

## DOCTOR OF NURSING PRACTICE

## POSTER PRESENTATION

**SPRING 2022** 

#### 8 A.M. SESSION PRESENTERS Moderator: Dr. Gregory Jennings

Cody Palmer Anna Hagnauer Anticipatory Guidance for Caregivers of Pediatric Patients Ages 0-12 Monthspage 1
Mathew Blount Jamie Wagner Peer Support Specialist Incorporation into Collaborative Patient Centered Care
Sydney Spaulding Megan Tuetken Sierra Hamlin Implementation of a Tele-Triage Protocol in an Emergency Department Setting
Rebecca Hunt  Establishing a Neonatal Peripherally Inserted Central Catheter (PICC)  Teampage 4
Ivonne Mandell Improving Healthcare Team Communication with Limited English Proficiency Families in the NICUpage 5
Ashley Whitlatch  Establishing Care with a Primary Care Providerpage 6
Velina Andrewski Vasovagal Syncope during Venipuncture: Alleviating Symptoms Through Leg Muscle Tension and Moving Toes Sequentiallypage 7
Mary Slusser Reducing Errors Through Implementation of Standardized Electronic Ordersets in the Intensive Care Settingpage 8
Susan Wolf Meghan Weber Assessing Provider Confidence of Acute Otitis Media Diagnosis and Treatment with an Optical Coherence Tomography Device in the Urgent Care Setting

#### 9:30 A.M. SESSION PRESENTERS Moderator: Dr. Melissa Bogle

Natalie Bethel
Jillian Youngquist
Improving Staff Education on Lung Cancer Screening at the
Illinois Correctional Facilities for the Justice-Involved Individualspage 10
Christina Guerrero
Conducting a Root Cause Analysis to Improve Intake Processes and
Record Review in Home Healthpage 11
Matthew Huelsmann
Emily Killebrew
Verah Bonareri
Utilizing a Personal Health Coach in the Management of T2DMpage 12
Kaitlin Sweeney
Rachael Schaefer
Establishing Guidelines to Promote Best Practice for Common Ailments
in School-Based Health Clinics (SBHCs)page 13
Myia Harper
Catalina West
Implementation of PrEP Protocol in Primary Carepage 14
Jordan Joynt
Alex Watson
Controlling Hypertension: Benefits of Home Blood Pressure Monitoring
with Cointerventionspage 15
Karen Howard
Physician Use of the RAPID3 to Guide Rheumatology Follow-Up: A
Retrospective Examinationnage 10

#### 11:00 A.M. SESSION PRESENTERS Moderator: Dr. Kelley McGuire

Titilayo Raji Implementation of Depression Screening in a Nursing Homepage	17
Chandra Pierson-Rye	
The Implementation of a Mental Health Screening Protocol in an	
Occupational Health Settingpage	18
Jo Muller	
Implementation of Routine Screening with Patient Health	
Questionnaire 9 (PHQ-9) in Adults with Crohn's Diseasepage	19
Joanna Luong	
Implementation of PHQ-2 Screening Tool in a Telemedicine Based	
Settingpage	20
Mark McAteer	
Improving No-Show Rates in a GI Endoscopy Outpatient Labpage	21
Megan Wojtko	
Community Health Worker Intervention to Improve HbA1c in Adult	
Diabetic Patientspage	22
Leah Deaton	
Critical Care Orientation Escape Roompage	23
Hollie Yoder	
Hypertension Management in Primary Care Using Target: BP Meeting	
Patient Goals and Quality Measures	24

#### 1:00 P.M. SESSION PRESENTERS Moderator: Dr. Leah Baecht

Jordan Swanberg
Perioperative Tube Feeding Guidelines for the Pediatric Burn Patientpage 25
Katherine Pozzo
Neuraxial Anesthesia for Total Joint Arthroplastypage 20
Kristin Wolff
Sadie Turner
Development and Evaluation of Enhanced Recovery After Surgery Protocols for
General Abdominal and Orthopedic Surgery with Focus on Preoperative Hydration
and Multimodal Management in Preoperative and Postoperative Phasespage 27
Paige Dickey
Melissa Gerlach
The Effectiveness of Using the Anatomage Table as a Learning Adjunct to
Peripheral Nerve Blocks Among Student Registered Nurse Anesthetistspage 23
Harry Senaldi
The Use of Point of Care Ultrasound to Assess Gastric Contents and
Determine Aspiration Risk in the Obese Patient Presenting for Elective Surgerypage 29
Lynexis P. McVey
Ashley Shulman
Development of a Protocol to Manage Postdural Puncture Headachepage 3
Andrew Screnchuk
Difficult Labor Epidural: Intrathecal Catheter Managementpage 3
Kwame Adu-Affum
Introduction of Enhanced Recovery After Cesarean Section (ERAC)
Protocolpage 3
Adam Bruinius
James Clancy
Identifying Facilitators and Barriers for a Successful Student Registered
Nurse Anesthetist's Clinical Experiencepage 3
Sarah Tobias
Addison Hohner
Intrathecal and Epidural Dexmedetomidine for Obstetric Patientspage 34

