACTS

### 1.2 Measuring the Clinical Nurses' Perceptions of Workplace Bullying

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*Baylor Scott & White Healthcare*

**Background:** Replacing nurses is a financial burden on the healthcare industry. Using an average salary of \$68,450, the approximate cost to replace one medical-surgical nurse is \$92,442, and the cost to replace a specialty practice nurse is estimated at \$145,000. Retaining nurses in an environment with workplace bullying (WPB) may be challenging. As a result of discussions around WPB, further research was needed to determine if WPB existed and to what extent it existed within Baylor Scott & White Medical Center Irving (BSWMC).

**Methods:** The purposes of this study were to identify the clinical nurses' perceptions of WPB and to determine the prevalence of WPB and the effects on work productivity of clinical nurses at BSWMC using an exploratory, cross-sectional survey design. The sample size was 182, with 85.16% females and 14.84% males ranging in age from 20 to 74 years, with 52.20% white/Caucasian and 79.67% with a bachelor of science in nursing degree.

**Results:** The results demonstrated that 76.4% of the clinical nurses were not being bullied (Negative Acts Questionnaire-Revised [NAQ-R] score <33), 2.7% were sometimes being bullied (NAQ-R score 33-44), and 20.9% were victims of bullying (NAQ-R score ≥45). The mean score for work productivity was 0.68, which demonstrated that the clinical nurses who perceived WPB had minimal decreased productivity following a stressful event of workplace violence.

**Conclusion:** As a result of the findings of this research study, the next step will be to conduct a qualitative study using phenomenological methodology to describe the lived experiences of WPB by the clinical nurses in acute care settings. Once the qualitative research study has been completed, an interventional study will be developed to assist clinical nurses in identifying WPB early and implement solutions to prevent WPB from occurring in healthcare settings.

### 2.1.A. Honoring Patient Wishes: Palliative Care Quality Improvement Project to Increase Use of LaPOST

Cathryn Green, BSN, RN, CCRN, CHPN

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**Background:** Palliative care provides benefits to patients and families with serious or life-limiting illnesses that improve quality of life by providing symptom management, coordination of complex medical care, help establishing goals of care, completion of advance directives, and psychosocial/spiritual support. The Louisiana Physician Orders for Scope of Treatment (LaPOST) is the document of choice to record preferences of patients with serious or terminal illness and those who are frail and elderly with a life expectancy of about one year. More comprehensive than an advance directive (living will), LaPOST is a physician order that documents the patient's desired scope of treatment and wishes for end-of-life care. Palliative care is uniquely positioned to conduct discussions with patients about goals of care and to clarify patients' wishes.

**Methods:** Ochsner Westbank has implemented completion of LaPOST in the palliative care patient population as best practice since 2014 to ensure patients' wishes are honored across all healthcare settings throughout the state of Louisiana.

**Results:** Prior to 2014, tracking advance directives, and specifically LaPOST, did not exist. From 2015 to 2018, manual tracking of advance directives for patients with a palliative care consult showed a >50% increase in the number of patients discharged with a LaPOST compared to the number on admission. In 2018 alone, there was a >62% increase in the number of LaPOST on discharge vs admission.

**Conclusion:** Palliative care is a pivotal resource for the healthcare team. Benefits of a LaPOST include avoidance of unwanted, burdensome, costly, and often futile treatments at the end of life; reduction of

family/surrogate/team distress; and reduction of hospital stays and deaths. It is also pertinent to explore and consider how to increase appropriate use of LaPOST in patients outside of the palliative care population.

### 2.2.A. Baccalaureate Nursing Students' Attitudes Towards Caring for Dying Patients and Their Families

Dianne Richoux, MSN, RN; Lynn Winfield, BSN, RN

*Children's Hospital New Orleans*

**Background:** Providing safe, compassionate end-of-life (EoL) care can have a critical impact on the lives of patients and their families. Many undergraduate nursing students indicate they lack the skills to care for patients at the EoL; however, they are often expected to provide care to dying patients during their clinical rotations. The purpose of this study was to identify bachelor of science in nursing (BSN) students' attitudes toward caring for dying patients and their families.

**Methods:** A comparative descriptive study utilized the Frommelt Attitudes Toward Care of the Dying Scale, Form B (FATCOD-B) to garner level I, level II, and level III BSN students' attitudes toward caring for dying patients and their families. Permission was obtained from Nicholls State University's Nursing Department Human Subject Institutional Review Board. The FATCOD-B survey was disseminated via Qualtrics survey software to BSN students enrolled in the first semester of level I, level II and level III nursing curriculum. One-way ANOVA was used to compare the FATCOD-B scores.

**Results:** There were no statistically significant differences in attitudes towards caring for the dying among level I, level II, and level III students. Level I students' scores were higher, indicating a more positive attitude.

**Conclusion:** The findings from this study, although not statistically significant by levels, provide support for implementation of EoL education within nursing curricula. A major strength of this study was its relevance to current trends in healthcare. Limitations include a small convenience sample (n=60) from only one BSN program. Healthcare organizations are searching for future nurses who are prepared to provide safe, evidence-based care. Attention to nursing students' attitudes, particularly when caring for dying patients and their families, is crucial. Both higher education and healthcare providers should collaborate to create a positive clinical learning environment.

### 2.3.A. Bedside Leaders' Spirituality Perceptions and Collaboration With Chaplaincy

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*Baylor Scott & White Medical Center*

**Background:** Spiritual care is an integral component of delivering holistic care and improved patient satisfaction. However, many patients report their spiritual needs are unmet or unaddressed until an emergent event has occurred. The purpose of this study was to identify and describe the current state of nursing workplace spirituality and comfort level with initiating a chaplaincy consultation.

