2024

DNP PROJECTS

IOWA
College of Nursing

Palliative Care Screening in Patients with Advanced Heart Failure

Caitlyn Al-Ostaz, BSN, RN, FNP-DNP Student

Background: Heart failure (HF) imposes a significant burden on healthcare systems worldwide, with its prevalence expected to rise in the coming years (Savarese & Stanek, 2023). Despite advances in treatment, HF continues to be associated with severe symptoms and high mortality rates. Palliative care (PC) has emerged as a vital component in managing HF, aiming to improve patients' quality of life (Kavalieratos et al., 2017). However, identifying and referring patients who would benefit from PC remains a challenge in clinical practice.

Purpose: This project aimed to develop and implement a Modified SPICT screening tool to identify patients with advanced HF who would benefit from PC in an outpatient cardiomyopathy clinic setting.

Methods: Employing the Iowa Model-Revised Evidence-Based Practice as its framework, this initiative introduced the Modified SPICT tool to a setting previously lacking a screening tool. The project focused on three primary outcomes: the rate of screening completion for new patients, the frequency of palliative care referrals following positive screenings, and staff satisfaction with the screening tool.

Findings: Post-implementation, the rate of screening new patients for palliative care needs increased dramatically to 72.97% from none previously. Of those screened, 26% (n=7) were identified as needing PC, resulting in referrals for two patients. Despite these advances, challenges like provider reluctance and patient refusal limited referral rates. Additionally, a qualitative analysis indicated no significant correlation between positive screenings and factors such as age, ejection fraction, or specific cardiac diagnoses.

Discussion: This project underscores the importance of integrating palliative care into HF management and highlights the need for ongoing research to develop effective screening tools and overcome barriers to accessing PC services for this population.

The Implementation of Primary Care Follow-After ED Visit

Marissa Amidon, BSN, RN, FNP-DNP Student

Background: Over the past decade, the US has seen fewer patients with an established primary care provider. This has caused more patients to be seen in the Emergency Department (ED) for low-acuity complaints, including UTIs, URIs, pregnancy testing, STI testing, and minor lacerations. It is recommended that patients schedule a primary care follow-up appointment to bridge care after ED treatment. Current literature suggests that implementing additional interventions before patient discharge from the Emergency Department will increase follow-up compliance and improve health outcomes.

Purpose: This quality improvement project aims to increase primary care follow-up compliance by providing an appointment before ED discharge.

Methods: The project used a plan-do-study-act (PDSA) model to guide the quality improvement process. It investigated whether a new scheduling process would be more successful than the established process within the Emergency Department. The established process included a hotline number for the patient to call to schedule an appointment with an available provider. The new scheduling process included providing eligible patients with an appointment before ED discharge.

Findings: The pilot process had a 100% scheduling success rate for available appointments when compared to the established process of 40%. The pilot saw increased patient satisfaction with the ease of scheduling before discharge. However, the process was not as successful in appointment attendance at 38%. Although attendance was not as successful, the process could become more successful with expanding provider availability.

Discussion: Increasing the number of patients with established primary care providers could decrease the number of patients seen in the ED for low acuity complaints. Providing an additional scheduling intervention increases patient satisfaction and follow-up compliance. The intervention negated the burdensome process of calling the scheduling department, increased patient satisfaction, and increased appointments scheduled after discharge.

Simulated Airway Management for Low Frequency, High Stakes Encounters

Jeff Artioli, BSN, RN, SRNA-DNP Student

Background: Low frequency, high stakes (LFHS) situations in healthcare are patient care events that are infrequently encountered but demand error-free and efficient delivery of care. Technical and nontechnical skills required by these events can decay during periods of nonuse, resulting in suboptimal provider performance. Emergency Medical Services (EMS) providers have unique considerations that pose challenges for maintaining skills. Simulation training has proven effective in minimizing skill decay and is a promising method for maintaining technical and non-technical skills for these LFHS scenarios.

Purpose: To provide simulated airway management for low-frequency, high-stakes encounters to EMS providers.

Methods: Simulations were developed based on the needs of two EMS organizations. A total of four simulations were developed, two for each organization, using organization-specific protocols. A high-fidelity, mobile simulation lab was used to deliver simulations, and participants completed retrospective pre/post surveys after completing both simulations.

Findings: Simulation training improved technical and nontechnical skills (P<.05). After participating in simulations, there was an improvement in provider proficiency using different airway equipment, increased comfort and confidence managing an airway, and increased competence in performing an RSI.

Discussion: Delivering simulation training using a high-fidelity, mobile simulation lab is effective and provides a sustainable framework for repeat education sessions to prevent skill decay for EMS providers.

Preventative Mental Health Screening in High School: Improving Screening and Access of Mental Health Resources

Weston Bietz BSN, RN, PMHNP-DNP Student

Background: Despite an increase in prevalence and worsening mental health among adolescents, access to mental health resources remains inadequate. The use of school-based mental health services offers the potential to improve the identification and treatment of adolescents with mental health concerns.

Purpose: To address the lack of school-based mental health services in a rural high school by implementing a mental health screening program with mental health education.

Methods: In August 2023, 318 students were invited to take the Pediatric Symptom Checklist-Youth Report (Y-PSC) to screen for mental health concerns. If mental health concerns were identified, students were referred to school-based counseling. School record audits measured the improvement in the identification of mental health concerns and utilization of counseling services before and after implementation. All teachers at the high school were invited to participate in an educational presentation on general information regarding mental health, how to identify signs of mental illness, and knowing available resources. A pre-and post-survey measured knowledge and confidence when working with students with mental health concerns before and after education. Qualitative interviews were conducted to assess the impact on the implementation of the screening program and education in the high school.

Findings: 26 high school students were screened by the Y-PSC, 11 (42.3%) of whom screened positive for mental health concerns. Of those 11 students, 4 were newly identified as having mental health concerns. Utilization of counseling services in the high school increased from 5 to 10 students after screening. After education, teachers showed increased knowledge (5%) and confidence (17%) regarding working with students with mental health concerns.

Discussion: These findings support that implementing a mental health screening program in school can improve early identification and utilization of services. Additionally, educating teachers on mental health can equip them with the necessary skills to support students.

The Use of Silicone and Foam Dressings in the Prevention of Cervical Device-Related Pressure Injuries
Jaicey Bowers, BSN, RN, AG-ACNP-DNP Student

Background: Pressure injuries lead to increased pain and length of stay and are considered a never-event by CMS. One Surgical-Neuro ICU (SNICU) found 20% of their pressure injuries were due to cervical collars.

Purpose: To reduce the incidence and severity of CDRPIs while increasing the nursing staff's knowledge of cervical collar care.

Methods: Audits to the SNICU at least twice weekly from April- October 2023 to assist with collar care and provide educational opportunities. Wound Ostomy Nursing provided official staging for pressure injuries if found. A pre- and post-intervention period assessed the nursing staff's knowledge and guided future educational materials.

Findings: Compared to 2022 data, cervical device-related pressure injuries (CDRPI) rates during the intervention period decreased by over 15% (p=0.075). There was no difference in wound severity between the 2022 data and the intervention period. In a staff survey evaluating nursing staff's knowledge of cervical collar care, nursing staff demonstrated an increase in knowledge throughout the intervention period in which educational materials were given to nursing staff (p= 0.035). Time and resources were found to be the greatest barrier to providing cervical collar care with a decrease in staff efficacy between the pre- and post-intervention period (p=0.001).

Discussion: The goal of this project was to reduce CDRPIs by 25% from baseline data, meaning, the observed decrease in CDRPI rates met the pre-set goal for this quality improvement project. However, silicone and foam dressings were not shown to provide any additional benefit in reducing the severity of pressure injury, which did not align with the goal of having at least 90% of CDRPIs be a stage 1 pressure injury. Multimodal educational tactics lead to improved scores between the pre-and post-intervention surveys, surpassing the goal of 20% improvement in staff knowledge.

Enhancing Advance Care Planning Awareness in a Rural Iowa Family Medicine Clinic

Molly Brecht RN, BSN, AG-PCNP-DNP Student

Background: Without advance care planning (ACP) awareness, patients and families may encounter difficult medical choices and treatments that do not match their preferences. ACP involves discussing and preparing for future decisions about an individual's medical care if they become seriously ill or unable to communicate their wishes. With a growing aging population, the prevalence of chronic illnesses, and extended longevity, there's an urgent need to raise awareness of ACP in primary care. However, despite increasing ACP use, it remains underutilized due to reluctance, discomfort, and lack of training among healthcare professionals.

Purpose: The purpose of this project was to increase ACP awareness in community-dwelling individuals utilizing an intervention called the "ACP Interest Form."

Methods: This project took place in a rural Iowa family medicine clinic focusing on patients ages 65+ attending their Medicare Annual Wellness Visit. Front desk staff and health coaches were trained on the form. The form was handed out by the front desk. If the patient indicated they were interested in receiving further information, they were handed an ACP informational packet and received a follow-up phone call.

Findings: 374 patients were eligible to receive the ACP interest form, while 214 (57%) of patients actually received it. In total, 178 (83%) patients completed the form. Overall, 38 patients identified they wanted like to receive additional information on ACP. Of these individuals, 74% of them received a follow-up phone call from a health coach certified in facilitating ACP conversations.

Discussion: The ACP interest form served as an opportunity to offer ACP information to all patients, regardless of their readiness level. Through this form, ACP awareness reached 214 people who may not have been exposed otherwise. Although active engagement was lacking in this project, evidence highlights the importance of raising awareness regardless of readiness level.

IOWA

Encouraging Self-Efficacy Through Education for Ischemic Stroke Patients

Katie Buchheit, MSN, AG-ACNP-DNP Student

Background: Following a stroke, individuals face a high risk for a subsequent stroke. Education is an important component of post-stroke care to help stroke survivors manage their chronic disease and prevent subsequent strokes.

Purpose: The purpose of this project was to enhance the education process for ischemic stroke survivors during their hospital admission through the use of self-management education strategies.

Methods: Based on the evidence, a communication tool was developed highlighting key aspects of post-stroke care. This was an interactive tool for patients and providers to use to track their education during their hospitalization. The Iowa Model was used to guide implementation. Data on patient self-efficacy, use of the tool, and staff satisfaction were collected.

Findings: 30 ischemic stroke patients participated in this project. Mean patient reported self-efficacy was high (27.68/39). Further, the greater percentage of the tool was moderately associated with a higher self-efficacy score (0.44, p=0.015). The mean completion of the communication tool was 54.4% with only 40% of communication tools 100% complete. 100% of the sections completed on the communication tool were completed by nursing staff. Mean nursing staff satisfaction was high (4.4/5).

Discussion: This project demonstrated a positive association with the use of self-management strategies on patient self-efficacy. Self-management strategies were an effective way to positively impact the patient education experience for ischemic stroke patients. Despite efforts to make this a multidisciplinary intervention, nurses held the majority of the workload for this project. Even so, nurses reported a high level of satisfaction with the use of this intervention. This project adds to the current literature about the positive application of self-management strategies, specifically for the stroke population. The findings in this project demonstrate a need for additional research on the specific application of self-management education for the stroke population.

Evidence-based Guidelines and Asthma Control Test Implementation in Primary Care Clinic

Ricci Amor Cardwell, MSN, RN, OCN, FNP-DNP Student

Background: Asthma is the most common chronic respiratory condition that affects more than 5.1 million children and nearly 21 million adults in the United States (Asthma and Allergy Foundation of America, 2022; Center for Disease Control and Prevention, 2022). The economic burden of asthma is a challenge to the public health (Allsopp et al., 2020). Asthma symptom control may not be properly assessed due to non-standardized assessment tools (Greenberg et al., 2018). There is underutilization of the evidence-based guidelines due to provider's disagreement, lack of knowledge, and confidence in the recommendation (Pudasainee-Kapri, 2021).

Purpose: To implement the Global Initiative for Asthma (GINA) guideline and asthma control test (ACT) questionnaires into clinical practice at the primary care clinic.

Methods: The Iowa Model guided this project. The project implementation and data collection were done from August 2023 – December 2023. Participants were healthcare providers and patients with asthma ≥ 12 years old who were seen for their well or sick visits. A PowerPoint presentation about the GINA guidelines and the ACT were presented to the providers and nursing staff. Providers received a survey questionnaire to assess their knowledge. Patients with asthma were assigned ACT before their appointment. Patients with ACT scores ≤ 19 were selected for further chart review. Their asthma medications were assessed if they reflected the GINA recommendation. During their follow-up, ACT was assigned to assess symptom improvement.

Findings: 113 patients with asthma were seen in the clinic and 80% of them had a documented ACT. 85% of the 13 uncontrolled patients had clinically significant improvement. 10% had the preferred GINA recommendation. Providers were limited on the patient's health insurance coverage. 83% of the eight providers had improvement in knowledge.

Discussion: The use of ACT gave healthcare providers awareness of patients' asthma control and identified patients who need medication adjustments. The GINA guideline has been a great resource for consistent care in asthma management.

Impact of Using the SCOFF Screening with Adolescents at Risk for Eating Disorders

Lorraine Chidester MSN, ARNP, PMHNP-BC, DNP Student

Background: Eating disorders are on the rise and are often unrecognized and missed due to insufficient screening and clinician knowledge. Eating disorders decrease learning ability by impairing cognitive function, are linked to poor social skills, and comorbid psychiatric illnesses. 50% of adolescent females and over one-third of teenage boys have symptoms and behaviors associated with disordered eating patterns. Nine percent of Iowans will have an eating disorder in their lifetime, which costs $624.2 million yearly in economic costs. Early detection improves quality of life and decreases health care costs, reducing the prevalence and incidence of mortality associated with the long-term effects of eating disorders. Screening adolescents for eating disorders using the SCOFF screening tool provides early detection and improves outcomes.