#### 2:30 P.M. SESSION PRESENTERS Moderator: Dr. Kevin Stein

Brent Hitchens
Darrell Risinger
The Development of an Evidenced-Based Guideline for the Anesthetic
Management of Surgical Cases Utilizing Evoked Potential Monitoringpage 35
Jennifer Ashton
Katherine Rosner
Pediatric Distraction Methods for the Perioperative Periodpage 36
James Canny
Nathan Carroll
Development of Evidence-Based Rubrics and Instructional Videos for
Anesthesia Induction Sequencespage 37
Nick Nguyen
Computer-Based Learning Module: Local Anesthetic Systemic Toxicity page 38
Kourtney Chapman
Mia Rhodes
Jordan Smith
Exploring the Use of Telehealth in a School -Based Health Centerpage 39
Emma Hanney
Kaitlin Springer
Improving Depression Surveillance at the We Care Clinicpage 40
Alexandra Evans
Alexandria Molaro
Alex Niebrugge
Creating a Guideline for STI Testing in the Pediatric Populationpage 41
Kelsey Beard
Morgan Lippert
Increasing Obesity Education in the Underserved and Latino Populationpage 42
Michele Hartke
Implementation of Childhood Trauma Questionnaire in a Primary Care
Settingpage 43

## **DNP POSTER PRESENTATION ELSEWHERE**

Emily Lester Presented at Illinois and Indiana Nurse Anesthetists Virtual Conference Spring 2021 Best Practice in the Perioperative Anesthetic Management of Infants
with Gastroschisispage 44
Ashley Wittler Presented at Sigma Theta Tau International Epsilon Eta Chapter Meeting Fall 2021 Improving Access to Reproductive Life Planning Following
Implementation of One Key Question® in Practicepage 45
Nicholas Collier Presented at Sigma Theta Tau International Epsilon Eta Chapter Meeting Fall 2021
Development and Implementation of an Enhanced Recovery  After Surgery Protocol for Thoracic Surgerypage 46
Erin O'Neal
Presented at Sigma Theta Tau International Epsilon Eta Chapter Meeting Fall 2021  Discharge Process Optimizationpage 47
Andrew Tharp Presented at Sigma Theta Tau International Epsilon Eta Chapter Meeting Fall 2021 Implementation of a Risk Assessment Tool to Increase Screening for Extragenital Gonorrhea and Chlamydia in Men Who Have
Sex with Menpage 48
Bethany Huelskoetter
Presented at Sigma Theta Tau International Epsilon Eta Chapter Meeting Fall 2021  Increasing Low-Dose CT Screening in Primary Carepage 49
Amanda Whistler Presented at Sigma Theta Tau International Epsilon Eta Chapter Meeting Fall 2021  Diabetic Education in a Uninsured Patient Populationpage 50
Nicolas Yemm Presented at Sigma Theta Tau International Epsilon Eta Chapter Meeting Fall 2021 Utilization of Telephone Outreach and Telemedicine to Improve
Diabetic Outcomespage 51
Jennifer Knight
Presented at Sigma Theta Tau International Epsilon Eta Chapter Meeting Fall 2021  In-Patient Observation Safety Assistant Practicespage 52

Gregory Jennings Presented at Sigma Theta Tau International Epsilon Eta Chapter Meeting Fall 2021								
hort Term Me	dical Mission	Trip Antibio	otic Protocol	1	•••••	••••••	page 54	

## Southern Illinois University Edwardsville April 29, 2022 8:00 a.m. Session

Cody Palmer
Anna Hagnauer
Doctor of Nursing Practice
Nurse Practitioner Specialization

#### Anticipatory Guidance for Caregivers of Pediatric Patients Ages 0-12 Months

Anticipatory guidance is defined as proactive counseling for caregivers regarding various aspects of childcare and development. This project sought to improve the process and delivery of anticipatory guidance for infants aged 0-12 months at one rural pediatric primary care clinic. An extensive literature review was undertaken to determine current recommendations for anticipatory guidance topics pertinent to pediatric patients aged 0-12 months. Additional research explored the efficacy of various educational formats to provide teaching. Written educational materials were updated and edited to be visually appealing and understandable, and educational videos were created. Written materials and educational videos were provided to parents/caregivers of patients aged 0-12 months during well child visits before seeing the providers. Thirty-two surveys were collected from parents/caregivers to assess their perspectives on the new educational materials and process, and a focus group was held with clinic staff to gather feedback. The proposed goal of the project was to update written educational materials and create educational videos that would introduce a new format to provide anticipatory guidance. These improvements would allow parents and caregivers to view the educational videos prior to seeing the provider, which would allow for a more individualized patient-provider discussion. Overall, patient and clinic staff feedback indicate positive responses toward the new educational materials and process. Ensuring that educational materials are current, engaging, and easily accessible are important for optimizing parent/caregiver education, which leads to improved patient outcomes.