**Methods:** This quantitative, nonexperimental, descriptive study was performed at a large urban acute care hospital in Dallas, TX for a total of six weeks. Following the provision of informed consent, a convenience sample of 293 responses was obtained via online survey distribution. The survey consisted of the Nursing Workplace Spirituality (NWS) instrument, demographic data, and yes/no questions pertaining to nursing spiritual perceptions and collaborative practices. All possible identifying markers were removed from the provided data to maintain participant anonymity. All analyses were performed using STATA 14.0.

**Results:** Of the 293 responses, 290 eligible participants wholly completed the survey. The majority felt comfortable addressing spiritual care at the bedside (250, 86%) and comfortable initiating chaplaincy consultations (278, 96%). Only 10 (3%) reported being a member of a spiritual nursing support group. However, 113 (39%) reported having personal spiritual beliefs, or lack of spiritual beliefs, that influence their initiation of a chaplaincy consultation. The overall mean (SD) and median scores of NWS were 5.43 (0.38) and 5 (indicating agree), respectively.

**Conclusion:** Generalizability of findings may be limited due to the utilization of a convenience sample. Nursing staff are comfortable in addressing spiritual care at the bedside and initiating spiritual care referrals without further training or guidance. However, personal biases pertaining to preexisting beliefs may influence the delivery of spiritual care at the bedside and warrant future qualitative studies.

### 2.2.B. SOrTing in the Emergency Department

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**Background:** Many emergency departments (EDs) are facing increasing challenges due to growing patient numbers and an inability to flex capacity to meet demand. Due to the increase in patient visits, ED lobbies and hallways have become crowded with patients, and negative outcomes are increasing, such as patients who leave without being seen and delays in care times. Ochsner Medical Center (OMC) – Westbank ED saw a need to optimize the ED throughput process to decrease negative outcomes related to delay in ED care.

**Methods:** In response to this significant challenge, OMC – Westbank sought to identify barriers and improve patient flow with the assistance and support of the Schumacher Group. Utilizing the change model of FOCUS–PDSA (find a problem, organize a team, clarify the problem, understand a problem, and select an intervention–plan, do, study, act), the ED team worked to improve patient outcomes through decreasing door-to-room, door-to-provider, and door-to-electrocardiogram (EKG) times, which led to a reduction in the number of patients that were leaving without being seen. Key changes included implementing a SOrT process (sort, order, and treatment) by placing a provider in triage, adding an additional nurse to implement the orders, and educating all ED stakeholders.

**Results:** Prior to the change, the OMC – Westbank ED average census was 150 patients per month, with a monthly left without being seen rate as high as 7.1% and average door-to-room time of 27 minutes, door-to-doctor time of 38 minutes, and door-to-EKG time of 24 minutes. Postimplementation, times decreased to an average of 8 minutes for door-to-room time, 10 minutes for door-to-provider time, and 9 minutes for door-to-EKG time, and a left without being seen rate <0.05% has been sustained for the past 10 months.

**Conclusion:** By identifying barriers, utilizing best practices, and refocusing on patient-centered outcomes, the OMC – Westbank ED was able to reduce the door-to-provider time by implementing a front-end process that overall reduced the delay in treatment times and the left without being seen rate.

### 2.3.B Resuscitation Redesign: Keeping the Sickest Patients Safer

Fiona Winterbottom, DNP, MSN, APRN, ACNS-BC, ACHPN, CCRN; Erika Ray, BSN, RN

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**Background:** Historically, rapid response systems (RRS) have been used reactively as a safety intervention to decrease rates of cardiac arrests and prevent unplanned transfers into the intensive care unit (ICU). Proactive resuscitation models have also demonstrated prevention of adverse events, dissemination of expertise, provision of staff support, and discovery of quality improvement opportunities. A resuscitation program redesign included new approaches to patient safety by reducing preventable deaths and resuscitation events outside the ICU.

**Methods:** This patient safety program combined novel artificial intelligence alerts, expert nurse rounding, interprofessional training, closed-loop quality improvement, and targeted outcome measurement to offer a systematic and standardized approach to patient safety that could be customized to any hospital.

**Results:** Since January 2018, cardiopulmonary arrests outside the ICU decreased by more than 70%, and cardiopulmonary arrests inside the ICU decreased by more than 36%. The Risk Adjusted Mortality Index decreased to a goal approaching 0.85, and the hospital saw an improved peer group ranking on the Hospital Survey of Patient Safety and in the areas of communication openness, nonpunitive response

to errors, and frequency of events reported, suggesting a positive cultural shift in perception of patient safety.

**Conclusion:** Implementation of a structured resuscitation program is likely to prevent adverse events and support frontline staff.

### 3.1.C Avoiding Predatory Publishers, Journals, and Conferences

Marsha Bennett, DNS, APRN, CNE

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**Background:** Predatory journals and publishers arose out of the open access movement in the early 2000s. While many open access journals and publishers are legitimate, almost half are not. These predatory journals and publishers unprofessionally exploit the open access model, luring unsuspecting authors with a promise of rapid publication. Predatory publishers dilute and corrupt the process of scientific communication, foster counterfeit science, and have little if any peer review or editorial oversight. Articles published in the predatory venue lack scientific and methodological rigor. Predatory conferences have been widespread since the late 2000s and are an outgrowth of the predatory publishing multibillion-dollar industry. Predatory conferences are not organized by scholarly associations but by revenue-generating companies, often predatory publishers, to exploit and profit from researchers who want to present at international conferences. Predatory conferences are poorly organized and poorly attended, with low quality and little to no peer review of submitted abstracts. Some estimates have predatory conferences outnumbering legitimate conferences. Predatory publications and predatory conferences reduce trust in science; thus, it is incumbent on all of us engaged in scholarly work and publishing to ensure we avoid predatory venues when disseminating our scholarly work.

**Methods:** Predatory publishing and predatory conference evaluation tools and checklists can assist researchers and clinicians to identify suspect venues. Attendees will use a free, online, and copyright-free sample checklist with scoring sheet to ascertain legitimacy of publications and conferences. A discussion of the elements of the journal evaluation tool will enable attendees to apply individual components of the tool.