Purpose: To accurately identify the early onset of eating disorders in adolescents seen in the outpatient setting. Improve clinician knowledge and assessment skills, increase early detection, and improve interventions with evidence-based education, treatment, and resources.

Methods: This quality improvement project was deemed not to be human subject research. The setting was a psychiatric outpatient clinic, and the population was adolescents ages 12-19. The inclusive sample size was n=60.

Findings: Clinician assessment skills were improved as evidenced by the statistically significant increase in scores between pre and post-test with a mean difference of 30% (p<0.01). The self-administered screening tool demonstrated clinical significance in the early detection of eating disorders. Interventions were applied early, as evidenced by clinicians implementing supportive education, treatment plans, and resources as specified by guidelines in 100% of positive SCOFF screenings.

Discussion: This project demonstrated that the SCOFF screening is a reliable tool that is easy to use and prompts early intervention. Evidence indicates that training clinicians to use the SCOFF screening and implementing interventions early to improve outcomes is effective.

Improving Transitional Care for Stroke Survivor Caregivers

Cindy Choudhary, BS, BSN, RN, CRRN, FNP-DNP Student

Background: After acute hospitalization, many stroke survivors will require further recovery at an inpatient rehabilitation facility (IRF). The top predictor of a stroke survivor discharging home depends on caregiver (CG) availability, readiness, and comfort. Many stroke CGs feel unprepared. Identifying CG's barriers earlier in the IRF admission can improve CG's feelings of readiness when transitioning from IRF to home.

Purpose: Effectively using the Preparedness Assessment for the Transition Home after Stroke (PATH-s) in the IRF setting to assess stroke survivor CGs' readiness can empower the IRF care team to implement tailored interventions, thereby addressing CG barriers and improving stroke CG readiness for the transition home.

Methods: This project was guided by The Iowa Model. The team involved comprised IRF case managers and the care team. The PATH-s assessment tool assessed stroke CGs on admission and discharge. Education was provided to the care team and case management. The EMR was reviewed for interventions, and assessment data was entered into Excel. Descriptive statistics were used to analyze the data.

Findings: The project included a sample size of 25 CGs. The most prevalent CG barriers were understanding stroke and recovery (48%) and not feeling prepared or comfortable to provide personal care (40%). The care team's most significant interventions included family caregiving training (60%) and home health care (48%), demonstrating an (18%) improvement in CG readiness in these areas at discharge.

Discussion: The PATH-s is a valuable tool in the IRF setting to identify CG barriers effectively and prepare stroke survivor CGs for the transition home. Case management's proactive identification of CG barriers during admission and the care team's pivotal role in providing tailored interventions contributed to the improved readiness of CGs in the transition home from IRF.

A Shared Governance Structure for Supporting Interdisciplinary Communication and Collaboration

Christopher R. Crossett, MSN, MBA, RN, CRRN, DNP Student

Background and Purpose: This initiative aimed to design and implement a shared governance structure using the Flight Model framework within a healthcare organization to enhance patient experiences and drive performance improvement activities.

Methodology: The project used the Flight Model framework to create a shared governance structure in a midwestern rehabilitation hospital that encourages interdisciplinary collaboration. Key strategies included implementing SBAR (Situation, Background, Assessment, and Recommendation) and Stop-Light report communication tools to facilitate decision-making and information-sharing
.
Findings: According to the Annual Employee Engagement Survey, post-implementation results showed significant progress in interdisciplinary teamwork and communication. Notably, there was a significant increase in employees' feeling that their opinions were valued and well-informed prior to organizational changes.

Discussion: By establishing a culture of collaborative decision-making and aligning organizational strategies with patient care objectives, the shared governance structure can empower frontline staff and significantly improve patient experiences. This DNP project contributes to the body of knowledge on implementing shared governance in healthcare settings, emphasizing the Flight Model framework's role in improving organizational outcomes and patient care.

Two-Person Dressing Changes to Decrease Central Line-Associated Bloodstream Infections in the Medical Intensive Care Unit

Brittany Deb BSN, RN, AG-ACNP-DNP Student

Background: Single-person dressing changes can lead to line manipulation and the entrance of microbes into the vein resulting in infection. The Agency for Healthcare Research and Quality (AHRQ, 2017) estimates each CLABSI averages $48,108. In the University of Iowa Hospitals & Clinics BMT unit, two-person dressings decreased CLABSIs 78.3% over one year (Hunger et al., 2020).

Purpose: The purpose of this evidence-based project is to reduce central line infections by using a second person to stabilize the line during dressing changes.

Methods: CLABSI reduction through a two-person dressing change procedure while measuring compliance through a fourteen-item investigator-created checklist, completed by staff nurses at the time of dressing change. Key implementation strategies included education posters, hands-on mannequin demonstrations, and e-mails to staff. Staff satisfaction with two-person dressing changes was measured using a 0-10 visual analog scale included on the checklist.

Findings: Outcome measures included total CLABSI reduction, staff compliance, and staff satisfaction. Three months pre-implementation, the project site reported one CLABSI, zero CLABSIs were reported during implementation. Between June and September 2023, an electronic medical record (EMR) review indicated 145 charted dressing changes, sixty-four (44%) were charted as two-person dressing changes. Fifty checklists were returned, indicating a 34% response rate. Zero CLABSIs were reported during implementation. Median staff satisfaction score was 8, ranging from 4.5 to 10. Time data collected indicated each dressing change took a median of 9 minutes, ranging from 2 to 27 minutes.

Discussion: The practice change brought awareness to central line stabilization during dressing changes. The project site remains CLABSI free since implementation. Checklist completion was lower than expected, however, 14 staff documented two-person dressings in the EMR without completing a checklist, indicating increased compliance with the primary intervention. The study period was short, and a longer observation period is needed to measure the longitudinal impact of two-person dressing changes in clinical practice.

IOWA

A Home Activity Support Tool for Daily Life after Acute Hospital Admission for Stroke

Malea Delcambre RN, BSN, FNP-DNP Student

Background: Stroke patients transitioning from the hospital to home often face challenges adapting to their typical daily tasks. Other problems stroke survivors experience include finding supportive community resources, post-stroke depression, and a high risk of another stroke. The implementation of evidence-based discharge education tools, such as the Home Activity Support Tool (HAST), is crucial in addressing challenges and improving patient outcomes.

Purpose: This Doctor of Nursing Practice Project aimed to evaluate the impact of the HAST on three outcomes regarding the hospital-to-home transition for stroke patients. These included increasing patient confidence at discharge, assisting with daily tasks at home with the utilization of the HAST, and assisting in the discharge education process with an efficient and evidence-based tool.

Methods: A non-experimental exploratory design was utilized for this project. The HAST was created in coordination with current literature, the hospital's stroke program coordinator, physical and occupational therapists, and resources from certified organizations including the American Heart Association. Likert-scale surveys were administered to patients and staff members in an intermediate neuroscience unit in a large Midwest tertiary hospital. Descriptive statistics including the mean, range, and standard deviation were calculated for each survey item response.

Findings: The implementation of the HAST resulted in increased confidence scores before discharge. Post-discharge patient follow-up revealed low utilization of the HAST for daily tasks, but patients generally found the tool easy to use. Most staff members agreed that the HAST was helpful and good for all stroke patients and felt knowledgeable about the HAST.

Discussion: Providing the HAST at the time of discharge increased the patient's confidence about discharge and participation in daily tasks once home. Providing evidence-based discharge resources specific to the needs of the stroke population improved patient and staff satisfaction. Clinical implications included the importance of providing evidence-based discharge education tools to increase patient knowledge retention, motivation, and autonomy in managing a new lifelong health condition.

Addressing Mental Wellness in Student Registered Nurse Anesthetists (SRNAs)

Brittany Demmer BSN, RN, SRNA-DNP Student

Background: Student registered nurse anesthetists (SRNAs) face challenging didactic content and rigorous clinical requirements throughout their curriculum that can have an impact on their mental wellness resulting in stress and anxiety.

Purpose: The purpose of this project was to provide mental wellness resources and education to SRNAs at a Midwest nurse anesthesia program in the form of a mobile application.

Methods: Institutional review board approval was obtained for the assessment of stress and anxiety levels in SRNAs. Recruitment was completed via email and consent was obtained when the students submitted an anonymous baseline perceived stress and anxiety assessment. The SRNAs were then offered a mobile wellness application for download. Perceived stress and anxiety were reassessed at one-month intervals beginning in October 2023 and ending in January 2024.

Findings: The findings of this project revealed that there was a linear decrease in perceived stress levels from the baseline to the fourth post-intervention assessment. Using a paired t-test, there was a statistically significant decrease in perceived stress levels at the fourth post-intervention assessment ($p = 0.026$). The anxiety results did not show a statistically significant change. Increased application use was associated with decreased stress and anxiety scores. However, there was not a statistically significant correlation between application use and stress or anxiety scores.

Discussion: This project demonstrated that SRNAs at this Midwest academic institution experience moderate levels of stress and anxiety on average. It was also shown that wellness training can have a positive impact on stress and anxiety levels.

The Implementation of a Loneliness Screening Tool for Residents in Long-Term Care

Alexx DeVore BSN, RN, OCN, Dual AG-PC/PMHNP- DNP Student

Background: Nearly 1.4 million Americans reside in residential or long-term care facilities. Over 55% of these individuals report feelings of loneliness and social isolation. The COVID-19 pandemic subjected individuals within these facilities to experience high levels of loneliness and social isolation. Social isolation and loneliness are presumed to be continued feelings despite the lifting of COVID-19 restrictions within these facilities. Persistent feelings of loneliness and social isolation are linked to several comorbidities, most notably anxiety, depression, and increased mortality.

Purpose: The purpose of this project was to identify individuals within a long-term care facility experiencing loneliness utilizing a modified UCLA Screening Tool. Evidence-based practice interventions were then implemented to reduce or eliminate feelings of loneliness.

Methods: This project was deemed not human subjects research by the University of Iowa Review Board. The Iowa Model guided the implementation of this project. The setting was a long-term care facility in the Midwest. The population included adults >65 residing within this facility.

Findings: There were 30 residents eligible for loneliness screening and 29 residents were screened throughout the project timeframe. In the first quarter of screening, 65.5% of residents scored positive for loneliness. All residents received offers for referrals to appropriate interventions within two weeks of their screening results. Post-intervention loneliness scores were reduced to 37.9% during the second quarter of screening.

Discussion: The UCLA Loneliness Screening tool is an effective way to identify feelings of loneliness across various healthcare settings. This project resulted in the identification of a high volume of residents experiencing feelings of loneliness. Staff were educated on the signs, symptoms, and consequences of persistent loneliness. This facility plans to adopt a version of the modified UCLA Loneliness Screening Tool to continue identifying individuals experiencing loneliness.

Evaluating the Use of the National Early Warning Score (NEWS) Tool in a Local Emergency Department

Ryan Foulkes MSN, RN, ARNP, FNP-C, NREMT-P, CCP, DNP Student

Background The average wait time in America's Emergency Departments (ED) is 166 minutes. This is concerning when there could be multiple patients with severe concerns in the waiting room. Approximately 70% of ED in the United States use the Emergency Severity Index (ESI). In 2023 there were an estimated 30 million patients mistriaged annually when the ESI tool was used. The NEWS tool started in British ICUs and was funneled down to their ED and then into their pre-hospital Emergency Medical Services (EMS).

Purpose To evaluate the triage of ED and EMS patients by evaluating the use of a NEWS tool in a local ED. Objectives were to compare differences in triage tools between the ambulance using the NEWS tool and the ED continuing to use the ESI tool, evaluate the agreement of the NEWS and ESI scores in relation to a patient's assigned placement upon arrival, and identify improvements in knowledge about how, with whom, and when to use the NEWS tool with ambulance and ED staff.

Methods The Iowa Model was used to guide this project. Individual PowerPoint education was provided to ED nurses, paramedics, patient care technicians, and EMS paramedics which focused on NEWS tool history, how to calculate, exclusion criteria, and team member expectations. Implementation included pre and post-intervention surveys for knowledge of the NEWS tool. For the analysis, the NEWS tool and the ESI were divided into three categories (Mild, Moderate, and Severe) for similar comparison, and patients' deposition and assigned triage scores were compared.

Findings The NEWS tool identified a higher number of mild patients while the ESI tool identified a higher number of moderate and severe patients. Patients assigned a NEWS severe level by EMS were also assigned an ESI severe level by the ED RNs and were also placed in a regular room upon arrival. There was an increase or retained knowledge of the NEWS tool by EMS and ED staff.

Discussion The NEWS and ESI tools showed that despite similar intentions, the tools had varied results. This could impact patient outcomes, staff time, and organizational resources. Ultimately, there are times when a nurse's judgment may need to supersede vitals to assign a patient acuity. Suggestions for further studies could use a longer data collection time frame to increase the number of participants, keep the focus of the project on one department that is going to benefit from the outcomes, and encourage active participation from each department as champions/representatives.

IOWA
College of Nursing

Establishing Best Perioperative Practices for Breastfeeding Patients

Jordan Y. Guidry, BSN, RN, SRNA-DNP Student

Background: Breastfeeding rates continue to rise within our country, and therefore specific perioperative practices for breastfeeding women is becoming an important issue to address. Breastfeeding is beneficial to both mother and baby, and some mothers have an increased difficulty in breastfeeding. Therefore, unnecessary interruptions and discarding of breast milk should be avoided specifically throughout the perioperative period.