## Southern Illinois University Edwardsville April 29, 2022 8:00 a.m. Session

Mathew Blount
Jamie Wagner
Doctor of Nursing Practice
Nurse Practitioner Specialization

#### Peer Support Specialist Incorporation into Collaborative Patient Centered Care

Peer support specialists (PSS) can deliver recovery care to those suffering with mental health and substance abuse issues; specifically, recuperative care is the fundamental principle in good practice for individuals with mental disease or substance abuse disorders. The goal of this quality improvement project was to improve the referral process to the in-house PSS at one Midwestern Veteran's Administration Medical Center. Data from May and June 2021 was collected to determine the number of referrals prior to project implementation. The pre-implementation data showed twenty-four referrals from May and June 2021. Implementation occurred during the months of July and August 2021. Data was collected in the two-month period and although there was not an increase in the referrals as the project anticipated, the data did not show a large decrease in referrals either. Referrals were tracked from the initial consult by the provider and whether the patient made the follow up with the PSS. This may be due to multiple variables such the decreased patient visits during the intervention period, poor communication between primary care providers and the mental health team, as well as an influx of new providers to the clinic that did not receive pre-implementation education on the new process. Clinic staff, providers, and PSS provided feedback on the referral process and suggested continuing education to both new providers and LPNs that started in the clinic after implementation. Keywords Peer support specialist, peer support, collaborative care, patient centered care, mental health

## Southern Illinois University Edwardsville April 29, 2022 8:00 a.m. Session

Sydney Spaulding
Megan Tuetken
Sierra Hamlin
Doctor of Nursing Practice
Nurse Practitioner Specialization

#### Implementation of a Tele-Triage Protocol in an Emergency Department Setting

Nationwide, the volume of emergency department (ED) visits has steadily increased over the last several decades. This steady increase in volume frequently causes ED crowding and considerable delays in patient evaluation and treatment. Recently, teletriage has been used in emergency departments to evaluate less emergent patient needs while freeing up in-house providers to care for more critical patients. The goal of this DNP project was to develop a protocol for the utilization of teletriage in an Emergency Department in a level 1 trauma center in central Illinois using nurse practitioners to assess patients in the waiting room and order appropriate tests to improve patient outcomes. After educating staff on the protocol, a four-week trial of the teletriage protocol was conducted on Mondays and Thursdays. Following the trial, staff were surveyed to evaluate the process to determine what improvements could be made. Data was collected pre and post implementation regarding the average door-to-provider time, number of patients who left without being seen and overall length of stay. A decrease in door-to-provider time, decrease in overall length of stay, and a decrease in the number of patients who left without being seen was found. Staff feedback indicated that additional staffing was needed and a separate room for the process would be beneficial for long term success. Future expansion of this project might include adapting the protocol to allow providers to treat and discharge patients via the teletriage process.

## Southern Illinois University Edwardsville April 29, 2022 8:00 a.m. Session

#### Rebecca Hunt

Post-Master's Doctor of Nursing Practice

#### Establishing a Neonatal Peripherally Inserted Central Catheter (PICC) Team

Infants admitted to the neonatal intensive care unit (NICU) have a plethora of diagnoses, including prematurity and newborns with genetic, neurological, surgical, and cardiac problems. The nature of these disease processes usually precludes enteral feedings and providing the infant with appropriate nutrition and hydration is a priority. This requires central venous access and peripherally inserted central catheter (PICC) placement allows for a reliable route of administration for intravenous nutrition and medications. The purpose of this project was to develop a nurse-led neonatal PICC team to provide timely placement of PICC lines while maintaining cost-effectiveness and maintaining a minimal number of adverse events, such as central-line associated bloodstream infections (CLABSIs). A nurse-led neonatal PICC line team was created at one local Midwestern Level III NICU. Five-day shift and five-night shift NICU registered nurses (RNs) were recruited to join the neonatal PICC line team. This allowed the team to provide 24-hour PICC line coverage year-round. The initial qualifications for membership were 4+ years of Level III NICU experience, expert peripheral IV insertion skills, excellent communication and organizational skills, and flexibility of shift scheduling. Results showed a decrease in the length of time between PICC line consultation to successful PICC line placement and a decrease in the number of peripheral IV attempts between the time of PICC line consultation to successful PICC line placement without an increase in adverse patient events while maintaining cost-effectiveness.