**Results:** Attendees of this presentation used a journal evaluation tool to discern legitimate from suspicious and phony invitations for publication and conferences.

**Conclusion:** Use of free, readily available, evidence-based predatory publication and conference evaluation tools and checklists offers feasible strategies for the identification and avoidance of predatory publications and conferences.

### 3.2.D Slapped and Grabbed? How Can We Keep Staff Safe?

Susie Arrendell, MSN, CCRN, RN-BC

*Baylor Scott & White Medical Center*

**Background:** In 2015, the Occupational Safety and Health Administration (OSHA) reported that healthcare workers were four times more likely to experience workplace violence (WPV) than workers in private industry. Between July 2015 and June 2018, twenty employees suffered injuries related WPV. Nine required medical care. WPV can have harmful effects and negative career impacts. The aim of this study was to examine the difference in the cognitive knowledge of nurses in addressing violent behavior of patients and visitors and to assess the difference in perception of WPV before and after an educational intervention.

**Methods:** This was a one group before and after intervention study. The sample size was calculated at 93. Ten employee safety program (ESP) sessions were offered over three months. Participants were asked to complete a knowledge test at the beginning of class and at the end of class. Participants were asked to complete a WPV perception survey at the beginning of class and 3 months later. This institutional review board-approved study took place at an acute care, not-for-profit, nonacademic, 143-bed, full-service community hospital. One hundred and four participants completed before and after surveys.

**Results:** There was a statistically significant difference in the participants' knowledge in addressing violence. Many felt violence has increased over the past year, a significant number feel safe at work, and more felt able to manage violent behaviors after attending training. Staff suggested using bright-colored nametags for visitors and placing a lighting system outside patient rooms to alert others that patient behaviors were escalating.

**Conclusion:** Recognizing escalating patient behaviors is the first step to maintaining a safe environment. Organizations must provide healthcare workers with de-escalation training to stay safe at work.

## POSTER ABSTRACTS

### P1. Journey to Implementing a Comprehensive Inpatient Fall Prevention Program in a Community Hospital

Kenesha Bradley, MSN, APRN, ACNS-BC; Jennifer Guillot

*Ochsner Medical Center – Westbank*

**Background:** Despite the vast amount of evidence regarding risk factors associated with falls and fall prevention strategies and guidelines, falls continue to present challenges in acute care settings. Because falls are the result of complex patient- and environmental-related factors, we set out over the course of four years to initiate and sustain a comprehensive fall prevention program for our inpatient hospital setting that included a multidisciplinary team to oversee the strategic plan for the fall program, optimization of the electronic medical record (EMR) for accurate assessment and intervention documentation, staff and patient education, and creation of a safe environment for patients and staff.

**Methods:** Utilizing the plan-do-study-act framework and the Roadmap to a Comprehensive Falls Prevention Program by the Minnesota Hospital Association and AHRQ Preventing Falls in Hospitals, our facility strategically piloted many recommended best practices, only choosing to sustain those efforts with the greatest impact on our fall outcomes.

**Results:** Outcomes measured throughout implementation included compliance, number of falls, and fall rates. Over the past 4 years, we have seen a consistent steady decrease in the number of falls each year, with the number of falls since 2015 decreasing by 39%. There has also been a 47% fall rate decrease to 1.76 in 2018 since implementing the program.

**Conclusion:** Of the recommendations, we have seen the greatest impact through our multidisciplinary committee, post-fall investigations, and safety rounding with coaching in the moment. We continue to work to decrease patient falls through staff accountability and individualized patient interventions.

### P2. Video Monitoring Technology as a Fall Prevention Intervention

Yelena Tuerk, BSN, MS, MSN, MBA, RN, CNRN, NEA-BC; Heather Carter-Templeton, PhD, RN-BC

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**Background:** Patient falls present an acutely problematic challenge in hospitals. Despite many programs and interventions to prevent falls and fall-related injuries, these rates have remained high. Advancements in technology have afforded the opportunity to implement novel video monitoring (VM) systems to observe and support inpatient settings from remote locations. VM offers a cost-effective way to address fall challenges by providing additional fall risk intervention, thereby maintaining patient safety and helping to decrease fall rates. The purpose of the study was to examine the effect of VM technology as a fall prevention intervention in four inpatient units—stroke unit (CVA), traumatic brain injury unit (TBI), comprehensive medical rehabilitation unit (CMR), and spinal cord injury/multitrauma unit (SCU)—at a rehabilitation hospital in the southeastern United States.

**Methods:** This retrospective review assessed the fall rates of four inpatient units (from October 2016 to February 2018) before and after the implementation of VM. Historic fall rate data for all four units were collected for the two-year period prior to the implementation of the VM system (May 2015 to September 2016) and used as the baseline data.

**Results:** VM has been effective in reducing falls in four inpatient units. Prior to implementation, the average fall rate was 7.8. After the implementation, the average decreased to 6.4. Furthermore, 75% of the units (CVA, CMR, SCU) included in this study experienced an average 30.86% decrease in fall rates. Changes in level of injury and fall event types were also analyzed and will be shared.

**Conclusion:** Falls and fall potential are a significant concern in rehabilitation settings. Current fall prevention strategies are often not effective at reducing fall rates. Implementation of new VM technology helped to reduce fall rates among three inpatient rehabilitation settings in our institution.

### P3. HUSH: The Creation of a Sleep Protocol to Limit Sleep Interruptions on a Medical-Surgical Unit

Shaun Lampron, DNP, RN; Donna Copeland, DNP, RN, NE-BC, CPN, CPON, AE-C

*University of South Alabama*

**Background:** Hospitalized patients often experience poor sleep quality due to unnecessary noise and sleep disruptions. The importance of sleep in maintaining physiological and psychological well-being are well documented. In addition to the physiological and psychological effects, sleep disruptions also affect patients' perceptions of the overall hospital experience. By coordinating care, noise and sleep disruptions can be reduced to improve patients' perceptions of the hospital experience and promote a healing environment. A quality improvement project was developed to improve the patient perceptions of quietness and reduce sleep disruptions by 5% over 16 weeks.