Purpose: The purpose of this evidence-based DNP project was to increase anesthesia provider and nursing knowledge regarding the perioperative management of breastfeeding patients.

Methods: Educational sessions were held with preoperative nursing staff to emphasize the importance of breastfeeding screening in women ages 15-55. Three months following the initial education session, there was an average 13 percent increase observed in patient screening practices. Additionally, an anesthesia guideline was created and implemented on a public online database in which all anesthesia providers have access.

Findings: Anesthesia provider knowledge was assessed with an eleven-question pre-test and post-test following implementation. Following the implementation of the created anesthesia guideline, pre-test and post-test scores were compared and demonstrated an average eight percent increase in questions answered correctly. Lastly, an educational patient brochure containing important information for breastfeeding patients was created and distributed to all surgical clinics.

Discussion: The importance of patient screening continues to be emphasized within the preoperative areas at this academic medical center. Future follow-up with the various surgical clinics needs to take place to ensure this patient educational brochure continues to be distributed when appropriate. Continued patient education will help breastfeeding mothers better prepare for their day of surgery and arrive to the hospital with the appropriate supplies to continue breastfeeding.

STOP-Bang: Improving Screening for Obstructive Sleep Apnea Risk with Dyslipidemia Patients in the Primary Care Setting

Kathryn A. Heins-Erickson, MSN, APRN, AGPCNP-BC, DNP Student

Background: Obstructive sleep apnea (OSA) is a common sleep-related breathing disorder that causes abnormal physiology which leads to increased comorbidities. Dyslipidemia is one common comorbidity. Early treatment of OSA can avoid resulting sequelae. Very few patients are screened for OSA risk in primary care, so it remains vastly underdiagnosed and undertreated. Studies relating dyslipidemia to OSA are limited.

Purpose: To evaluate the effectiveness of implementing the STOP-Bang screening questionnaire in adult patients with dyslipidemia. Three measurable objectives were addressed: identify the number of patients with dyslipidemia who have a level of risk for OSA, increase the number of patients referred for a sleep study test after being screened, and increase primary care provider (PCP) knowledge about the STOP-Bang.

Methods: Participants were adult patients with dyslipidemia and without OSA diagnosis at a rural primary care clinic in Midwestern USA. Clinic staff and the PCP completed the STOP-Bang questionnaires at clinic visits. Patients with any level of risk were recommended to have a sleep study test to diagnose OSA. The PCP was given a knowledge test.

Findings: Identification of the level of risk for OSA and referral rates with STOP-Bang both increased 100% compared to pre-intervention usual care. All 106 patients showed a minimum of one risk factor for OSA and were referred to a sleep study test. As the severity of risk increased, acceptance of referrals also increased. PCP knowledge test score increased to 100% after using STOP-Bang.

Discussion: STOP-Bang successfully identified the level of risk for OSA with subsequent referral to a sleep study test in patients with dyslipidemia. Provider familiarity with STOP-Bang increased with regular use. Findings are generalizable to a similar population. STOP-Bang is widely available and easy to use in the primary care setting to screen for OSA risk.

IOWA
College of Nursing
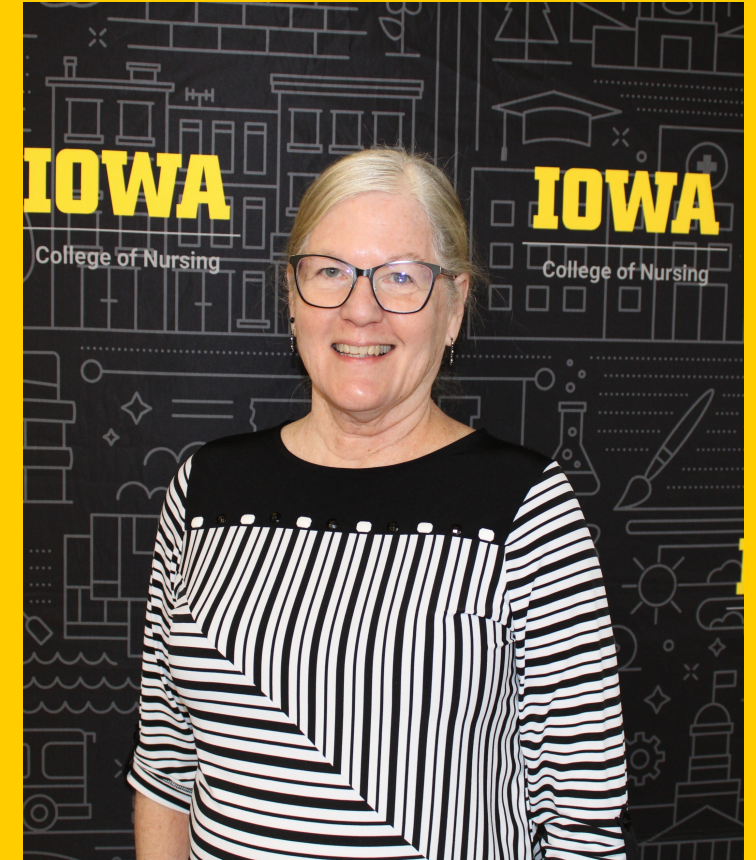
Utilizing Simulation-Based Training to Ensure Code Hemorrhage Protocol Compliance in an Ambulatory Surgery Center

Anna Henningsen RN, BSN, SRNA-DNP Student

Background: Hemorrhage during surgery is a major cause of preventable death during surgery. To combat this, massive transfusion protocols (MTPs) have been developed, which have been shown to independently increase patient survival rates. A triggering issue was identified as a lack of preparedness in the event of a hemorrhage emergency in an ambulatory surgery center (ASC). Simply having an MTP is not enough. Simulation-based education, cognitive aids, and new personnel training is needed to ensure protocol effectiveness.

Purpose: To improve hemorrhage management in the ASC through simulation-based training, cognitive aids, and new personnel training.

Methods: A multidisciplinary team was created and revised an MTP specific to the ASC. A pilot code hemorrhage simulation for perioperative staff was created, tested, and revised. After revision, the simulation was implemented. Data was collected through a retrospective pre- and post-self-survey.

Findings: Overall, there was an increase in confidence scores in participants' knowledge, preparedness, and competence on how to handle a hemorrhage emergency in the ASC. A Wilcoxon Sign-Rank Test indicated mean post-simulation scores for each question on the retrospective self-survey were statistically significantly higher than the pre-simulation scores (n=25; p<0.001). On average, there was a 50% increase in self-perceived staff confidence and competence using the MTP specific to the ASC after simulation participation.

Discussion: MTPs have consistently been shown to reduce patient morbidity and mortality in the event of a hemorrhagic emergency (Dargere et al., 2019). Compliance to an MTP is a significant indicator of patient survival (Nunn et al., 2017). Simulation-based training has practical significance in reducing adverse patient outcomes since it has been shown to effectively increase compliance to a protocol (Vortman, 2020). Participants felt the simulation-based training and educational aides adequately prepared them to manage a real-life hemorrhagic emergency.

Postpartum Hemorrhage Simulations for Obstetrical Staff in Critical Access Hospitals

Jae Jang, BSN, RN, SRNA-DNP Student

Background: Postpartum hemorrhage (PPH) is a major cause of maternal mortality and morbidity all over the world, especially in rural areas where access to expert obstetric treatment is restricted. Simulation-based training has emerged as a useful strategy for improving healthcare providers' readiness and responsiveness to obstetric emergencies.

Purpose: The purpose of this study was to determine how postpartum hemorrhage simulations affected the knowledge, teamwork, and communication abilities of perioperative obstetrical staff as well as improve patient outcomes in the context of obstetric emergencies in critical care hospitals in Iowa.

Methods: Perioperative obstetrical staff at a rural Iowa hospital completed a comprehensive simulation training focusing on PPH recognition, management, and interdisciplinary teamwork. A retrospective pre-post survey was used to assess participants' knowledge and communication skills. The TEAM assessment evaluated the participants' responses to crises and assessed their leadership, teamwork, crisis awareness, and task management. Participants received the PPH checklist to utilize as a guide during the simulation and the instructor counted the number of correct steps outlined in the checklist implemented in a crisis.

Findings: 92% of perioperative OB staff who participated in the PPH simulation reported increased confidence and knowledge of PPH treatment. The team scored a 3 or higher on each individual team score and an 8 or higher on the overall scores of the team's non-technical performance in the TEAM Overall Assessment due to increased readiness, improved teamwork, and communication skills. The number of correct steps listed in the PPH checklist implemented in a crisis increased from 61 to 100%.

Discussion: Participants' knowledge and confidence level of PPH management concepts improved significantly, as did their teamwork and communication abilities with interdisciplinary team members, following simulation training.

IOWA

College of Nursing

Implementation of a Nursing Communication Tool in Immediately Post-operative Cardiac Surgery Patients in the CVICU

Lucille Johnston RN, BSN, CCRN, AG-ACNP-DNP Student

Background: Standardizing nursing shift report is an evidence-based practice shown in the literature to combat communication failures between healthcare team members during the transfer of patient information. Standardizing this process has been shown to decrease omissions in reports, lead to fewer preventable complications, and correlate with positive nursing impacts surrounding communication, confidence, knowledge, and accountability.

Purpose: The purpose of this project was to evaluate if the implementation of a standardized communication tool for giving nursing shift report impact the nurses' perception of communication and success in caring for post-operative cardiac surgery patients.

Methods: This project used a group pre-implementation and postimplementation comparison of nursing survey scores on a 24-bed CVICU, surveying nurses caring for post-operative cardiac surgery patients. We also followed HCAHPS survey scores for comparison preimplementation to postimplementation in the category "communication with nurses".

Findings: After implementing a standardized communication tool for utilization for nurses during shift report, a 2.5% increase in nursing confidence was found in postimplementation survey scores. HCAHPS survey scores improved from 80th percentile to 99th percentile post-implementation in the category "communication with nurses".

Discussion: Results postimplementation did not show the expected significant results post-implementation. A redesign process is necessary to find a sustainable standardized process for nursing shift report on this patient population and potentially target new graduates for insight to increase nursing confidence.
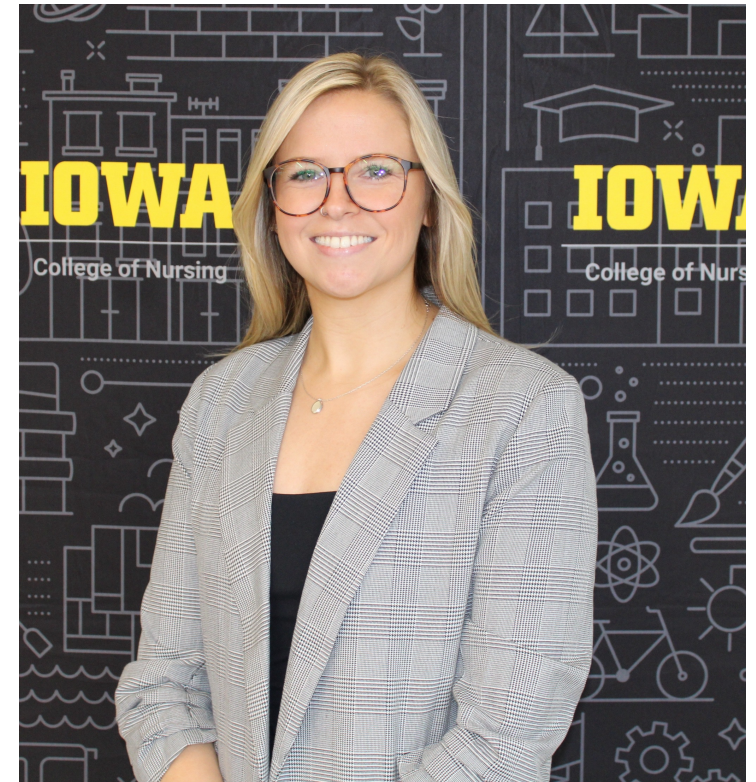
Enhancing Listening Visits (LV) Support for Postpartum Depression (PPD) in Iowa's Maternal Health Programs (MHP)

Kesley Karim, BSN, RN, FNP-DNP Student

Background: PPD affects up to 20% of new mothers, disproportionately impacting low-income and women of color. Interventions are underutilized due to access difficulties and stigma. Acknowledging the need for accessible interventions, like LV, Iowa's MHP administrator sought help to enhance support for LV-trained staff, recognizing its potential to bridge maternal mental health treatment gaps and protect the vulnerable population most at risk for PPD.

Purpose: This DNP project aimed to enhance support for the use of LV by creating virtual LV-focused sessions for Iowa's state-level MHP staff.

Methods: Utilizing the Iowa Model of EBP, this project targeted Iowa's 40 MHS trained in LV across 13 state-level MHPs. Interventions included virtual LV sessions, identifying staff views on LV utilization barriers, and developing strategies to address these barriers. Data were collected using a pre-post comparative design and analyzed through a mixed-methods approach.

Findings: The project's aim to support the use of LV for MHS demonstrated a successful collaboration and integration of newly developed LV virtual sessions, an increase in MHS attendance in these sessions, identification of MHS views of barriers to LV use, and development and implementation of strategies to overcome barriers to LV use (i.e., toy kits, LV handy reference guide, internal support champions, the potential for CEUs, and additional annual LV trainings contracted). Additionally, the staff showed renewed confidence in LV skills, increased excitement about LV, and improved understanding of billing and paperwork.