## Southern Illinois University Edwardsville April 29, 2022 8:00 a.m. Session

#### **Ivonne Mandell**

Post-Master's Doctor of Nursing Practice

## Improving Healthcare Team Communication with Limited English Proficiency Families in the NICU

Language barriers are common in healthcare settings, creating disparities in care between individuals with limited English proficiency and those with English proficiency. In the NICU setting, professional interpreters have been shown to improve parent/staff communication and increase parent satisfaction by allowing them to ask questions and form trusting relationships with staff. Solid parent-provider communication can result in better health outcomes by increasing parental empowerment and participation in their child's care. Despite the acknowledged advantages of using professional interpreters in healthcare settings, they are frequently under-utilized. The purpose of this project was to improve communication with limited English proficiency families using professional interpreters in a 65 bed, universityaffiliated level IV NICU in St. Louis, Missouri. Practice guidelines and staff education were created based on the results of an extensive literature review. Five (5) limited English proficiency families were identified during the implementation period and three interpreter modalities were used. Barriers to interpreter use were availability of interpreters in the family's preferred language, families declining an interpreter, lack of time, and uncertainty about how to access an interpreter. Staff members appreciated education on available interpreter modalities and found communication with LEP families to be effective and especially convenient with the newly available video remote interpreting tablet. Daily communication using professional interpreters was improved overall, and NICU staff now recognize it as an essential component of high-quality, family-centered care.

## Southern Illinois University Edwardsville April 29, 2022 8:00 a.m. Session

**Ashley Whitlatch** 

Post-Master's Doctor of Nursing Practice

#### Establishing Care with a Primary Care Provider

Established primary care leads to continuity of care, improved patient outcomes, and increased quality of life. There is also an improvement in the unnecessary usage of urgent care resources. The purpose of this project was to pilot a new process within the urgent or emergent care setting to ensure that patients who are not established with a primary care provider (PCP) have an appointment set before they are discharged. Staff was educated and trained in how to schedule primary care appointments for at-large patients. There are a high number of individuals who do not have a primary care provider. When an individual does not have a primary care provider, there is an increased rate of morbidities and mortalities along with decreased urgent/emergent care wait times and decreased pressure on health care providers. Results showed that primary care appointments were made for 44 patients, and 23 of them were compliant. Twenty percent of these patients previously had a PCP but were non-compliant. All but two of these patients reestablished care. Overall, staff within the clinic were pleased with the process and the decrease in clinic congestion. Some limitations included primary care offices not having adequate appointment slots and staff scheduling visits incorrectly. Keywords: Primary care provider, patient outcomes, continuity of care, urgent care, emergent care, establish care

## Southern Illinois University Edwardsville April 29, 2022 8:00 a.m. Session

Velina Andrewski

Post-Master's Doctor of Nursing Practice

Vasovagal Syncope during Venipuncture: Alleviating Symptoms Through Leg Muscle Tension and Moving Toes Sequentially

Venipuncture is a common medical procedure and is considered safe and routine. However, intermittent cases occur where patients develop symptoms of lightheadedness, nausea, weakness, and occasionally a full syncopal episode due to needle phobia, blood phobia, and pain associated with venipuncture. Vasovagal Reactions (VVR) or Vasovagal Syncope (VVS) during a venipuncture procedure can be distressing for the patient, the clinician, and disruptive to clinic routines. This paper examines whether techniques such as simple leg tensing and wiggling of toes can reduce or abort VVR/VVS completely as the patient undergoes venipuncture. Clinicians were instructed in techniques to use if the patient exhibited any signs of VVR/VVS, or if the patient claimed to have a history of these reactions in the past with venipuncture. Two outpatient lab sites were used for this project. 1200 patients presented for bloodwork, of which 15 exhibited signs of VVR/VVS. Of those patients who did need intervention, all but one experienced modified or no symptoms at all as the exercises were performed. The ability to mitigate VVR/VVS easily during a routine blood drawing or intravenous insertion procedure is beneficial to the patient, decreasing their symptoms and level of anxiety. It is also beneficial to the phlebotomist, who can direct the patient and help manage the problem quickly and easily. Mitigating the problem before it advances to more significant problems also helps to minimize any disruption to clinic operations.

## Southern Illinois University Edwardsville April 29, 2022 8:00 a.m. Session

**Mary Slusser** 

Post-Master's Doctor of Nursing Practice

## Reducing Errors Through Implementation of Standardized Electronic Ordersets in the Intensive Care Setting

Healthcare facilities are constantly chasing through striving to meet interoperability and meaningful use requirements while still advancing the field through the concepts of evidencebased practice and value-based delivery modules. Healthcare facilities can encourage the healthcare team by utilizing computerized physician order entry using standardized ordersets. An orderset is a series of recommended orders based on different diagnoses, conditions, or treatments. It was noted that several errors and delays of care were occurring related to the paper process at a small Midwestern hospital. The purpose of this quality improvement project was to convert the remaining paper ordersets to electronic ordersets in the form of powerplans. After an extensive literature review was created, an interdisciplinary team was created to review the current paper ordersets, update and make changes as necessary and then build electronically. An orderset and protocol committee was the final approval process for the electronic validation before going live. Along with this project, the medical staff was re-educated on the use and intention of powerplans. Ultimately three paper ordersets were converted from paper to electronic. Two were placed on hold due to staffing and resourcing, and the Induced Hypothermia orderset was discontinued as it was found this is no longer a best practice treatment. Unusual occurrences were reviewed pre and post-implementation and found that delays of care, absence of orders, and errors were reduced when the paper was eliminated. Keywords: Ordersets, powerplans, standards of care