**Methods:** An interprofessional team developed a Help Us Support Healing (HUSH) protocol to coordinate patient care activities to minimize sleep interruptions, allowing patients six or more hours of uninterrupted sleep. Inclusion criteria for the HUSH protocol were patients with a modified early warning score of 2 at 24 hours after admission to the medical-surgical unit. Changes in patient perceptions of noise and number of hours of restful sleep were compared preimplementation and postimplementation of the HUSH protocol utilizing the Hospital Consumer Assessment of Hospital Providers and Systems (HCAHPS) quiet domain scores and patient interviews during daily nurse leader rounding.

**Results:** Twenty-four patients were included on the HUSH protocol, 63% female and 37% male. Patients ranged in age from 40-91 years with the mean age group 70-79 years. Overall results of the quiet domain scores indicated a 9% improvement from 44% six months before implementation of the project to 53% postimplementation. Patient interviews during nurse leader rounding indicated a positive response, with patients reporting more restful sleep and a decrease in sleep interruptions during the nighttime hours.

**Conclusion:** This quality improvement project demonstrated that coordinating care can improve patients' perceptions of quietness and sleep quality. However, due to a small sample size, further studies are needed to confirm the findings and to evaluate the impact of a sleep protocol in other populations and settings. Further investigation is needed for limiting sleep disruptions and the effects on patient outcomes.

### P4. TeamSTEPPS®: A Framework to Foster Teamwork and Collaboration Among Interprofessional Students

Donna Copeland, DNP, RN, NE-BC, CPN, CPON, AE-C; Clista Clanton, MSLS

*University of South Alabama*

**Background:** Students do not inherently know how to work in an interprofessional (IP) team; faculty observations confirmed that students were unable to establish mutual goals, select a team leader, or decide who was responsible for tasks in the clinical setting. Consequently, students' ability to work collaboratively was diminished. When healthcare professionals do not communicate effectively, patient safety is at risk; therefore, communication and team collaboration are essential to patient outcomes. TeamSTEPPS® training has been proven effective in enhancing communication and teamwork. In addition, team-based learning (TBL) has been shown to enhance student engagement; however, little has been written on TBL for TeamSTEPPS® training among IP students. Therefore, an institutional review board-approved study was designed to determine whether TBL is feasible for the delivery of TeamSTEPPS® training and whether TeamSTEPPS® training would improve students' capacity for IP collaboration.

**Methods:** Two cohorts of students from five disciplines enrolled in an IP course participated after consent was obtained. TeamSTEPPS® training consisted of one 4-hour session for multiple teams of 4-5 students over the semester. Each session included pre-readings, individual and team readiness assurance testing, and application activities to assimilate the training into practice. The Student Perceptions of IP Clinical Education-Revised 2 was administered preimplementation and postimplementation of the training.

**Results:** Descriptive statistics were used to compare pre/post survey results of 103 participants. Increases were found in both the roles/responsibilities and patient outcome domains: cohort 1-13% increase (M=4.12, SD=0.80); cohort 2-7% increase (M=4.14, SD=0.93); cohort 1-3% increase (M=4.30, SD=0.66); and cohort 2-2% increase (M=4.41, SD=0.78), respectively. Student reflections and faculty observations confirmed that students were able to demonstrate effective communication and collaboration in the clinical setting.

**Conclusion:** Findings indicate that TBL is feasible for the delivery of TeamSTEPPS® training. This study shows promise in short-term improvements in attitudes of IP students in collaborative practice.

#### P5. Leadership Rounding: Improving Outcomes With High Reliability

Isabella Booher, RN, CCRN; Diana Diaz, BSN, RN

*Children's Hospital New Orleans*

**Background:** Over a period of six months in early 2017, central line-associated blood stream infection (CLABSI) maintenance reliability in our pediatric intensive care unit (PICU) was consistently below 70%, coinciding with an uptick in our CLABSI infection rate. Senior nursing leadership (CNO), noting the drift in reliability, implemented leadership rounding with the intention of rounding on each patient every day to assess CLABSI maintenance reliability.

**Methods:** The quality improvement intervention began in August 2017 with the unit director attempting to round on each patient daily. PICU patient volumes fluctuate, and the unit manager found it more effective to round with bedside nurses throughout the week on both day and night shifts. Each interaction lasted approximately 20 minutes and began with asking the bedside nurse to identify what hospital-acquired conditions the patient was at risk for and reviewing all applicable bundle elements. Clinical leaders were added to the rounding process in December 2017, reinforcing best practice with staff on all shifts. Staff members were encouraged to join quality improvement teams and act as unit champions.

**Results:** Since the intervention, the PICU went 10 months without a CLABSI and had a statistically significant improvement in CLABSI maintenance reliability ( $P=0.02$ , 2 proportion test).

**Conclusion:** The initial objective was to round on all patients every day and increase auditing. The PICU implemented this change through leadership involvement, bedside education, and increasing situational awareness to reinforce best practice. A new electronic medical record implementation in April 2018 resulted in a decrease in reliability associated with documentation, but the unit remained infection free for 10 months, indicating hardwiring of the process on the unit.

#### P6. Engaging Stakeholders to Improve CLABSI Reliability and Outcomes

Lynn Winfield, RN, BSN, CPHON; Kristie Rozands, RN, BSN, CPHON

*Children's Hospital New Orleans*

**Background:** Over a period of six months in early 2017, central line-associated blood stream infection (CLABSI) maintenance reliability in our hematology/oncology unit was inconsistent, with rates ranging from 44% to 100%. During that time period, 7 patients were diagnosed with a CLABSI. Senior nursing leadership responded to the drift in reliability by implementing daily leadership rounding on every patient to assess CLABSI maintenance reliability. The hematology/oncology unit developed a variety of interventions in fall 2017 designed to improve CLABSI maintenance reliability and reduce CLABSI infection rates. Specifically, the unit focused on hygiene measures to reduce the incidence of mucosal bloodstream infections (MBIs), which hematology/oncology patients are particularly at risk for.