Discussion: Early identification and intervention of PPD leads to a reduced risk for adverse maternal outcomes. LV are an evidence-based counseling intervention provided by Iowa's MHPs. By diminishing barriers to LV use and increasing support for MHS through virtual sessions, there is a potential impact to broaden access to maternal mental health care for underprivileged women within the state.

Implementation and Evaluation of a Modified Wake-up and Breathe Protocol in a Medical Intensive Care Unit

Michaela Kennedy, BSN, CCRN, AG-ACNP DNP Student

Abstract

Background: 20 million people worldwide receive invasive mechanical ventilation (Perkins et al., 2019). MV can lead to longer stays in the ICU and if not used correctly, death (AHRQ, 2017). The ABCDEF bundle (Marra et al., 2017) is an evidence-based guideline that reduces delirium and assesses patient readiness for extubation. Per the guideline, SAT and SBT are directly associated with reductions in ICU mortality (Stollings et al., 2019).

Purpose: The purpose of this project is to implement an evidence-based SAT/SBT protocol via a modified version of the Wake-up and breathe protocol in the medical intensive care unit (MICU) at a large academic hospital to improve outcomes for patients receiving mechanical ventilation.

Methods: This project was done at a large academic hospital MICU. Vanderbilt's Wake-up and Breathe Guidelines and the policies at the large academic hospital were combined to make a unit-specific SAT/SBT protocol. A laminated version was taped to the outside of patient doors and in common spaces. Investigator-designed pre and post-knowledge surveys were distributed via Qualtrics to all RNs and RTs. Data was obtained via direct observation and interaction with RNs and RTs onto a paper/pencil data collection tool.

Findings: 74 patients were extubated during the project. 248 patients were surveyed, and of those, 74% passed their SAT screen, compared to the pre-project 68%. 79% passed their SBT screen compared to 80% pre-project. The median ICU LOS in the pre-intervention group was 2.84 compared to the post-intervention group at 3.08. Wilcoxon testing p-value 0.143. The median ventilator duration days in the pre-intervention group was 1.63, compared to the post-intervention group at 1.86. Wilcoxon testing p-value 0.235. In the initial survey, 61% got the survey quiz question correct compared to the post of 64%.

Discussion: The protocol was effective at helping nurses restart sedation more appropriately, improve knowledge of SATs, and remain consistent with ICU LOS, and days on MV (not statistically significant).

Standardization of Topical Pain Management for Invasive Procedures in a Neonatal Intensive Care Unit

Logan Kiche, BSN, RN, PNP-DNP Student

Background: Most NICU patients endure some sort of painful medical intervention or procedure daily during their hospitalization (Campbell-Yeo et al., 2019). Painful procedures can have both immediate and future physiological implications for neonatal patients (Committee on Fetus and Newborn and Section on Anesthesiology and Pain Medicine, 2016).

Purpose: Enhance the knowledge and utilization of an available pain intervention, L.M.X.4 (lidocaine 4%) topical anesthetic cream, and its standard of practice policy. The objectives included increased education, increased utilization, and better procedural tolerance.

Methods: An evidence-based practice project was conducted using the Iowa Model Revised to promote the use of pain management interventions by NICU nurses in a hospital setting (Cullen et al., 2018). The project was deemed not human subjects research. The process included a pre-intervention survey, educational sessions, reminders and follow-ups, and a post-intervention survey. The pre and post-intervention surveys included a knowledge section and an attitudes/perceptions section.

Findings: Knowledge scores from pre to post-intervention increased from 53% to 90%. 100% of survey participants agreed or strongly agreed that education helped them increase their utilization. 59% of survey participants agreed or strongly agreed that L.M.X.4 cream had helped their patients be calm and better tolerate the procedure.

Discussion: The project was successful in significantly increasing staff knowledge about L.M.X.4. cream. The project also shows improvement in utilization and how well patients tolerate certain invasive procedures.

Enhancing Patient Well-Being: A Mindfulness-Based Quality Improvement Initiative in a Headache Clinic

Meghan Kinnetz, MSN, ARNP-BC, DNP-Student

Background: Migraine is a prevalent neurological disorder with a substantial global impact, particularly affecting individuals in their most productive years. Despite available pharmacological treatments, many sufferers experience inadequate relief. Consequently, there's growing interest in complementary approaches, such as mindfulness-based interventions (MBIs), rooted in non-judgmental awareness of the present moment.

Purpose: This quality improvement project aimed to integrate mindfulness-based stress reduction (MBSR) into clinical practice at a Midwest headache clinic, where MBSR was previously underutilized. The project sought to enhance provider knowledge, confidence, and patient access to MBSR to improve migraine management and patient outcomes.

Methods: A mixed-methods approach was employed, including provider education, patient resource provision, and retrospective chart reviews. Educational sessions and resources were utilized to enhance provider knowledge and confidence in MBSR integration. Data on provider knowledge, confidence, and patient resource provision were collected and analyzed.

Findings: While educational interventions significantly improved provider knowledge and confidence, the documentation of MBSR recommendations in patient records remained low, indicating a gap between recommendation and adoption. Staff turnover and resource availability were identified as potential barriers to implementation.

Discussion: These findings highlight both the effectiveness of educational interventions in enhancing provider knowledge and confidence and the challenges associated with integrating MBSR into routine clinical care. Addressing

IOWA

College of Nursing

Standardizing Patient Portal Communication
Alissa Kleywegt, RN, BSN, DNP-FNP Student

Background: Online patient portals allow patients access to their medical data and communication with their providers asynchronously. As this technology continues to expand, it is important to understand the clinical implications and workload associated with asynchronous communication. Nursing triage, rules of engagement, and provider and patient satisfaction are important factors to consider when developing organizational policies and procedures.

Purpose: This project aimed to decrease the number of portal messages escalated to providers to improve provider satisfaction and improved workflow. Creating clear rules of engagement for patients to establish boundaries for communication is essential for provider satisfaction, reducing provider burnout related to high volumes of messages, and ensuring patients receive the appropriate level of care.

Methods: Lean Six Sigma was chosen as the guiding framework for this project. The problem was identified and then a standardized triage process and clear patient portal use guidelines were created and implemented to ensure patients were receiving the appropriate level of care and reducing the number of messages escalated to providers. Provider satisfaction was also measured using provider satisfaction surveys.

Findings: Of the four providers selected to participate, two were unable to complete implementation due to staffing issues. Data from the remaining two providers was analyzed using a t-test comparing the first half of implementation versus the second half for each provider. Both providers had a statistically significant decrease in the number of messages they were receiving per day.

Discussion: Both providers saw a statistically significant decrease in the number of portal messages escalated to their inboxes by about 50% in turn improving their satisfaction survey scores. Improving appointment access by using schedule blocks also ensured patients were receiving the appropriate level of care for their message concerns. Unfortunately, clinic-wide adoption of the policy was unable to be obtained at the completion of the project due to conflicting management priorities.

IOWA
College of Nursing

Adult Obesity: Medical Management for Sustained Weight Reduction

Sherry Leitch, BSN, RN, FNP-DNP Student

Background: Despite the growing obesity epidemic, contributing to 4.7 million annual deaths, FDA-approved anti-obesity medications (AOMs) for the medical management of adult obesity remain underutilized (Coutinho & Halpern, 2024; Dai et al., 2020). The first-line treatment is lifestyle modification, yet about 80% of individuals regain the weight they lose (MacEwan et al., 2021). Literature suggests that AOMs, in addition to lifestyle modifications, can result in 5-15% weight loss and provide cardiovascular and metabolic benefits (Coutinho & Halpern, 2024).

Purpose: To increase utilization of FDA-approved AOMs in adults 18 and older with a BMI of 27 kg/m2 or greater in addition to lifestyle modifications by providing providers with a weight management guideline and resources in a rural family practice clinic. The secondary aims were to reduce body weight percentage by at least 3% and improve self-reported use of weight loss strategies.

Methods: The Iowa Model guided the project. A team was formed, and a weight management guideline and additional resources were developed. Providers were trained in selecting FDA-approved AOMs and lifestyle management for obesity. The practice change was piloted, and modifications were made for sustainability. Outcomes were evaluated using electronic medical record (EMR) queries, the Oxford Food and Activity Behaviors 20 item (OxFAB20) questionnaire, and provider feedback surveys.

Findings: An EMR query identified 132 patients prescribed FDA-approved AOMs from Oct 2 to Nov 24, 2023. Of these, 13 completed follow-ups beyond 12 weeks. AOM prescriptions increased by 2.2%. The mean weight loss was 4.5%, with a drop in mean BMI from 40.2 to 38.8 kg/m². Most patients (69%, n=9) achieved the weight reduction target of 3% or more. There was a 7.4% overall increase in self-reported lifestyle modifications.

Discussion: Implementing a weight management guideline and providing resources to assist providers in selecting FDA-approved AOMs has delivered promising results in terms of weight loss and prescription practices.

Supporting Mental Health of Healthcare Workers Through Smartphone Technology

Jenay Lindsey, BA, BSN- RN, MS, AG-PC-DNP Student

Background: Healthcare workers continue to struggle with mental health issues. American Surgeon General Vivek Murthy has issued a warning about healthcare worker mental health, declaring this issue as a national priority (Murthy, 2022). Data shows many healthcare professionals are stating intentions to leave their job or their field entirely (Jackson-Preston, 2022). New smartphone applications may be a cost-effective way to support them.

Purpose: The purpose of this quality improvement project was to increase employee usage of smartphone mental health application "Joyages" to help support mental health for employees of the healthcare company.

Methods: Information was advertised along with activities to increase engagement with the smartphone application "Joyages" over a 6 month implementation period. Data was collected directly from the application to assess the number of new accounts created during the project, the number of accounts that are active, and the average scores that were given by users to rate their mood that day.

Findings While we were able to increase the number of new accounts created by 101.7% over the previous year, we were unable to keep those accounts active, with a decrease in the number of active accounts when compared to the previous year, despite bringing in many more. There was an increase in average mood scores provided by users of 9.99, but other external factors were likely the cause.

Discussion: The project was successful in getting more employees to sign up for Joyages. The target increase was 15% over the previous year, the project gained over 100%. More investigation needs to go into keeping employees who are using Joyages engaged. Gathering all data directly from the application is a novel approach and should be attempted again with more focus on using the clinical tools provided in the application like the GAD-7 and PHQ-9.

Age-Friendly Healthcare: Implementing the 4M's in Rural Iowa

Betty Mallen, MSN, RN, CNL, DNP Student

Background: The 65-years and older population is growing faster than any other age group. Many in this population have or will develop one or more chronic diseases. The current healthcare systems' focus on disease treatment instead of prevention will need to change to meet the needs of this population. The 4M's framework, (What Matters, Medications, Mentation, Mobility) especially having the *What Matters* conversation, has been proposed as a way to assess the needs of this population. Public health's engagement in health promotion and disease prevention makes it a good fit for implementing the 4M's framework.

Purpose: To discover if training public health nurses and the leadership team at a rural public health agency in Iowa, on the 4M's framework will result in persons 65 and older receiving age-friendly healthcare including a *What Matters* conversation and allocation of resources to support continued age-friendly care.

Methods: A quality improvement project was conducted utilizing the Institute for Healthcare Improvement (IHI) Model for Improvement using the Plan-Do-Study-Act (PDSA) process to monitor change. Seven PDSA cycles were conducted over a seven-month period at community blood pressure, vaccination, and senior wellness clinics.

Findings: A total of 285 participants accessed one of the clinics and 80 participants completed the 4M's assessment tool for a 28% completion rate. Leadership identified four existing funding sources to reallocate and five potential new grants to sustain the project.

Discussion: Utilizing public health programs is an innovative approach for implementing the 4M's assessments. Obtaining data on older adults that are not in an acute disease process can provide valuable information on what is important to maintain their best level of health. Expansion of the 4M's to other community screening programs, the connection of older adults to needed resources, and tying these results to patient-centered outcomes will be an important next step in attaining age-friendly healthcare.

Enhanced Recovery After Surgery (ERAS) for Breast Surgery Patients

Anne Marie Manganaro, BSN-RN, SRNA-DNP Student

Background: Enhanced Recovery After Surgery (ERAS) protocols were introduced in the United States in 2001 to improve surgical patient outcomes and facilitate discharge. The goals of ERAS are freedom from nausea and pain. Certain patient populations, including breast surgery patients, are more at risk for nausea and pain.

Purpose: This project aimed to improve patient outcomes by adapting and implementing an ERAS protocol for breast surgery patients. The project's objectives were to reduce the incidence of postoperative nausea and vomiting (PONV), average pain scores in PACU, and intravenous opioid consumption in PACU.

Methods: A comprehensive literature review was performed on existing protocols in the United States, and an evidence-based protocol was developed based on existing protocols. Consensus was gained through a multidisciplinary team of anesthesiologists, breast surgeons, and nurses. The protocol was made available to the academic institution's anesthesia department. It was implemented on all mastectomies (breast cancer, prophylactic, transgender), breast reconstructions, breast reductions, and breast augmentations.

Findings: A retrospective data analysis was performed on de-identified patient information of all breast patients in the ambulatory surgery center from September 2023 to February 2024. The protocol demonstrated a reduction in PONV incidence, mild average pain scores, and a low incidence of IV opioid consumption in PACU.

Discussion: The Breast Surgery ERAS protocol improved patient outcomes for this high-risk patient population. The protocol remains approved by the academic institution's Best Practice Committee, and its impact should continue to be championed in all care environments, even outside of ambulatory surgery.