### Southern Illinois University Edwardsville April 29, 2022 8:00 a.m. Session

Susan Wolf Meghan Weber Post-Master's Doctor of Nursing Practice

Assessing Provider Confidence of Acute Otitis Media Diagnosis and Treatment with an Optical Coherence Tomography Device in the Urgent Care Setting

Acute otitis media (AOM) is one of the most common causes of pediatric infection worldwide at approximately 350 million visits per year, as well as one of the most challenging illnesses to diagnose for providers (Tong et al., 2018). This dilemma leads to antibiotics being inappropriately prescribed, at a rate of approximately 75% (Islam & Hassinger, 2018). This project sought to explore the impact of implementing an optical coherence tomography (OCT) device in an urgent care setting when assessing otalgia in patients 0 to 17 years of age. The three main objectives of the project were to increase provider confidence in both acute otitis media (AOM) and otitis media with effusion (OME) diagnoses, provide patient/parent satisfaction, and decrease unnecessary antibiotic prescribing to patients with complaints of otalgia. A cohort of 12 Urgent Care Advanced Practice Providers (APPs) were invited to participate in OCT device education and utilization, as well as complete an anonymous survey in the pre-implementation phase and subsequently every 30 days to assess the first two objectives based on a four-point Likert scale. At the end of the six-month project, provider confidence scores averaged 2.86 for AOM and 3.19 for OME, and patient/parent satisfaction averaged 3.28. Aggregate data on antibiotic prescribing rates was collected during both pre-implementation and evaluation phases to assess the final objective and found a 17.6% improvement in antibiotic prescribing rates. Device implementation in other specialties, trial of other OCT devices, and longer training periods are recommended for future studies.

Natalie Bethel
Jillian Youngquist
Doctor of Nursing Practi

Doctor of Nursing Practice Nurse Practitioner Specialization

## Improving Staff Education on Lung Cancer Screening at the Illinois Correctional Facilities for the Justice-Involved Individuals

Justice-involved individuals are at an increased risk of developing chronic health conditions, including lung cancer. Literature supports the practice of using an annual low-dose CT scan to screen for lung cancer. Illinois Correctional Facilities lacked a lung cancer screening protocol for justice-involved individuals. Lung cancer screening guidelines were approved for the facilities, however, the time frame for implementation was unclear. This DNP project focused on evidenced based guidelines for lung cancer screening with education tools for staff members to prepare them for implementation. Staff was presented with a pre-test, PowerPoint presentation, and a post-test to evaluate lung cancer screening knowledge. Our educational goal for improvement was set at a 25% increase from pre-test to post-test. There was a 27% increase in correct response rate for lung cancer screening awareness questions after watching the presentation, implying this was a successful strategy for improvement of knowledge. On the post-test all staff members agreed at a 100% to feeling confident in applying the U. S. Preventive Services Task Force (USPSTF) guidelines for lung cancer screening for justice-involved individuals. For future projects with correctional facilities, it would be beneficial to coordinate efforts with the director who supervises targeted staff members. In addition, having a hands-on approach by presenting the PowerPoint and pre/post-tests in person would potentially increase participation in the project.

#### **Christina Guerrero**

Doctor of Nursing Practice Nurse Practitioner Specialization

## Conducting a Root Cause Analysis to Improve Intake Processes and Record Review in Home Health

Minimization of adverse events, reduction of inpatient admissions, and prevention of polypharmacy within home health are of importance due to the increasing number of Medicare beneficiaries. In 2019, CMS reported 5,266,931 patients were served, accounting for 7,439,849 episodes. The number of beneficiaries will rise from 54 million to over 80 million by 2030. Medical errors are now the third-leading cause of death in the United States, surpassing diabetes, Alzheimer's, and stroke. The Agency for Healthcare Research and Quality identifies a lack of institutional intake processes as the leading cause for medical errors in home health agencies. An evidence-based 5-step root cause analysis was developed to address this concern in a private, Midwestern home health agency. Project objectives included: identifying root causes for the lack of uniform intake processes and access to patient records, assessing stakeholder knowledge of root causes, addressing obstacles for implementation and adaptation of new processes, and assessment of stakeholder readiness for change. Project methods included a niche specific PowerPoint presentation delivered to leadership, a pre and post Qualtrics survey utilizing a 5point Likert scale, and qualitative data review. The post-presentation survey resulted in a significant 75% increase in stakeholder knowledge and readiness for change. Outcomes included self-reported empowerment and immediate follow-up action. Understanding the root causes of barriers to patient care is recommended for all home health agencies. Knowledge supports initiatives to streamline intake processes, decrease adverse events, and prepare for the predicted influx of patients.