**Methods:** Using a plan-do-study-act methodology, unit leadership implemented several interventions. Clinical leads devised a comprehensive, intensive rounding schedule including direct observation, education, and individualized written feedback to staff for improvement opportunities. Components of the Children's Hospitals' Solutions for Patient Safety oral care and environmental bundle were adopted. The unit partnered with environmental services to ensure cleanliness on the unit and began using Tru-D sterilization for terminal cleaning. A Daily Cares poster was used in the patient rooms to partner with the healthcare team for completion of daily hygiene tasks.

**Results:** From January 2017 through January 2019, the hematology/oncology unit had a statistically significant improvement in CLABSI maintenance reliability ( $P=0.000$ , 2 proportion test) and a statistically significant change in the proportion of CLABSIs that are MBIs ( $P=0.008$ , 2 proportion test).

**Conclusion:** The initial objective was to round on all patients every day and increase auditing. The unit implemented this change through leadership involvement, bedside education, and increased situational awareness to reinforce best practice. The reduction in MBIs also suggests that partial adoption of the oral care and environmental bundle can still be effective.

**P7. Reduction of Serious Harm Events with Practice Change(s) and Implementation of Clinical Education Software**

Kathleen Vincent, BS, RN; Margaret Richmond, MPH

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Not published at authors' request

**P8. Cuddle Care: Reducing Readmissions with a Multi-Disciplinary Discharge Planning Team**

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*Children's Hospital New Orleans*

**Background:** In February 2016, identification of high-risk readmitting populations with corresponding interventions became a standard element of the Solutions for Patient Safety unplanned readmissions bundle. Medically complex patients with multiple subspecialty involvement were identified as one of our target populations. Pediatric hospitalists manage these patients in conjunction with pediatric residents. In the absence of discharge planners and dedicated nurse coordinators for this service, the group developed a multi-disciplinary discharge planning team in October 2018.

**Methods:** The multi-disciplinary discharge planning team, called Cuddle Care, includes a senior resident from each hospitalist team, nursing unit representatives, case managers, and social workers. The team meets weekly, Monday and Thursday, to address discharge needs for patients seen by the service line. Coordinating home health, authorizing equipment and medication as required by insurance, and addressing social issues are the primary focus. Developing a cohesive discharge plan for medically complex patients can often take several days and the involvement of multiple disciplines. Identifying needs early assists with timely discharge and provides more time to educate caregivers on appropriate tools for home management.

**Results:** Cuddle Care rounds have had a positive impact on reduction of unplanned readmissions for patients identified as medically complex. In the seven-month period since Cuddle Care rounds were initiated, the seven-day readmission rate (per 100 discharges by the hospitalist team) for patients identified as medically complex has decreased by two-thirds. Fourteen- and thirty-day readmissions in this population have also decreased by 31% and 27%, respectively. Nurses report Cuddle Care rounds have led to better experiences for patients and smoother discharges.

**Conclusion:** The team plans to expand Cuddle Care rounds to four days a week. Involving all necessary care providers as early as possible both better provides for the needs of these complex patients and decreases readmissions.

**P9. Catheter-Associated Urinary Tract Infection Prevention in the Medical Intensive Care Unit With a New Prevention Protocol**

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**Background:** Urinary tract infections (UTIs) are the fourth most common type of healthcare-associated infection (HAI). A catheter-associated UTI (CAUTI) is the leading cause of secondary nosocomial bloodstream infections; about 17% of hospital-acquired bacteremias are from a urinary source, with an associated mortality of approximately 10%. An estimated 17% to 69% of CAUTI may be preventable with recommended infection control measures, which means that up to 380,000 infections and 9,000 deaths related to CAUTI per year could be prevented. The purpose of this project was to test a new CAUTI prevention protocol.

**Methods:** A quality improvement project was initiated July 2018-September 2018 at Ochsner LSU Health Shreveport in the medical intensive care unit (MICU) comparing CAUTI rates with our CAUTI prevention protocol in the third quarter with CAUTI rates in the previous two quarters. We used the standardized infection ratio (SIR) to evaluate our number of CAUTIs. The SIR compares the actual number of HAIs reported to the number that would be predicted, given the standard population (ie, National Healthcare Safety Network baseline), adjusting for several risk factors that have been found to be significantly associated with the differences in infection incidence. The CAUTI SIR goal for our facility is <0.8, which is the value-based purchasing threshold.

**Results:** After implementation of the new protocol, we had a CAUTI SIR of 0.726, achieving our SIR goal of <0.8. HAI were reduced, and patient safety outcomes were improved. The one CAUTI we had was due to an asymptomatic bacteremic UTI in a patient who had multiple other sources.

**Conclusion:** The new protocol was successful in reducing the number of CAUTIs identified in our MICU. Because of this success, the protocol has recently begun to be implemented throughout the hospital.

**P10. Nursing Innovation: Investing in Non-Clinical Time**

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*Ochsner Medical Center – New Orleans*

**Background:** Nurses are uniquely positioned to recognize improvement opportunities, identify cost-effective changes, design innovative workflows, and lead sustainable change. There are more than four million active nurses in the United States who could be empowered to pursue innovative ideas and translate evidence into practice and positive patient outcomes. An investment in non-clinical nursing time offers exciting opportunities to enhance creativity, decrease burnout, and engage frontline staff in designing a healthy work environment.

**Methods:** In 2019, a large health system in the southern United States embarked on a journey in partnership with a large national nursing organization. A structured curriculum was used to train frontline nurses in leadership topics, communication, change concepts, quality improvement methods, project management, and data management and analysis. Each nurse was supported to commit to 96 hours of non-clinical time to identify a specific clinical problem and solve the issue with a team.