Mindfulness-Based Meditation Interventions Can Reduce Obesity

Courtney Martin, BSN, RN, PMHNP-DNP Student

Background: High levels of stress can negatively impact weight management. Individuals with a knowledge deficit of the impacts stress can have on the body are at an increased risk for obesity and comorbidities. The stress response causes the body to see an internal threat and respond with imbalances inside of the body. Chronic stressors cause an increase in caloric intake, altered glucose regulation, and weight gain. Obesity leads to comorbidities and higher healthcare costs. High-stress levels and obesity increase risks for cardiovascular mortality.

Purpose: To determine whether practicing mindfulness-based stress reduction interventions improves stress levels, weight loss, or decreases body fat percentage.

Methods: In this project, 50 adults with obesity and high-stress levels were asked to participate in implementing one of three mindfulness-based stress reduction interventions three times a week, for 20 minutes, for one month, and track time on a calendar provided. Of the 50 individuals asked to participate, 15 individuals completed the interventions in one month. Weight and body fat percentages were evaluated with the individuals who implemented the intervention and those that did not implement the intervention.

Findings: Individuals who did not implement the intervention did not show a significant change in weight or body fat percentage. With the p-value set at 0.05, $p=1$ for weight and $p=0.2$ for body fat percentage. Individuals who did implement the intervention showed a statistically significant difference in weight with the p-value set at 0.05, $p=0.01$ for weight, and $p=0.00004$ for body fat percentage.

Discussion: Mindfulness-based stress reduction interventions are shown to reduce stress levels, weight, and/or body fat percentage. Promoting mindfulness-based stress reduction interventions can decrease obesity and improve mental health with the reduction of stress levels.

Social Isolation and its Role in Cardiac Rehabilitation Adherence

Emily McDonald, BSN, RN, AG-PCNP-DNP Student

Background: Heart disease affects approximately 697,000 Americans and costs our healthcare system $219 billion annually. Cardiac rehabilitation is a program utilized to improve health outcomes after a cardiac event or procedure and can save health systems up to $9200 per person per year of life saved. Only 25% participate nationally and many who do start the program, drop out. Psychological factors limit an individual's ability to participate. Studies have explored psychosocial factors of non-adherence including depression, anxiety, social isolation, and stress. Continued attention is warranted to identify interventions to improve cardiac rehabilitation attendance.

Purpose: The purpose of this project was to increase cardiac rehabilitation graduation rates by identifying individuals at risk of decreased adherence to cardiac rehabilitation and provide intervention.

Methods: All new patients enrolled in outpatient cardiac rehabilitation between July and August 2023, aged $\geq$ 18 years old, from one outpatient site in Iowa participated. Social isolation status was assessed, using a pre-determined screening tool. A follow-up phone call intervention was aimed at the identified socially isolated individuals and attendance rates of all individuals were monitored for graduation rates to identify correlates of social isolation.

Findings: A total of 36 participants were included in the analysis. Eight participants were socially isolated; 63.9% were male; 63.9% were referred to cardiac rehabilitation after catheter lab interventions, including stent placements; the average age was 66.8 (SD = 13) years. A Fisher's Exact test resulted in p = 0.155, with no statistical significance between the socially isolated and not socially isolated individuals and CR attendance rates.

Discussion: Social isolation is associated with decreased attendance rates. Project outcomes support interventions aimed at psychosocial factors to improve adherence and increase graduation rates.

Beyond Awareness: Development and Implementation of Provider Education on Youth Substance Use Screening, Brief Intervention, and Referral to Treatment (SBIRT)

Courtney McIntire BSN, RN, PMHNP-DNP Student

Background: Substance use is a nationwide problem that can begin early in adolescence and young adulthood. Despite recommendation (Levy et al., 2016), SBIRT intervention is not routinely used among primary care providers to address youth substance use (Kuhns et al., 2020; R. Harris et al., 2016, Ramos et al., 2017) and further education is necessary (R. Harris et al., 2016; Ramos et al., 2017).

Purpose: This quality improvement project evaluated whether SBIRT education increased provider knowledge, confidence, use, and acceptance of SBIRT with the CRAFFT screening tool in youth aged 13-21.

Methods: Seven providers (NP & MDs) at a federally qualified health center completed online SBIRT education then began implementing SBIRT at 13–18-year-old well child checks or 19–21-year-old physicals. Six providers completed a pre- and post-intervention survey to compare use, knowledge, and confidence. To assess provider utilization of SBIRT, confidence, and acceptability, a phone interview was conducted post-intervention and was completed by four providers.

Findings: The results indicated that SBIRT education facilitated provider knowledge, confidence, use, and acceptance of SBIRT. Pre-intervention 50% of providers identified an appropriate SBIRT strategy which increased to 80% post-intervention. Provider confidence in utilizing SBIRT increased by 50% among interviewed providers however there was not a statistically significant increase in knowledge/confidence (p > 0.05). Two providers identified high risk youth and one recommended follow up. All interviewed providers reported using SBIRT, desired annual education to sustain SBIRT in practice, and would recommend SBIRT to a colleague.

Discussion: Providers made the following recommendations to increase utilization of SBIRT and to improve the process; expand SBIRT to quick care visits, include behavioral health professionals as appropriate, and integrate SBIRT into the EMR. This QI project affirms prior evidence in the literature indicating the need for providers to have additional training in SBIRT (R. Harris et al., 2016; Ramos et al., 2017) to facilitate provider knowledge, confidence, and use of SBIRT.

Enhancing Early Mobility in Mechanically Ventilated Patients in the ICU

Jason McWhorter, BSN, RN, AG-ACNP-DNP Student

Background: This EBP project looked at enhancing early mobility in mechanically ventilated patients in the ICU. EM has been shown in the literature to improve functional outcomes and reduce ICU LOS and days of MV. A reduction in ICU LOS and days of MV can potentially lead to a reduction in iatrogenic adverse events, reduce healthcare expenses, and improve patient outcomes.

Purpose: This project evaluated pre and post-intervention datasets to see if EM practices led to a reduction in ICU LOS and days of MV. Nurses' perception of safety and resources surrounding EM was evaluated.

Methods: Pre and post-intervention data (n=33, n=37 respectively) were evaluated for reduction in length of ICU stay and number of days on MV. A pre and post-intervention investigator-designed survey via Qualtrics was used to evaluate nurses' perceptions of safety and resources surrounding EM.

Findings: In both the pre and post-intervention datasets, a total of 2 patients had EM activities performed. Due to the small sample sizes in both pre and post-intervention datasets, no statistical significance between the two was able to be determined. Survey results indicate that nurses at this facility do not feel they have the resources needed to effectively perform EM interventions with their MV patients. Regarding the survey question on if there are available resources, 78.57% of respondents answered "Strongly Disagree" or "Disagree" in the pre-intervention period and 100% of respondents answered "Strongly Disagree" or "Disagree" in the post-intervention period.

Discussion: Based on the lack of EM interventions performed in both pre and post-intervention periods, as shown by this EBP project, the CCU director is lobbying for a new mobility aid position. This new FTE will not only assist in the routine day-to-day mobility assistance needs but will also coordinate SAT with the nurses to perform EM interventions.

Use of Self-Care Tools to Decrease Burnout & Promote Well-Being in Psychiatric Healthcare Staff

Shelly Menard BSN, RN, PMH-BC, PMHNP-DNP Student

Background: Increased workload, staff resignations, and mandatory overtime have led to staff reporting increased burnout, stress, and anxiety. Increased burnout is leading to poor staff relationships, job satisfaction, staff retention, patient care, and patient outcomes. Burnout is a serious job-related condition that can have significant impacts on staff and patients, can occur in any job sector, and can look different for everyone (Melnyk et al., 2020, Lluch et al., 2022 & Dall'Ora et al., 2020).

Purpose: This Doctor of Nursing Practice (DNP) project focused on creating a new Tranquility Room (TR) for employees with the goal of improving staff well-being, decreasing feelings of stress and anxiety related to burnout, and providing staff with education about self-care to promote a sense of employee empowerment with an improved work-life balance.

Methods: The population is all clinical staff (n-45) at an adult, inpatient psychiatric hospital. Pre- (n-18) & post-intervention (n-9) surveys are completed using the Maslach Burnout Inventory, Beck Anxiety Inventory, and a Self-Care Assessment Checklist before and after staff use the TR a minimum of three times per week.

Findings: With continued nursing shortages, increased reports of burnout, poor staff retention, and increased job dissatisfaction, led to the creation of the TR. When comparing the pre- & post-intervention scores staff self-reported decreased burnout by 20% or higher, decreased anxiety by 20% or higher, and increased utilization of self-care tools by 20% or higher.

Discussion: Creating the TR offered staff a place for relaxation and was effective at decreasing feelings of stress & anxiety related to burnout, decreased anxiety, and providing self-care education increased use of self-care tools. Healthcare organizations should be aware that the best management of burnout is prevention, and employee education programs in conjunction with improvements to staff work environments have been effective in decreasing burnout, stress, and anxiety.

IOWA
College of Nursing

Implementation of Project ADAM: A CPR and AED Training Program in A School-Based Setting

Erin Mitchell, RN, BSN, PNP-PC-DNP Student

Background: The chance of survival for a victim of sudden cardiac arrest (SCA) or a sudden cardiac event (SCE) improves significantly when bystanders are trained in CPR and AED usage. "SCD (sudden cardiac death) is the leading cause of death in athletes during exercise and usually results from intrinsic cardiac conditions that are triggered by the physiologic demands of vigorous exercise" (Ackerman et al. 2016).

Purpose: This project focused on the critical components of secondary prevention, CPR, and AED use. Utilizing guidance and steps from Project ADAM, this project aimed to address the lack of a standardized CPR/AED program within the school setting, while also implementing and sustaining an emergency action plan.

Methods: This evidence-based practice project utilized objectives decided upon by the DNP student and team and was a part of a checklist designed by the Project ADAM organization to achieve the desired outcomes. Through education and survey data collection, three project objectives were used to implement Project ADAM's heart-safe school in the 3rd largest high school in an urban school district in eastern Iowa.

Findings: Through this project, our team worked to increase the number of AEDs on their campus, increase the number of staff and school personnel who were CPR certified, and increase confidence in their usage of an emergency action plan as well as provide CPR/AED usage if necessary. All objectives were met, and the project had a successful implementation.

Discussion: With the completion of this nursing practice project, the secondary school is now effectively prepared to handle a sudden cardiac emergency. Overall, all project objectives were met and show the successful implementation of Project ADAM at this secondary school.

Psychosocial Rehabilitation & Recovery: Improving Understanding of its Impact on Schizophrenia-Spectrum Disorders

Courtney Mitten, BSN, RN, PMHNP-DNP Student

Background: Declining psychosocial rehabilitation and recovery center (PRRC) group census and decreased staff referrals are indicative of a gap in the understanding amongst the mental health staff regarding the importance of the PPRC and social skills training (SST) for the schizophrenia-spectrum population.

Purpose: Through staff education, this project sought to not only improve staff confidence, knowledge, and collaboration but also intended to fulfill necessary practice changes to benefit the schizophrenia-spectrum disorder veteran population.

Methods: This quality improvement project used a quasi-experimental pre- and post-education survey project design. The project was conducted among the mental health staff in both the inpatient and outpatient settings, as well as in the community-based outpatient clinics at a federally funded hospital in the Midwest that serves only an adult population. The sample was comprised of nursing staff, licensed independent social workers, nurse practitioners, occupational therapists, staff physicians, pharmacists, vocational rehabilitation specialists, psychologists, and administrative staff (n=163).

Intervention: Pre-education surveys followed by an approximately 20-minute slide deck presentation shared with the mental health staff at various staff meetings. Post-education survey was distributed four weeks following implementation.

Findings: Staff reported both increased confidence and knowledge regarding both psychosocial rehabilitation and SST following education. Staff self-reported increased PRRC referrals. A chi-square test of independence was performed to examine the relation between discontinued/canceled and completed/active PRRC consults prior to education, from January to June and July to November 2023. The relation between these variables did not suggest statistical significance, $p=0.63$ with an alpha of 0.05.

Discussion: This project increased staff confidence and knowledge regarding the differences between psychosocial rehabilitation and psychotherapy through education developed and delivered to the mental health service line staff. Therefore, improving staff knowledge and confidence in available support and resources for this population is the first step in increasing the PRRC census and utilization.

Team-based Nursing Care Delivery Model in an Acute Care Hospital

Joel M. Moore, MSN, RN, CNML, DNP-Student

Background: Current nursing care delivery models aren't keeping up with nursing workforce demands. The American Hospital Association predicts 22% of nurses are considering leaving their job. A team-based care delivery model may improve job satisfaction and influence patient outcomes.

Purpose: Validating that a team-based care delivery model increases a feeling of job satisfaction and results in better patient outcomes: decreasing falls and increase the patient's perception of staff responsiveness.

Findings: Job satisfaction surveys resulted in an increase, from 70% to 80%, of staff feeling satisfied with their job. Job satisfaction themes from qualitative data included: teamwork, increased communication, and collaboration. Patient outcomes of unpaired two-tailed t-test were insignificant: falls (p=0.34) and staff responsiveness (p=0.35).

Discussion: Care model redesign is a priority for workforce strategic plans. A HUB team-based care model suggests increased staff satisfaction when working as a team. Future work should include a selection of different patient outcomes to measure that could be directly correlated to HUB design. Workforce redesign is necessary to support a fragile nursing profession.