Matthew Huelsmann
Emily Killebrew
Verah Bonareri
Doctor of Nursing Practice
Nurse Anesthesia Specialization

#### Utilizing a Personal Health Coach in the Management of T2DM

Management of type 2 diabetes mellitus (T2DM) can reduce hemoglobin a1c values and ultimately reduce the risk of morbidity and mortality. Many adults live with uncontrolled T2DM due to a lack of knowledge of disease management. The purpose of this project was to evaluate the implementation of a personal health coach for the management of T2DM in adult patients. An extensive literature review was conducted, and the use of the Diabetes Management Self-Efficacy Scale (DMSES) was chosen to evaluate participants' self-efficacy regarding their T2DM. Adult patients aged 21-75 with a diagnosis of T2DM and a hemoglobin a1c >7 in a federally qualified healthcare clinic in southern Illinois were asked to complete a pre-and post-DMSES and a pre-and post-hemoglobin a1c. Seven participants were initially enrolled, with three completing the project in its entirety. During the implementation period, participants were engaged in routine phone calls with the investigators to discuss areas of diabetic management. Results revealed a mean decrease in hemoglobin a1c values by 0.93% and improvements in DMSES scores examining the ability to check blood sugars and correct as necessary, ability to perform foot exams, adjust meals based on dietary needs and blood glucose levels, and to follow a healthy meal plan and take medication appropriately. The DSMES scores showed a mean decrease or no change for questions 5, 9, and 10, which examined weight and exercise. Overall, results revealed participants gained confidence in their perceived abilities to manage their T2DM.

Kaitlin Sweeney
Rachael Schaefer
Doctor of Nursing Practice
Nurse Practitioner Specialization

## Establishing Guidelines to Promote Best Practice for Common Ailments in School-Based Health Clinics (SBHCs)

The COVID-19 pandemic exposed the gap in access to medical care of school-age children and identified a need for community-based health clinics to aid in its minimization. Evidence shows the creation of school-based health clinics (SBHCs) in public school districts provides a pathway for students to receive high-quality care in an easily accessible manner. Therefore, patient care guidelines for common ailments seen in SBHCs for a local federally qualified healthcare center (FQHC) were developed in conjunction with the FQHC goal to build and operate a SBHC located in southern Illinois. Eight guidelines were created to analyze the most common chief complaints for patient visits through the use of UptoDate, evidence-based practice available from various sources and in coordination with the regulations for public school attendance in the state of Illinois. All eight guidelines were presented to the Director of Operations for the SBHC's Mobile Units at the FQHC and consulted medical professionals. Copies of these guidelines were provided for future use to promote project sustainability. A 5-question survey was distributed to collect further feedback surrounding the guidelines, indicating likelihood of use and effectiveness in capturing proper management of common ailments. Future expansion of this project may include all staff education to providers about implementation and use of treatment guidelines once the SBHCs are opperational. This project served as an initial step toward the development of standardized evaluation and treatment of common ailments in school-based health clinics.

Myia Harper
Catalina West
Doctor of Nursing Practice
Nurse Practitioner Specialization

#### Implementation of PrEP Protocol in Primary Care

Human immunodeficiency virus (HIV) is an incurable condition that continues to be a public health threat. Approximately 38 million people live with the disease worldwide, and one out of seven are unaware they have the disease. Pre-exposure prophylaxis (PrEP) is a medication that can be prescribed to individuals at risk of acquiring HIV. PrEP can be prescribed by any healthcare provider who deems a patient at risk for HIV. However, a primary care practice in central Illinois previously had no protocol for initiation of PrEP. This quality improvement (QI) project aimed to implement a PrEP protocol in the department of internal medicine and optimize PrEP uptake. The project methods included an educational meeting, packet, brochures, and PrEP protocol. The project was evaluated utilizing the pre-and post-intervention. Overall, among the three providers who completed both pre-and post-intervention surveys, there was an increase in the familiarity and comfort of prescribing PrEP after the intervention. In addition, there was an increase that indicated a higher possibility of the providers not referring patients to infectious disease for PrEP. The knowledge assessment of the providers did show an increase for the nurse practitioner but not the other two respondents, which indicates further education could be beneficial to the providers. The project's future goals in the primary care office are to increase uptake of prescribing PrEP to patients who are high-risk for HIV and eventually open a designated clinic day just for PrEP patients.

Jordan Joynt
Alex Watson
Doctor of Nursing Practice
Nurse Practitioner Specialization

#### Controlling Hypertension: Benefits of Home Blood Pressure Monitoring with Cointerventions

While nearly half of adults in the United States have hypertension, only about one quarter of those adults have adequately controlled hypertension. Providing a nurse-led coaching program in combination with home blood pressure monitoring (HBPM) has been shown to improve blood pressure control. A rural family practice clinic in the Illinois Metro East area proposed a clinical trial to test a nurse-led coaching program in combination with home blood pressure monitoring (HBPM) in decreasing blood pressure long-term. Both intervention and control groups received nurse-led hypertension coaching, while the intervention group also received a home blood pressure cuff. The results showed that a nurse-led coaching is effective in decreasing blood pressure. However, due to significant attrition, meaningful results could not be obtained regarding any additional benefits of adding HBPM to nurse-led coaching.