**Results:** Ten teams participated in the program from 9 intensive care units (ICUs) and one medical/surgical unit. Four ICUs choose to look at emergency response, four teams implemented interdisciplinary rounds, one chose to tackle burnout, and one looked at noise reduction. Each team will be able to demonstrate positive patient, nurse, and fiscal outcomes at the end of the one-year program.

**Conclusion:** Staff nurses can make substantial contributions to their organizations in clinical and fiscal outcomes when provided with non-clinical time.

**P11. Overcoming Barriers to Evidence-Based Practice: A Focused Example**

Debra Sullivan, PhD, MSN, RN, CNE, COI; Deborah Weatherspoon, PhD, MSN, RN, CRNA, CNE, COI

*Walden University*

**Background:** Research supports evidence-based practice (EBP) as key to meeting the Institute of Healthcare Improvement (IHI) quadruple aim in healthcare. Yet even when there are EBP initiatives in place, many healthcare organizations struggle with the implementation of these standards of care. The quantity of rapidly changing information available is often overwhelming, yet it is imperative that healthcare providers retrieve and apply evidence to improve patient outcomes. This project aimed to identify primary barriers to EBP implementation and ways to overcome them. One barrier was selected and presented in detail as an example.

**Methods:** A literature review was conducted for best practices for overcoming barriers and implementing EBP competencies.

**Results:** Current evidence identifies a significant barrier to EBP implementation as a knowledge gap for practicing nurses on differentiating between quality measures and EBP.

**Conclusion:** A structured approach that includes EBP competency training will enable implementation that includes translation of research into real-world clinical practice. This will enable healthcare organizations to meet the IHI quadruple aim as well as improve healthcare quality and patient outcomes.

**P12. Clinical Nursing Skills: Evidence-Based Updates to Ensure Patient Safety**

Brenda Woodmansee, DNP, RN; Kimberly Jordan, DNP, RN

*University of South Alabama*

**Background:** As the largest healthcare workforce, nurses are responsible for applying theoretical knowledge, clinical skill, and practice experience to provide safe and effective care to a variety of patients. Knowledge gained regarding the practice of clinical nursing skills in nursing educational institutions often differs from that learned in clinical practice, causing confusion for the nurse and the potential for unsafe practices. Based on personal clinical experience, the greatest amount of confusion is seen regarding recommended practices surrounding intravenous (IV) access, medication administration, and nasogastric (NG) tube management.

**Methods:** The research question of “What evidence-based clinical recommendations are in publication surrounding intravenous access, medication administration, and nasogastric tube management for front-line registered nurses?” guided literature exploration. A search for clinical practice guidelines from professional nursing and/or healthcare organizations was completed. A total of four clinical practice guidelines were selected from the Centers for Disease Control and Prevention, the American Society for Parenteral and Enteral Nutrition, and the Association for Professionals in Infection Control and Epidemiology. From the guidelines, updates on topics of IV medication dilution, peripheral IV site maintenance, aspiration with intramuscular (IM) injections, and NG tube placement verification were highlighted.

**Results:** Recommendations for the frontline nurse include avoiding prefilled syringes for dilution of medication for administration, utilizing a chlorhexidine-impregnated dressing for peripheral IV sites, limiting replacement of peripheral IV catheters to every 96 hours, abstaining from aspiration during IM vaccination administration, and performing x-ray as the gold standard for verification of NG tube placement.

**Conclusion:** Utilization of clinical practice guidelines ensures use of the safest evidence-based recommendations for performance of clinical skills in nursing education and practice.

**P13. Education vs Practice: Evidence-Based Comparison of Enteral Nutrition Tube Residual Management**

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*University of South Alabama*

**Background:** As the largest healthcare workforce, nurses are responsible for applying theoretical knowledge, clinical skill, and practice experience to provide safe and effective care to a variety of patients. Knowledge gained regarding the practice of clinical nursing skills in nursing educational institutions often differs from that learned in clinical practice, causing confusion for the nurse and the potential for unsafe practices. In relation to patients receiving nutrition via an enteral tube, the performance of routine gastric residual volume (GRV) assessments is controversial.

**Methods:** The research question of “What evidence-based recommendations are in publication surrounding routine GRV assessments for patients receiving nutrition via an enteral tube?” guided literature exploration. A search for clinical practice guidelines from professional nursing and/or healthcare organizations and a recent-edition nursing textbook was completed. Literature from the American Society for Parenteral and Enteral Nutrition (ASPEN), Society of Critical Care Medicine (SCCM), and Perry, Potter, and Ostendorf’s *Clinical Nursing Skills and Techniques* textbook were included.

**Results:** In clinical practice, ASPEN and SCCM guidelines recommend the lack of routine GRV measurements in the adult inpatient population as routine measurements may lead to unnecessary cessation of vital nutrition. In nursing education environments, it is recommended to assess GRV every 4-6 hours to monitor for appropriate gut motility and potential for aspiration. All resources recommend avoidance of holding enteral nutrition with a GRV <500 mL in the absence of other signs of intolerance.

**Conclusion:** Although differences exist in the recommendations for routine GRV measurements, facilities should update clinical policies on holding enteral nutrition specific to clinical indications and a GRV. Updated protocols would assist in ensuring appropriate nutrition is delivered to patients and in preventing aspiration.

**P14. Borescope Inspection Implementation: A New Process and Its Impact on Endoscope Maintenance and Repair**

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**Background:** The carbapenem-resistant Enterobacteriaceae (CRE) outbreaks of 2015 prompted increased attention and strict adherence to endoscopy practices: specifically, endoscope manufacturers’ reprocessing guidelines, microbiologic surveillance, and visual inspection with lighted magnification of internal working channels of endoscopes. The purpose of this project was to implement a borescope inspection process to visualize internal lumens during the cleaning process and after microbiologic culturing. Expected outcomes include 100% staff training on borescope use/handling/cleaning, 100% identification and intervention of endoscope deficiency, and 5% decrease in quarterly endoscope repair costs.