Methods: Three measures evaluated the impact of the HUB (Helping Us Belong) model: Job satisfaction, patient fall rates and responsiveness of staff. Job satisfaction was measured utilizing both dichotomous questions and open-ended anonymous surveys with HUB RN's and care technicians. Learning sessions and focus groups with key stakeholders were held to understand the reason for action, vision, and Iowa Model framework for the modular care delivery model, called HUB. Each HUB, consisting of two RN's and one care technician, cared for 10-12 patients. On the acute care, neurology-oncology nursing unit there were multiple HUB's, census dependent. The HUB was implemented in a medium-sized community hospital on February 26, 2023. Real-time rounding, listening sessions and surveys were used to gather feedback.

Mitigating Burnout and Stress in Neonatal Nurse Practitioners with Expressive Writing: An Evidence-Based Practice Project

Jennifer Nieman, MSN, APRN, NNP-BC, DNP Student

Background: Burnout is a pervasive problem in the United States healthcare system with some critical care institutions reporting burnout rates as high as 60%. Burnout can lead to a myriad of physical and psychological complications.

Purpose: Neonatal nurse practitioners (NNPs) are at increased risk of developing burnout as they face many occupational stressors in their daily workflow. Without effective coping strategies these occupational hazards lead to burnout—a syndrome characterized by exhaustion, depersonalization, and professional efficacy. Expressive writing is a strategy to mitigate those negative outcomes and promote clinician well-being.

Methods: This evidence-based practice project used a quasi-experimental pretest-posttest design to evaluate the effect of expressive writing on burnout, perceived stress, and participant satisfaction among NNPs. This project was conducted at a freestanding children's hospital. A convenience sample of NNPs working at this facility was recruited for this project (n=13). A 4-week expressive writing program was implemented followed by project outcome evaluations at 3 intervals. Two validated instruments were used to evaluate project outcomes: the Maslach Burnout Inventory for Medical Personnel (MBI) survey and the Perceived Stress Scale (PSS) survey.

Findings: NNP participants had a significant reduction in perceived stress from pre- to 1-month post ($p = .007$ and $p < .001$) for a 37.3% total reduction in PSS mean scores. Emotional exhaustion and depersonalization pre- to 1-month post scores demonstrated a 12.2% reduction, while personal accomplishment scores increased by 5.8%. Participants reported 100% satisfaction with the project intervention.

Discussion: This evidence-based practice project demonstrates that expressive writing is an effective approach to mitigating burnout and stress in NNPs. Reduction in NNP stress and burnout scores could lead to decreased negative health effects, improved patient care, and increased job satisfaction. Future research should focus on targeting both individual and organizational-level methods to reduce burnout to increase clinician well-being.

Effects of Individualized Inhaler Education on Medication Adherence and Disease Control for COPD and Asthma Patients

McKenzie Nuss, BSN, RN, FNP-DNP Student

Background: As of March 2022, there were 37 million people in the United States living with a chronic pulmonary disease (American Lung Association, 2022). Pulmonary diagnoses are routinely managed with prescription inhaled medications, yet studies have shown that 50-80% of pulmonary patients do not adhere to their prescribed regimen (Gregoriano et al., 2018). Inappropriate use of an inhaler is one of the most widely reported barriers to medication adherence (Sánchez-Nieto et al., 2022). Patients report forgetting to use an inhaler and lacking knowledge about the dosing and frequency of their inhalers as reasons for their nonadherence (Sánchez-Nieto et al., 2022). When patients are not adherent to their prescribed regimens, they are at an increased risk of having poor disease control (Lindsay & Heaney, 2013).

Purpose: This project's purpose was to evaluate the effects of providing individualized inhaler education to patients with COPD and/or asthma on their medication adherence and disease control.

Methods: This prospective cohort project was implemented using the Iowa Model framework. A nonexperimental comparative design was utilized to assess the impact of an intervention on participant disease control and medication adherence. The population consisted of patients aged 18 years and older with at least one pulmonary diagnosis
.

Findings: Most participants reported that they were adherent to their medication regimen (n = 86, 93%), and most asthma control test (ACT) scores increased at follow-up (67%). The post-intervention FEV1 was significantly higher than the pre-intervention FEV1 with $p < .001$. All stages of chronic obstructive pulmonary disease revealed improved post-intervention FEV1s. Insurance was found to be a barrier to medication adherence.

Discussion: Providing inhaler education leads to high rates of medication adherence and better disease control among patients with obstructive pulmonary disease. On average, ACT scores and FEV1s were improved at follow-up. The results were clinically significant.

Enhancing Pain Management and Evaluation in Post-Cardiac Surgery Patients

Emmalee Oxley, BSN, RN, AG-ACNP-DNP Student

Background: Pain is experienced by all patients undergoing cardiac surgery (Bills et al., 2022). Inappropriately managed postoperative pain can lead to negative clinical outcomes such as respiratory failure, postoperative pneumonia, poor rehabilitation, and longer hospital stays (Bills et al., 2022). Enhanced Recovery After Cardiac Surgery (ERACS) recommends the usage of multimodal analgesia with decreased opioid usage (Bills et al., 2022). The use of non-pharmacological pain interventions can diminish pain intensity (Tsegave et al., 2023).

Purpose: The purpose of this evidence-based practice project was to implement the usage of a nursing-led pain decision tree as a tool to increase the frequency of assessment, intervention, and documentation of postoperative pain in cardiac surgery patients in the first 48 hours after surgery

Methods: Literature review and synthesis via two databases and organizational policy review led to the creation of the Postoperative Pain Decision Tree (PPDT). Manual chart review of pain reassessment and non-pharmacological pain intervention documentation in post-cardiac surgery patients in the first 48 hours after surgery occurred. CVICU nurses were educated on the PPDT. The implementation period occurred from June to August of 2023. Post-intervention chart review and data analysis using medians and Mann-Whitney U testing occurred.

Findings: Frequency of pain reassessment increased from a median of 2 to 6 post implementation of the PPDT (p<0.001). Non-pharmacologic pain intervention documentation increased from a median of 0 to 2 with the implementation of the PPDT (p<0.001). The delivery of MME remained unchanged with the usage of the PPDT (median 87.5 to median of 92). Modified Knowledge and Attitude Regarding Pain Survey (m-KARPS) scores increased from 26 pre-intervention to 27 post. (p<.029)

Discussion: Use of PPDT leads to increased reassessment of pain after administration of analgesia, increased implementation of non-pharmacological pain intervention, and similar opioid analgesia administered. Nursing knowledge scores had a modest increase, though likely not clinically significant.

Transition Education & Readiness Among Adolescents with Congenital Heart Disease

Amanda Nawrocki Parrott, BSN RN, PNP-PC-DNP Student

Background: Pediatric patients with congenital heart disease (CHD) are having longer lifespans requiring increased transition into adult cardiology services (Mackie et al., 2018). Prolonged gaps in follow-up care can result in increased patient morbidity and mortality (Mackie et al., 2018), (Said et al., 2015).Transition education can help adolescents with CHD understand their disease prognosis and associated risks, while reducing the risk of CHD complications (Mackie et al., 2018), (Said et al., 2015), (Flocco et al., 2018).

Purpose: To understand whether a nurse-led education session increased patient disease knowledge and transition readiness, through pre and post-surveys, in adolescents with CHD, specifically Bicuspid Aortic Valve disease (BAV).

Methods: This project was conducted at a monthly pediatric cardiology clinic. Included participants were adolescents aged 12-18 with BAV. Participants were provided a nurse led education session that focused on transition to adult cardiology care, follow-up care, disease management and disease knowledge. Participants were surveyed on CHD knowledge, lifestyle management and follow-up care knowledge via the Leuven CHD knowledge questionnaire and on their transition readiness via the Transition Readiness Assessment Questionnaire pre and post-intervention.

Findings: Pre and post-intervention surveys were scored and analyzed using a paired t-test with statistical significance at $p > 0.05$. Results from self-management, CHD knowledge and transition readiness scores were not statistically significant due to significant limitations.

Discussion: Although this project did not produce significant results, it helped lay a foundation for future intervention. With improved transition readiness and disease knowledge, adolescent patients can take charge of their own health, while also reducing their risk of adverse outcomes (Mackie et al., 2018). Adults with CHD continue to grow as a population and our healthcare system needs to be equipped to provide them with unique and complex care. Future research is needed to understand how to best prepare adolescents with CHD for their transition into the adult healthcare system.

Nurturing Parenthood: Advancing Detection & Referral of Perinatal Mood Disorders in a Pediatric Setting

Jen Peters BSN, RN, PMHNP-DNP Student

Purpose: The purpose of this project was to improve provider knowledge of perinatal mood and anxiety disorders (PMADs) and the Edinburgh Postnatal Depression Scale (EPDS) and ultimately to nurture the family environment through identification and referral of positive EPDS screens.

Background: Postpartum depression (PPD) affects 14% of mothers and 10% of fathers (Wisner et al., 2013). The United States Preventative Services Task Force (USPSTF) (2019) reviewed questionnaires to help identify PMADs. The EPDS was identified as the preferred method for identifying the risk of PMADs when using a single screening tool, and the Patient Health Questionnaire-2 (PHQ-2) as an inadequate screening tool. Additionally, the American Academy of Pediatrics (AAP) recommends using the EPDS to monitor a caregiver's risk for PMADs (Rafferty et al, 2019). The local clinic's standard of practice for screening a caregiver's mental health was using the PHQ-2 at well-child visits.

Methods: The Model for Quality Improvement (Langley et al., 2009) provided the framework for the project allowing for changes to occur using the Plan-Do-Study-Act cycle. Clinicians and nursing staff attended an educational in-service on PMADs, EPDS, documentation options, and local resources. Following USPSTF and AAP recommendations, and support from five key stakeholders, the EHR documentation and papers were modified to remove the PHQ-2 from the 2-, 4-, 6-, and 9-month well-child templates and replaced with the EPDS.

Findings: Provider knowledge was measured using a pre and post-implementation six-question, 5-point Likert scale survey. Provider knowledge of PMADs and EPDS screening practices increased by 90% from pre-implementation. The EPDS screening was completed at 95% of the visits. Of the patients having an EPDS score ≥10 EPDS, 19% were provided options for local therapists, and prescribers.

Discussion: Provider and staff education on PMADs and the EPDS improved the adoption of proper screening and supporting families. Integration of the EPDS into the EHR resulted in clinically significant higher screen rates compared to the use of the PHQ-2.

IOWA

Evaluating Pediatric Asthma Education through a Health Literacy Lens

Emily Puetz, BSN, RN, CPN, PNP-PC-DNP Student

Background: Poorly controlled asthma has physical, psychosocial, and financial consequences. Low health literacy contributes to poor asthma control. Asthma control measures and literacy-considerate asthma action plans improve control and support self-efficacy.

Purpose: To improve pediatric asthma care through the implementation of guideline-based Asthma Control Tests (ACTs) or Childhood-Asthma Control Tests (C-ACTs) and pictorial asthma action plans (PAAPs).

Methods: After an educational session on ACT/C-ACT and PAAP use at a pediatric primary care clinic in Eastern Iowa, data on use was extracted monthly from electronic health records (EHRs) of patients with a diagnosis of asthma seen by site providers between November 2023 and February 2024 for a well-visit or an ill-visit for asthma exacerbation. A post-intervention provider questionnaire identified satisfaction, ease of integration, and routine use of ACTs/C-ACTs and PAAPs.

Findings: Of 105 patients seen during project implementation, 8.57% (n=9) had ACT/C-ACT use documented in the EHR and 5.71% (n=6) had PAAP use documented in the EHR. Three of 10 providers completed the post-intervention questionnaire, with two indicating continued routine use of ACTs/C-ACTs and PAAPs.

Discussion: An educational intervention on ACTs/C-ACTs and PAAPs in a pediatric primary care clinic in Eastern Iowa resulted in increased provider-reported routine use of these tools. This finding is clinically significant as more children with asthma will receive guideline-based asthma care and demonstrates progress toward reducing health literacy barriers in asthma education.

Decreasing Stigma Towards Substance Use Disorder

Chelsea Ratchford, BSN, RN, PMHNP-DNP Student

Background: Substance use disorder (SUD) is one of the most discriminated disorders by healthcare professionals (Neale et al., 2008). The negative attitudes affect healthcare professionals' ability to provide compassionate care to these individuals (Smyth et al., 2021). Additionally, studies have found that healthcare professionals are not being adequately trained to treat or identify addiction behavior (Wakeman et al., 2015). Many feel uncomfortable interacting when an SUD is detected in a patient (Neale et al., 2008). According to the literature, having knowledge and employing reflective journaling increases positive attitudes in caring for this population (Hwang et al., 2018; Sage & Sele, 2015; Stuart et al., 2020).

Purpose: The primary aim of this quality improvement project was to provide SUD-targeted education and implementation of evidence-based reflective journaling activity over time to decrease SUD stigma. A secondary aim was to determine if confidence in the ability to define SUD and the ability to deliver compassionate care improved after education and journaling.

Methods: During their mental health clinical rotation, nursing students were provided with SUD education and participated in reflective journaling for four weeks. The Medical Condition Regard Scale (MCRS) and confidence survey were used to evaluate changes in stigma level and confidence in students after implementation.

Finding: The MCRS improved in stigma from a mean of 49.3 to 55.1. Confidence survey scores in the ability to define SUD and deliver compassionate care to SUD improved from a mean of 3.5 to 4.5.