#### **Karen Howard**

Doctor of Nursing Practice Nurse Practitioner Specialization

## Physician Use of the RAPID3 to Guide Rheumatology Follow-Up: A Retrospective Examination

The Quality Improvement Team of a rheumatology clinic was seeking ways to deal with the long intervals for an available follow-up appointment. The use of standardized disease activity assessment tools as a part of patient care is an evidence-based practice that is not employed by over one third of rheumatologists. One of the many uses of these tools is to guide treat-to-target care. Treat-to-target care uses the disease assessment tool score to guide treatment decisions and follow up interval. This project examined the use of a standardized disease assessment tool, the Routine Assessment of Patient Index Data 3 (RAPID3), as recommended by the American College of Rheumatology (ACR) to guide follow-up interval. In this retrospective study the data from one physician's use of the RAPID3 was analyzed to determine how closely follow-up appointments adhered to the ACR recommendations for the RAPID3 score of 30 new patients. Results demonstrated that provider knowledge of the RAPID3 score alone is not sufficient to ensure use of the evidence-based practice of basing follow-up on RAPID3 scores. Outcomes of this project include a recommendation for implementation of a follow-up protocol for the rheumatology clinic based on the RAPID3 score, facilitation of RAPID3 use though a method for electronic completion of the RAPID3 by rheumatology patients before each appointment, and an educational presentation for providers on the validity and ease of the RAPID3 tool to encourage use of the score once obtained.

## Southern Illinois University Edwardsville April 29, 2022

11:00 a.m. Session

#### Titilayo Raji

Doctor of Nursing Practice Psychiatric Mental Health Nurse Practitioner Specialization

#### Implementation of Depression Screening in a Nursing Home

Background/Introduction Unidentified and untreated depression among nursing home residents leads to poor quality-of-life and substantial healthcare dollars are utilized for care management. Use of validated instruments and routine screening provides opportunity for early detection and treatment. Purpose The purpose of this project was to educate employees of a nursing home on the use of the Geriatric Depression Screening (GDS) tool, implement it on two units of the nursing home, and evaluate the feasibility and acceptability of this quality improvement project. Method An educational presentation was delivered to introduce the implementation plan, GDS screening tool, and protocol for data collection. Return demonstration was utilized to assess understanding of training. A 10-item evaluation tool was developed to understand staff experiences during the implementation. Result The return demonstration revealed increased understanding for the nurses on identification of symptoms of depression. Use of the GDS was deemed overwhelmingly feasible and acceptable by staff. Limitations Limitations of this project are high staff turnover rate and increased nurses' workload due to COVID protocols, requiring frequent re-education. Implication to Practice/Conclusion Positive patient screening throughout this project led to early and appropriate interventions to manage symptoms and improved quality-of-life. It also led to routine screening of this nursing home residents on admission and every 6months. Early detection of depression symptoms through caregiver knowledge can provide timely treatment and improved quality of life.

## Southern Illinois University Edwardsville April 29, 2022 11:00 a.m. Session

#### Chandra Pierson-Rye

Doctor of Nursing Practice Psychiatric Mental Health Nurse Practitioner Specialization

## The Implementation of a Mental Health Screening Protocol in an Occupational Health Setting

Background Occupational injuries are disturbingly common and can occur regardless of employment industry, given that virtually every job in every industry has some degree of risk. Literature suggests that once an injury has occurred, psychosocial factors such as depression can play a pivotal role in the progression of pain, determine whether a subsequent disability develops, and the length of time an employee is off work. Theoretical Framework Both pain and depression are hypothesized to follow the same descending pathway in the CNS and have the same biochemical basis, serotonin and norepinephrine. The Biophysical Model of Pain can be used to explain this phenomena. Methods Currently in occupational health, patients are not screened for depression, leaving a gap in care. This QI project implemented the PHQ – 9 to screen for depression in patients <18 years old seen for a work-related injury. All staff were surveyed after implementation to determine if this change was feasible and effective. Results Per Likert-scale questionnaire 71.43% "strongly agreed" and 28.57% "somewhat agreed" that it would be feasible to continue utilizing the PHQ - 9 in daily practice. Some things the staff liked about using the PHQ – 9 in their own words "it is a good mental health tool" and "it's an objective measurement of subjective reports". Implications for Practice The results of this quality improvement project are promising and suggests it is feasible to utilize the PHQ – 9 to assess the psychological needs of patients injured in a work-related injury. Future work will include implementing routine screening as a protocol.