**Methods:** The endoscopy department utilized the Institute for Healthcare Improvement’s Model for Improvement. This was a convenience sample of 13,049 endoscopic procedures in a 767-bed, acute care teaching facility. Six new borescopes were purchased for reprocessing areas. Logs were kept detailing borescope usage, findings, and interventions. Quarterly reports were received from the manufacturer regarding maintenance and repair costs. Staff were trained on borescope use/handling/cleaning; endoscopes with identified deficiencies were addressed before next patient use.

**Results:** Competency was validated in 100% of staff. One thousand eighty-eight inspections were performed: 152 postculture inspections, 393 endoscopes in which a device was deployed/removed through instrument channel, and 542 duodenoscope distal tip/elevator inspections. Sixty-four abnormal findings included debris, retained foreign bodies, discoloration, and channel shredding. One hundred percent of abnormal findings were addressed prior to next patient use. There was a 37% average quarterly increase in endoscope maintenance and repair costs compared to Q1 2018. Data collection remains in progress.

**Conclusion:** Implementation of a borescope inspection process allowed for identification of residual debris and damage of endoscopes prior to next patient use. An increase in endoscope repair costs and maintenance was noted; however, patient risk of exposure was mitigated. The health system's performance improvement and infection prevention teams appreciated the potential patient safety implications, value our new process, and mandated borescope implementation systemwide.

#### P15. Getting Ahead of Sepsis

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**Background:** Sepsis is a leading cause of death in the United States. Early recognition and intervention save lives as mortality increases 8% each hour sepsis is not identified. Baylor University Medical Center (BUMC) evaluated the accuracy of sepsis screening completed by nursing on deteriorating septic patients requiring the rapid response team from September 2018 to January 2019. Screening accuracy prior to the patient requiring critical intervention was 27%. An anonymous survey sent to nurses revealed that they did not look at vital sign/lab trends, treated the sepsis screen as a task they clicked on without giving it much thought, and did not understand how to conduct the screen. A goal was developed to improve the accuracy of sepsis screening to 75% on three pilot units by May 2019.

**Methods:** Lean methodology and A3 structured problem solving were utilized to address the sepsis screening accuracy gaps. Efforts focused on three units. Interventions were visual management tools to assist with sepsis screening, sepsis champions on each pilot unit, an education packet with self-paced workbook, sepsis screening education to champions, and education of nursing staff by champions. Also, weekly data of accurate screening were posted on units' huddle boards for discussion, emails were sent to registered nurses who did not screen accurately, and nurses were recognized who screened accurately.

**Results:** In February 2019, accurate sepsis screening on pilot units was 21%. On April 28, 2019, accurate screening reached 91%, and the goal of 75% was sustained for 5 weeks through the end of the pilot project.

**Conclusion:** Nursing plays a key role in identifying patients who become septic. Knowing how to accurately screen for sepsis and notifying the provider with effective communication prompt treatment that can be initiated to save lives. Education is being provided throughout BUMC so that all nurses will get ahead of sepsis by accurately screening.

#### P16. Evaluating Staff Perceptions of Rapid Response System Knowledge and Satisfaction After Innovation

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**Background:** Rapid response systems (RRS) are a patient safety framework for bedside staff to summon a team of providers when a patient demonstrates signs of clinical deterioration. The RRS goal is to intervene early and prevent the need for critical care transfers or cardiopulmonary arrest. Staff perceptions can impact the success of a hospital's RRS. The purpose of this study was to explore differences in staff perceptions of RRS knowledge and satisfaction before and after a process change.

**Methods:** An exploratory analysis was conducted using pretest and posttest data from the Rapid Response System Staff Knowledge and Satisfaction Survey. After the pretest, the RRS process was modified to incorporate a technology-based patient risk stratification system, to do proactive rapid response nurse (RRN) rounding, and to encourage RRN telephone consults. The posttest survey was administered the following year. Respondents included in this analysis were registered nurses (RNs) who self-identified as emergency response team callers (n=111 in 2017; n=144 in 2018). Descriptive statistics were used to analyze survey data, including frequency distributions. Each survey item was investigated using chi-square tests of association to assess change in distribution of responses across years. The sample was analyzed in totality with subgroup analysis (by years of experience) for statistically significant findings.

**Results:** Results demonstrated significant change on two survey items for all RNs, indicating improved support for the decision to activate RRS and postcall care documentation. For novice nurses, there was significant change in perception of willingness to use the RRS. For experienced nurses, there was significant change in perceptions about physician support for activating the RRS.

**Conclusion:** Technology-based risk scores allow RRS teams to anticipate and prevent patient deterioration. Proactive RRS consultation can improve staff perceptions, building confidence in the system and encouraging utilization.

#### P17. Standardizing Chemotherapy Education

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**Background:** The purpose of this quality improvement project was to identify the education practice issue within the organization and demonstrate a quality improvement plan, with change theory as an underpinning for the process.

**Methods:** The oncology outpatient infusion center nurses completed surveys consisting of self-reported rates of patient education. More than 90% of the nurses reported an inability to provide thorough chemotherapy education to all patients. Barriers to providing proper chemotherapy education to their patients were assessed. Knowledge base of supportive interventions, time restraints, increasing patient loads, and higher patient acuity were identified as barriers. Education was inconsistent among nurses. Patient satisfaction surveys consistently reflected deficits in the areas of “education to manage symptoms,” “what to expect during chemo,” and “explained how to manage chemo side effects.”