Discussion: Providing SUD and reflective journaling to nursing students supports literature findings in decreasing stigma levels toward individuals diagnosed with SUD. Additionally, these interventions provide nursing students more confidence in their ability to define an SUD and in their ability to deliver compassionate care to the population.

Screening and Referral of Veterans to a Telehealth Program

Mallory Richardson RN, BSN, FNP-DNP Student

Background: Nearly one-fourth of all heart failure patients are readmitted within 30 days of discharge from the hospital, and half of these patients are readmitted within 6 months. Cardiac telehealthcare has been used as a method to smooth the discharge process and allows patients to stay connected with their healthcare team virtually in the often-tumultuous time following discharge from the hospital. Readmission risk assessment tools have been proven useful in identifying patients at high risk of readmission to better connect patients with valuable resources like cardiac telehealth care.

Purpose: To reduce heart failure hospital readmissions by identifying patients at high risk of readmission via a readmission risk assessment tool and referring these patients to an already established cardiac telehealth care program.

Methods: This quasi-experimental design project occurred at a veteran's hospital located in the Midwest over the course of 5 months. All patients admitted with heart failure were screened with a risk assessment tool and referred to an already established cardiac telehealth program if they were deemed at high risk of readmission. 30 and 90-day all-cause readmission rates were the primary data outputs analyzed. The Mann-Whitney U test was used to compare pre and post-project implementation data.

Findings: This project showed no statistically significant reduction in all-cause 30-day readmission rates, and a statistically significant reduction occurred in all-cause 90-day readmission rates.

Discussion: These findings emphasize the importance of identifying patients at high risk of readmission and the important role cardiac telehealthcare has in reducing the likelihood of readmissions in the veteran population. This allows the opportunity to apply similar practices to similar care environments and patient populations.

Accessible APRN Student Clinical Sites: Advanced Registered Nurse Practitioner Preceptor Tax Credit

Selena Sampson, BSN, RN, AG-ACNP-DNP Student

Background: An APRN preceptor is a qualified clinician who voluntarily collaborates with faculty to supervise the clinical learning experience of the ARNP student (National Task Force on Quality NP Education, 2022). The Iowa Board of Nursing found that only 1,200 out of 6,800 (17.6%) Advanced Registered Nurse Practitioners (ARNP) self-identified as being willing to precept ARNP students (2022). Difficulty placing Iowa ARNP students for clinical preceptorship has the effect of limiting Iowa ARNP program student admission allowances and program growth. This ultimately reduces Iowa's capacity to increase the ARNP workforce to meet Iowa healthcare demands, particularly in specialty practice and rural areas.

Purpose: The purpose of this health policy doctoral project was to develop an ARNP Preceptor Tax Credit in Iowa to incentivize ARNP preceptors to improve recruitment and retention of ARNP preceptors.

Methods: The Stages Model for Health Policy Development was utilized. The three primary project objectives were the revision of previously attempted legislation- House File 157, obtaining bill sponsorship for introduction into the 2024 Iowa legislative session, and engaging key stakeholders within the clinical practice sector.

Findings: Eligible individuals included nurse midwives, nurse practitioners, nurse anesthetists, and clinical nurse specialists. The tax credit proposed was $100 per 500 hours of clinical preceptorship; with an annual maximum of $2,000. This bill, House File 2017 (HF 2017), was co-sponsored by Representatives Meyer and Bossman and introduced into Iowa legislation on January 9, 2024. It was able to pass out of its first subcommittee unanimously. The Iowa Hospital Association released a publication in support of HF 2017 on February 9, 2024. Clinical nursing leadership from UnityPoint Health and MercyOne were contacted regarding bill implications and both organizations declared lobbyist support for HF 2017.

Discussion: While HF 2017 remains in Iowa legislation it was able to progress further than its predecessor HF 157. This is attributed to routine communication between DNP student team members, organized communication with stakeholders, and reviewing enacted legislation to guide bill composition. One limitation to gaining bill support was that states with enacted preceptor tax credits have not reported outcomes on preceptor retention or recruitment. This is an area that needs further investigation.

IOWA College of Nursing

Improving Early Identification of Hypertension in IVF Patients

Lauren Schoonover BSN, RN, HS-DNP Student

Background: In vitro fertilization (IVF) treatment is costly, time-consuming, and emotionally taxing. Before reaching the goal of a healthy parent taking their healthy baby home from the hospital, numerous steps must be achieved from undergoing an egg retrieval procedure, transferring an embryo to an intended parent's uterus, a positive pregnancy test, a viable, term pregnancy, and a safe delivery. Addressing the threat of hypertension and its risks in IVF treatment and pregnancy is essential to promote the health and success of IVF patients.

Purpose: The problem of undiagnosed or untreated hypertension in patients seeking IVF therapy was addressed in this project. Hypertension detected late in the process can conceivably impact care delays and cancellations for concern of patient safety during pregnancy. No current process existed for nurse screening and communication to providers of hypertension in IVF patients at the project site.

Methods: Baseline and post-implementation data were collected including blood pressure measurement at pre-operative appointment and blood pressure measurement at procedure. If either systolic blood pressure (SBP) measurement exceeded 130mmHg, it was noted whether provider communication about measurement was documented. Staff nurse education was prepared and disseminated in person and electronically to address frequency of blood pressure measurement and provider communication of patient SBP $\geq$ 130.

Findings: The mean compliance in blood pressure measurement by nursing staff was higher post-implementation compared to pre-implementation. Pre-implementation, 2% of blood pressure measurements with SBP $\geq$ 130 was accompanied by appropriate documentation in one month. Post implementation, this number increased to 3%, 4%, 11% and 3% monthly. The number of patients reporting to embryo transfer with SBP $\geq$ 130 fluctuated throughout this project without a clear downward trend.

Discussion: The creation of a process and implementation of staff education led to clinically significant improved compliance with blood pressure monitoring documentation and an increase in documentation of provider notification of hypertensive levels.

Family Involvement in Preventing ICU-Acquired Delirium

Breanna Sims, BSN, RN, FNP-DNP Student

Background: The delirium rate within an ICU setting ranges between 45-85%, which is higher than the delirium rate of 11-31% on a general medicine floor. There is no treatment regimen for ICU-acquired delirium, so prevention activities are important as ICU-acquired delirium can lead to an increased risk of mortality. Family members can play an important role in the prevention of ICU-acquired delirium.

Purpose: The purpose of this project was to improve ICU-acquired delirium rates on a medical intensive care unit by implementing a guided family intervention to increase family engagement in patient care.

Methods: This evidence-based practice project was implemented using the IOWA Model of Evidence-Based Practice. Family members were educated on ICU-acquired delirium and the activities they could partake in to help reduce the risk of the patient developing ICU-acquired delirium. Then they were asked to fill out a family engagement (FAME) measurement survey. Nurses were also educated about ICU-acquired delirium. CAM-ICU scores were screened for 5 days per patient. The pre- and post-intervention CAM-ICU scores were analyzed to evaluate if there was a difference in the ICU-acquired delirium rate.

Findings: Thirty family members completed the FAME survey, and the average level of engagement was 91.3. Of the thirty families who filled out the FAME survey, 83% (n=25) recorded a high level of family engagement. CAM-ICU scores were screened on 322 patients during the pre-intervention phase and 249 patients during the post-intervention phase for ICU-acquired delirium. There was not a statistical difference in the ICU-acquired delirium rate between the two groups.

Discussion: The implementation of a guided family intervention led to a high rate of family engagement but did not reduce the ICU-acquired delirium rate. Further projects should be done to understand how a longer implementation period impacts the ICU-acquired delirium rate.

IOWA

College of Nursing

Educational Program for Critical Access Hospitals to Care for Critically Ill Patients

Molly Thomas, BSN, RN, SRNA-DNP Student

Background: Critical access hospitals (CAH) are crucial in providing access to health care. Due to strains on the health care system, rural nurses are being forced to care for high-acuity patients, with minimal resources available, resulting in increased mortality and morbidity. Rural nurses must have access to evidence-based educational resources to manage and care for critically ill patients.

Purpose: Evidence-based practice project to address CAH education with the implementation of asynchronous, online educational modules to increase the knowledge and confidence of nurses caring for critically ill patients.

Methods: Electronic needs assessment survey was distributed and analyzed to determine appropriate module content. The course was created through UI Learn platform "Introduction to Critical Care" to house educational modules, including incorporation of previous SRNA-DNP student "Module I: Vasopressors." Based on the results of the needs assessment, a new module was developed. "Module II: Ventilator Management" was created including lectures, videos, pictures, and charts. Pre-assessment and post-assessment were performed to evaluate the change in nurses' knowledge and self-perceived confidence.

Findings: The new module "Module II: Ventilator Management" was created and disseminated to 20 registered nurses (44% of CAH nurses). Mean CAH nurses' knowledge increased from 67% on the pre-assessment quiz to 90% on the post-assessment quiz. 90% of CAH nurses increased knowledge in ventilator management and 80% of CAH nurses reported increased confidence in managing a ventilated patient.

Discussion: The use of online learning modules is beneficial to enhancing the knowledge and confidence of participants. The implementation of critical care modules will serve as a resource for CAH nurses taking care of critically ill patients. In the future, incorporation of spaced learning approaches, such as yearly competencies, and hands-on training, such as simulation, are beneficial to retaining knowledge from online learning modules.

Improving Vascular Access in a Day of Surgery Admission (DOSA) Unit

Justin M. Thornburg , BSN, RN, SRNA-DNP Student

Background – First-attempt Peripheral Intravenous (PIV) catheter failure rates remain higher than most recognize. Advances in ultrasound technology and acceptance of point-of-care ultrasound (POCUS) as a readily available diagnostic tool have led to the fielding of ultrasound within nearly all hospital services. With increased availability, ultrasound-guided PIV placement (USGPIV) has become more commonplace and is a skill set within the nursing scope of practice. We attempted to demonstrate that USGPIV training of a DOSA staff can increase successful cannulation placement and decrease calls for assistance in PIV cannulation.

Purpose – This quality improvement project implemented evidence-based recommendations for the use of ultrasound guidance to increase the success rate of PIV catheters in the Day of Surgery Admission (DOSA) and Post Anesthesia Care Unit (PACU) of a medium-sized comprehensive level 1b, tertiary care facility affiliated with a university hospital.

Methods – Using a crawl, walk, run methodology, an asynchronous comprehensive education program model consisting of power-point modules and exams were used in initial training. Next, skill competency was directly supervised in simulation-based learning. Finally, direct observation and real-time feedback of USGPIV cannulation of live patients were performed with a mastery checklist.

Findings – Nurses demonstrated a 32% (53% vs 84%, p<0.001) increase in awareness, knowledge, and confidence in USGPIV placement as evidenced by knowledge exams and surveys. Additionally, we observed a 95.08% success rate in IVs placed within ≤2 attempts and a decrease in total number of calls placed to anesthesia due to failed attempts.

Discussion – Our study demonstrated the value in providing USGPIV training and education to a nursing staff through increased cannulation success rates, decreased calls for assistance, and a decrease in perception of USGPIV performance difficulty.

Obstetric Simulation Implementation for Postpartum Emergency in a Rural Hospital

Jacob Vermeer, MSN, RN, SRNA-DNP Student

Background: Post-partum hemorrhage (PPH) is a leading cause of maternal mortality worldwide causing a quarter of all maternal deaths. Maternal morbidity and mortality are climbing in the U.S., especially in rural communities where access to hospitals with obstetric services is limited. In a prospective analysis of data from 2016 to 2019, maternal mortality has nearly doubled in rural compared to urban areas.

Purpose: The purpose of this project was to implement evidence-based educational resources for maternal hemorrhage management using a team-based, multidisciplinary simulation in order to improve maternal morbidity and mortality in a rural Midwest hospital.

Methods: The project was deemed not human subjects research. The post-partum hemorrhage checklist developed by The American College of Obstetricians and Gynecologists (ACOG) was utilized during simulation implantation. Team Emergency Assessment Measure (TEAM) Eval to evaluate teamwork. Participants self-reported improvement in signs and symptoms, treatment, and knowledge.

Findings: The team-based simulation on postpartum hemorrhage demonstrated effective teamwork, leadership, and management of obstetrical hemorrhage.

Discussion: The use of the PPH Checklist during resuscitation for obstetrical hemorrhage management was effectively used to demonstrate a step-by-step process of treatment for postpartum hemorrhage. The project will be implemented again at this facility and other rural facilities to improve obstetrical care of hemorrhages in rural hospitals. The project focused on a high-risk population in order to ultimately improve maternal morbidity and mortality in obstetrical patients in a rural area.

Improving the Management of Postoperative Airway Emergencies in an Ambulatory Surgery Center

John M. Wells RN, BSN, SRNA-DNP Student

Background: In the United States there are 21 million general anesthetics performed each year with roughly 210,000 airway emergencies. Airway emergencies are infrequent crisis events that, if not handled effectively and efficiently, can lead to devastating outcomes. Simulation training has the potential to bridge knowledge gaps for infrequently used skills and new nursing staff.

Purpose: To improve nursing management of postoperative airway emergencies in the Ambulatory Surgery Center (ASC) Postoperative Anesthesia Unit (PACU). The project aimed to design a mastery checklist and pre/post-simulation survey, improve knowledge of airway crisis events, and improve confidence in airway crisis events.