**Results:** Six Sigma was used as a quality improvement model to provide a better understanding of the process being improved and how to reach a solution through a cycle to define, measure, analyze, improve, and control the practice improvement initiative. The process issue can be defined as inconsistent and inefficient education of first-time cancer patients receiving chemotherapy. When measuring the process, the expectation is that 100% of new patients receiving chemotherapy will be educated by the infusion nurse, but the current audits reveal not all patients are receiving thorough education. Analysis reveals inconsistencies in educational material and nursing time restraints limiting and preventing patient education.

**Conclusion:** Structure measures in the outpatient oncology clinic should include a nursing supervisor always available with a manager or charge nurse available in the supervisor’s absence. Process measures should ensure all first-time chemotherapy patients are educated and consistently provided with the same handouts and binders. Outcome measures should evaluate patient safety through compliance with home care techniques and decreased problem visits and triage calls for symptom management. The structure, process, and outcomes will be measured through monthly audits of education rates, patient satisfaction survey scores, unscheduled problem visits with oncologists, and phone calls to triage nurses for symptom management.

#### P18. Trialing Use of the Difficult Intravenous Access (DIVA) Tool

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*Tampa General Hospital*

**Background:** Peripheral intravenous (IV) catheters are commonly used in hospitalized patients to deliver medical care. Approximately 200 million peripheral IV catheters are inserted in hospitals across America each year. At times, trying to establish IV access can be challenging because of comorbidities, scar tissue, hydration status, age, and a variety of other factors. Multiple studies have shown beneficial effects of determining the difficulty of an IV placement by using the difficult intravenous access tool.

**Methods:** The project authors collected data from 43 nurses in five different units in a large urban teaching hospital. Data were collected using an edited version of the clinical predictor tool to help identify patients with difficult IV access (DIVA tool). A score of five or greater suggests that the patient has a difficult IV

access and should prompt a consult to the vascular access team (VAT). The group added a question to determine if IV access was ultimately obtained by the hospital's VAT.

**Results:** Nearly all surveyed nurses felt the DIVA tool was a helpful predictor for IV insertion success. Fifty-three percent of patients with a score of five or greater required the VAT to obtain peripheral IV access. The average number of peripheral IV insertion attempts per patient was two.

**Conclusion:** Project data suggest that the DIVA tool was helpful to predict when IV insertions would be difficult, warranting a consult to the VAT. Further testing of the tool should occur before housewide implementation.

### P19. Impacting the New Nurse Experience

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**Background:** A new nurse guide was designed as a residency project by new nurses to help fellow new nurses integrate into the culture of their large urban teaching hospital.

**Methods:** The group created and tested the guide's content and evaluated the perceived usefulness of the guide during their year in residency. An established residency cohort was surveyed to establish key topics to include in the guide. The guide was then tested on a newer nurse residency cohort. The new cohort was surveyed to determine baseline knowledge of topics included in the guide, but only the control group received the guide. One month later, the control and experimental groups completed the same survey again to measure change in knowledge level. The experimental group was asked additional questions about the usefulness of the book.

**Results:** More than half of the questions answered by the experimental group showed a positive response. More than half of respondents rated the guide as useful and stated they felt better integrated into hospital culture, and three-quarters of respondents would recommend it to a friend.

**Conclusion:** Outcome data showed the book helped educate and welcome new nurses to the hospital and could be useful to introduce subsequent nursing residency groups into the hospital culture.

### P20. Workplace Fatigue: Levels, Contributors, and Outcomes

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**Background:** Work-related fatigue is ubiquitous in acute care with consequences impacting patient safety, productivity, and personal health at substantial societal costs. Clinical staff are vulnerable to shiftwork and struggle to achieve sufficient sleep, balanced lifestyles, and healthy work environments. Fatigue increases the risk of harm and error and extends into communities. Nursing leaders can foster environments that promote staff alertness, preparedness, and responsiveness, but first, they must determine the existence and prevalence of fatigue in clinical staff.

**Methods:** The Occupational Fatigue Exhaustion/Recovery Scale (OFER15) measures clinical staff fatigue levels, providing a valued and unique snapshot of the balance between adaptive and recovery fatigue states. The study implemented a web-based survey using the OFER15 and demographic, work-related, and sleep hygiene items.

**Results:** OFER15 scores reported acute fatigue ( $60.70 \pm 22.64$ ), chronic fatigue ( $41.09 \pm 25.26$ ), intershift recovery ( $48.00 \pm 24.79$ ), and persistent fatigue ( $52.00 \pm 24.79$ ) in staff ( $n=95$ ) working predominantly 12-hour shifts.

**Conclusion:** The prevalence of fatigue is concerning. Nursing leaders and staff are jointly responsible for reducing fatigue-associated risks. Nursing leaders are uniquely positioned to develop fatigue countermeasures to mitigate the harmful effects of workplace fatigue.

**P21. A Performance Improvement Initiative: Discharge Center Almost Home**

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**Background:** Our purpose was to provide patients with a last stop prior to discharge from the hospital to receive further education. Patients waiting for a ride to pick them up can also utilize the Discharge Center to ease patient flow and capacity management. The lack of available inpatient beds has put a constraint on patient flow and capacity within the emergency department and admission directly from clinic offices. A study by Hernandez et al in 2014 showed that an average of 33% of discharge orders were placed and signed by physicians before lunchtime, and once orders were placed, it took an average of two hours for the patient to physically be discharged from the unit.

**Methods:** A plan-do-study-act methodology is currently being used to ensure success of the Discharge Center. An initial discharge lounge was created in 2017 that served as a place for patients to go while waiting for their ride home. This was considered our pilot program for the process. A committee was developed to discuss the improvement and transformation of the lounge into a Discharge Center and what types of services would be offered, along with inclusion and exclusion criteria that would be put in place.

**Results:** Initial data were collected on the number of patients being sent to the Discharge Center on a daily basis and from which units. We found that while this information was helpful, it did not give us enough information to evaluate the success of the Discharge Center.

**Conclusion:** The utilization of the Discharge Center has improved patient flow from admission to discharge by decreasing the length of time a patient stays in their room once discharge orders have been placed by the doctor.