Methods: This project followed the Iowa Model and Implementation Framework. A hospital-wide needs assessment was conducted in the summer of 2023, that identified simulation as the desired format for ASC PACU education. A pre/post-simulation survey and mastery checklist were created utilizing a Modified Delphi process with anesthesia faculty. Emergency airway simulations were run in the fall of 2023 and winter of 2024 for ASC PACU nurses. Data from the survey and checklist was collected and complied after each simulation session.

Findings: There was roughly a 20% improvement in all categories, comparing the pre and post-simulation surveys addressing comfort/confidence and efficiency. Initially, the mastery checklist had zero passing participants, but with remediation, there was a 100% pass rate for the 24 participants.

Discussion: The utilization of airway emergency simulation has improved ASC PACU nurses' comfort/confidence and efficiency. This simulation has become an annual competency for the ASC PACU nursing staff in this institution and all participants have demonstrated competency. At the publishing of this project, there have been zero airway emergencies within this institution.

Rural County Hospital Difficult Airway Management
Carter Wevik, BSN, RN, SRNA-DNP Student

Background A difficult airway scenario is a low-frequency event with high mortality consequences. Nurse practitioners are tasked with responding to inpatient airway emergencies at critical access hospitals. Rural healthcare providers have a disadvantage in developing technical and nontechnical skills for crisis management and lack familiarity with airway management crises.

Purpose This project aimed to increase knowledge and skill in difficult airway management for rural advanced practice providers.

Methods Acute Care Nurse Practitioners (ACNPs) at a rural county hospital participated in this quality improvement project. The project combined education, skills training, and simulation to improve airway competencies and knowledge.

Findings In-situ airway simulations uncovered provider unfamiliarity with emergency airway management equipment and workflow and prompted necessary practice changes and equipment updates. Data analysis showed statistically significant increases in participants' ability to manage an adult airway and ability to perform RSI. Provider perceptions of confidence, comfort, and teamwork in airway management crisis scenarios also improved significantly.

Discussion In-situ simulation provides assessment and updating of necessary emergency equipment and resources. Rural ACNPs can improve airway management skills, competency, and teamwork through education, in-person skills training, and simulation.

Maladaptive Behavior Management in Adults with Autism Spectrum Disorder: A Facility Perspective

Teresa Whiteaker, BSN, RN,FNP-DNP Student

Background: Individuals on the autism spectrum (ASD) exhibiting maladaptive behaviors are at increased risk of being overmedicated to control those behaviors in facilities/institutions. Psychotropic drug overmedication of people with ASD for maladaptive behaviors is a significant public health concern with reported rates of 70% psychotropic drug prescribing as the youth ages into adulthood. Adverse and sedating side effects of these medications impact the individual's ability to engage in life and their communities.

Purpose: The purpose of this project was to improve ASD behavior management to reflect best practice guidelines and ensure the protection of the residents from unnecessary chemical and/or physical restrictions or restraint(s).

Methods: The Iowa Model for evidence-based practice was utilized due to its built-in framework for feedback and sustainability. A template was created to guide the writing and training of behavior intervention programming (BIPs) designed to implement individualized, person-centered early intervention for prevention and therapeutic response to maladaptive behaviors. Additional behavior intervention training was scheduled, and staff were educated on alternative interventions to reduce the use of hold procedures. A human rights committee was created to advocate for and protect individuals with ASD residing within the facility.

Findings: Implementation of BIPs resulted in a 47.6% decrease in overall maladaptive behavioral incidents pre- vs. post-intervention for those on behavior-modifying medications and a 21.2% decrease in those without medications. There was a 5.3% decrease in scheduled medications (no PRNs were used at this facility). BIP implementation and behavior intervention training resulted in a 77.8% decrease in hold procedures. Finally, a human rights committee was successfully established and implemented into the process.

Discussion: Behavior program implementation is beneficial for individuals on the autism spectrum regardless of the use of behavioral modifying medications, though if medications are being utilized, evidence supports behavior programming being used in combination with the medications for minimized dosing, frequency, and duration when possible. The establishment of the human rights committee supports the needed protections vulnerable populations require even when residing in facilities designed to protect them.

Routine Depression Screening in Children with Epilepsy

Katie Wick, BSN, RN, Dual PNP-PC/PMHNP-DNP Student

Background: Depression is a common comorbidity seen in children with epilepsy. Unidentified, it can contribute to decreased quality of life and impact their seizure control. The Neurological Disorders Depression Inventory-Epilepsy-Youth (NDDI-E-Y) is a short, population-specific, validated depression screening tool that was implemented in a Neurology Clinic within a Pediatric Specialty Clinic.

Purpose: The purpose of this project was to implement an evidence-based depression screening tool for children with epilepsy and refer patients with positive screens to mental health providers.

Methods: This quality improvement project implemented an evidence-based depression screening tool for children aged 12-17 years with an epilepsy diagnosis. Children with a positive screening, defined as ≥ 32, were referred to mental health services. A pre-and post-implementation survey was administered to providers who see children with epilepsy to assess their confidence levels in identifying and managing depression in this population.

Findings: Over a 12-week implementation period, 176 children met the criteria to be screened with the NDDI-E-Y. Of that, 36% (n = 63) eligible patients completed the screening tool. There were no positive screenings and therefore no mental health referrals during the implementation period.

Discussion: The implementation of this project showed clinical significance as there was a 36% increase in patients screened for depression compared to zero patients being routinely screened pre-implementation. There was an increase in the confidence levels of providers when comparing the pre-implementation mean (2.18) and post-implementation mean (2.63) in identifying and managing depression in this population. This ensures providers are becoming more aware of the high prevalence of depression in their patient population and are acknowledging the utilization of the NDDI-E-Y in their clinic. Although zero children screened positive, this evidence-based tool will continue to screen for depression in children with epilepsy.

IOWA
College of Nursing

Establishing Intravenous Access in an Ambulatory Surgery Center

Kelsey Wood, BSN, RN, SRNA-DNP student

Background: An opportunity existed at this ambulatory surgery center to optimize peripheral intravenous catheter (PIV) insertion processes and empower nursing staff to practice at their full scope. Difficult intravenous access (DIVA) can lead to higher healthcare costs, delays in care, and patient discomfort (Sou et al., 2017). Ultrasound guidance (USG) should be considered for early use in patients at high risk for DIVA (Sweeny et al., 2022).

Purpose: The purpose of this Doctor of Nursing Practice project was to implement evidence-based recommendations for the use of USG to place PIVs. At the project site, a combination of difficult vascular access patients, lack of experience, and high turnover among nursing staff resulted in suboptimal PIV placement rates.

Methods: The Iowa Model & Implementation Framework guided project implementation to bridge the gap between current practices and optimal PIV insertion. A mastery learning model was developed involving asynchronous education, live demonstration, deliberate simulation practice, and formative and summative assessment of USG PIV placement. Every simulated procedure was evaluated with a 12-point technique checklist created using the Modified Delphi method. Trainee competence was based on the successful completion of all checklist points. Frequency of surgical case delays, cancellations, anesthesia consults for PIV placement assistance, and patient comments related to PIV issues were collected.

Findings: Five nurses were educated and demonstrated competency in USG PIV insertion. These individuals collectively placed 124 USG PIVs for patients during the first three months post-training. Outcomes included an 88.2% success rate. Preoperative anesthesia placed PIVs decreased from 6.38% to 0.88% ($p = 0.02$), and patient satisfaction regarding the "skill of nurse inserting PIV" increased.

Discussion: A "train-the-trainer" approach was employed to foster sustainability. Interrater reliability between the project director and upcoming USG PIV skill evaluators was achieved to support continued staff training initiatives.

IOWA
College of Nursing

Implementing De-Escalation Training to Hospital New Hires
Mary Claire Wunderlich, RN, BSN, PMHNP-DNP Student

Background: The problem to be addressed is the deficit in education for colleagues on effective techniques for de-escalation. An estimated one in five healthcare workers experiences violence perpetrated by patients or visitors. Healthcare workers specifically nurses are at a much higher risk of experiencing workplace violence as compared to other occupations. There has consistently been inadequate training provided to caregivers in the hospital setting on how to de-escalate amid violent episodes.

Purpose: The purpose of this project is to determine the effect of de-escalation training on patient caregivers' knowledge, confidence, and ability when dealing with patient aggression.

Methods: This quality improvement project was developed using the PDSA cycles to enhance the safety of both patient caregivers and patients in the inpatient hospital setting. A de-escalation course was developed containing online and in-person components. The project was deemed not human subjects research. Participants were identified using their date of hire. Those hired between May and October of the selected year were invited to participate. Participants were educated on "10 Tips for De-Escalation." Thackrey's "Confidence in Coping with Patient Aggression Instrument" was administered both pre and post-intervention. Codes relating to patient violence were also tracked for the months during and following the intervention.

Findings: Mean scores from each assessment were compared and a p-value <0.05 indicated a significant increase in both knowledge and confidence for caregivers who participated in the training. Violent incidents were also tracked, and a trend was noted in a decreased number of violent episodes occurring during the months following the training.

Discussion: De-escalation training improved confidence and showed a trend for a lowered number of violent incidents at the project site. More patient caregivers need this education as violence within healthcare remains on the rise. Additional research with a larger sample size would add validity to these results.

Improving Mammogram Adherence in a Primary Care Clinic

Natalie Zimmerman, BSN, RN, FNP-DNP Student

Background: Mammograms are essential in detecting breast cancer to optimize chances of survival. However, in primary care settings, 1/3 of patients are not willing to get their mammograms done.

Purpose: The purpose of this evidence-based project was to improve mammogram adherence in women for earlier identification of breast cancer. The project also identified common barriers that women face in a primary care setting to address potential interventions that could be further implemented.

Methods: The population included women ages 50-74 who were due for mammogram screening. The interventions of reminder cards and phone calls were implemented according to the provider's suggestion. Adherence rates were collected before, during, and after implementation. Patients were also asked a survey at routine appointments to find out what their top barrier to getting their mammogram done was.

Findings: From September 2022 to May 2023, the mammogram adherence rate of the provider was on average 68%. Implementation began in June 2023. The mammogram adherence rate for June was 68.24%. By the end of implementation in November 2023, the adherence rate was 72.76%. Seven patients were surveyed asking what their top barrier to getting their mammogram done was. Of the seven patients, four patients (57%) stated that inconvenience was their top barrier. Other barriers listed were not wanting to get the mammogram done and forgetfulness.

Discussion: Reminder calls and cards improved mammogram adherence in a primary care setting. The top barrier interfering with the mammogram was identified as an inconvenience. More interventions such as self-scheduling, hiring a case manager, having walk-in hours, and creating a staff incentive would be beneficial to further improve mammogram adherence.

IOWA
College of Nursing
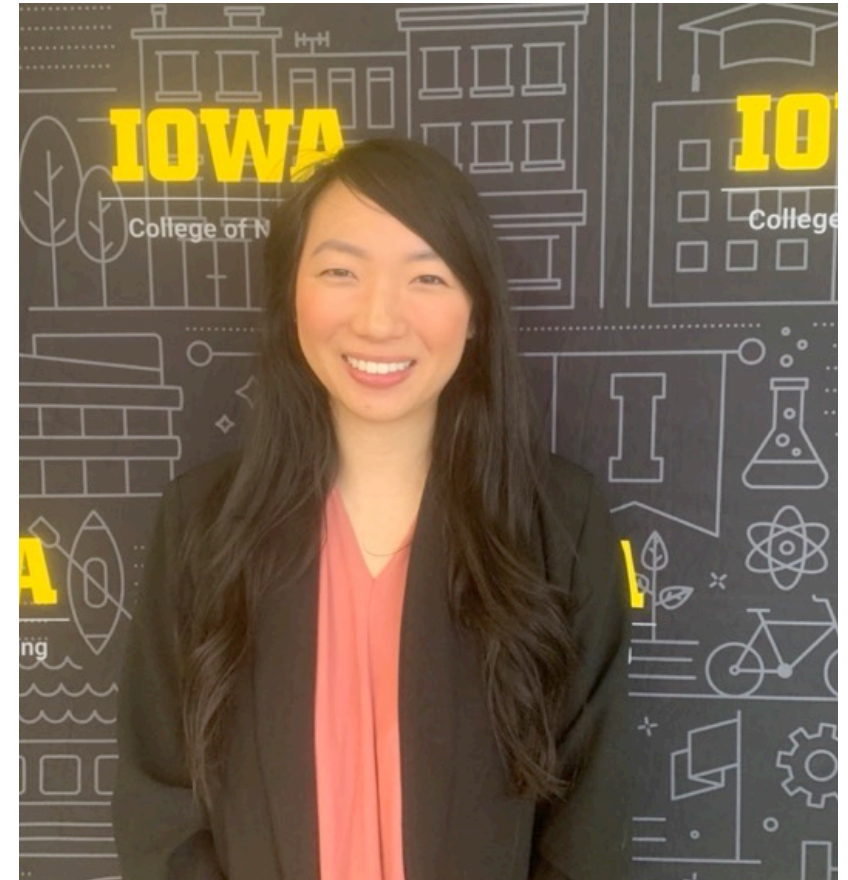
Keep in touch!

You're going places, and we want to be part of your journey. If you have news to share, please get in touch! We'd love to feature your career or life news and photos in our upcoming newsletters.

Katie Machovsky
Director of Communications,
Alumni and External Relations

✉ kathryn-machovsky@uiowa.edu

📞 319-467-0352

➔ nursing.uiowa.edu

📘 UICollegeofNursing

🐦 IowaNursing

📷 uicollegeofnursing

▶ UICollegeofNursing

Get involved

Stay connected, make a gift or join an alumni network in your area

→ FORIOWA.ORG

IOWA