## Southern Illinois University Edwardsville April 29, 2022

11:00 a.m. Session

#### Jo Muller

Doctor of Nursing Practice Psychiatric Mental Health Nurse Practitioner Specialization

## Implementation of Routine Screening with Patient Health Questionnaire 9 (PHQ-9) in Adults with Crohn's Disease

Introduction: Mild levels of depression have been measured with screening tools at rates of 15-24% in adults with Crohn's disease (CD). The spectrum of the impact of depressive symptoms is measurable and documented for those with CD. Patient perspectives support the integration of psychological care, and the Patient Health Questionnaire (PHQ-9) is a well validated tool for the measurement of depressive symptoms. Purpose: Increase depression screening of adult CD patients in the outpatient gastroenterology clinic and evaluate the provider perspectives regarding PHQ-9, depression, and CD. Conceptual Framework: The Johns Hopkins Nursing Evidence Based Practice (JHNEBP) Model was selected as the conceptual framework to guide this Doctoral project because it is rooted in evidence-based practice (EBP) and composed of inquiry, practice, and learning. Methods: The total number of PHQ-9, prior to and during implementation, and the provider's perspective on utility/integration of the PHQ-9 were measured with anonymous online pre and posttest surveys. Results: No routine depression screening took place prior to implementation and the total number of PHQ-9 completed after implementation was reported as five. Initial pre and posttest scoring indicated positivity to neutrality in all areas. Provider perspective revealed a positive provider shift related to depression frequency, provider screening responsibility, and practice integration. The most significant shift was increased provider comfort identifying depression symptoms. Conclusion: Continued screening of adult CD patients with PHQ-9 will increase depression identification, enhance routine care, and improve patient outcomes.

## Southern Illinois University Edwardsville April 29, 2022

11:00 a.m. Session

#### Joanna Luong

Doctor of Nursing Practice Psychiatric Mental Health Nurse Practitioner Specialization

#### Implementation of PHQ-2 Screening Tool in a Telemedicine Based Setting

Background Major depression is one of the most common mental health disorders in the United States, affecting nearly 17.3 million of the population. As cases continue to rise throughout the ongoing pandemic of COVID-19, telemedicine has become a popular modality for accessibility to mental health care. Adequate screening, availability of resources and services, prompt treatment, and simple follow ups can contribute to treatment success rates and higher positive outcomes. Theoretical Framework The expanded collaborative chronic care model theoretical framework translates to this project in that it approaches management of patients with a team approach for those who screen positive for major depressive disorder in a telemedicine setting. Methods Over the course of 3 months, all incoming telemedicine calls were screened using the PHQ-2 by a team of physician assistants and one nurse practitioner. Any positive screenings were further evaluated with a diagnostic PHQ-9 tool and treatment planned following evidencebased guidelines. Results Approximately 162 patients were screened and 18 were treated during the 3 months screening process. Staff involved with the process reported positive opinions related to the project, including ease of use and quality of patient care. Implications for Practice The screening process continues to be part of the telemedicine practice today, and the mental health branch has grown in direct relation to recognizing the growing volume. The telemedicine now incorporates a team of psychiatric nurse practitioners and therapists to support those who screen positive and may need additional treatment.

## Southern Illinois University Edwardsville April 29, 2022

11:00 a.m. Session

#### Mark McAteer

Post-Master's Doctor of Nursing Practice

#### Improving No-Show Rates in a GI Endoscopy Outpatient Lab

Many procedural areas face an average no show rate between 14%-16% annually. Insufficient procedure preparation, socioeconomical issues including lack of transportation, illness on the day of the day of the procedure, and lack of educational awareness surrounding the importance of needing the procedure have been linked to patient's canceling scheduled procedures. High no show rates contribute to significant financial losses as well as unused resources for procedural departments. The negative impact of these losses can create issues with staff department productivity and impact other patients due to delayed procedure times. The purpose of this project was to implement a verbal pre-call assessment by the RN schedulers on patients scheduled for endoscopy procedures. The pre-call assessment included pre-procedural education, review and confirmation of required appointment resources in order to minimize barriers. The pre-call assessment afforded the patients the opportunity to cancel procedures far enough in advance to allow another patient to be scheduled in their spot, reducing financial loss and maintaining department productivity. Since the projects implementation in July 2021, 6,625 patients have completed the pre-assessment form resulting in a 1-2% decrease in cancelation rates. Pre project implementation cancelation/no-show rate was 15% with a post project implementation of 13%-14%. Limitations of this project included challenges related to the pandemic which created unforeseen cancelations due to a mandatory decrease in elective surgeries and cancelations related to symptomatic COVID patients with minimal lead time.

## Southern Illinois University Edwardsville April 29, 2022

11:00 a.m. Session

Megan Wojtko

Post-Master's Doctor of Nursing Practice

#### Community Health Worker Intervention to Improve HbA1c in Adult Diabetic Patients

Type 2 Diabetes Mellitus (T2DM) is a disease that disproportionally impacts patients with multiple socioeconomic barriers that are often difficult to address during a primary care visit. Several provider and practice-level barriers also exist including time limitations within the visit and lack of trained staff to help with patient education and case management. Uncontrolled T2DM leads to poor health outcomes and increased healthcare costs. Community Health Workers (CHW) are trained lay persons that can successfully address the patient's unmet needs and assist with the provider's recommendations. The purpose of this project was to explore if a CHW led intervention focused on improving diabetic management would decrease the hemoglobin a1c (HbA1c) of adult primary care patients with uncontrolled T2DM in a Community Health Center (CHC). Participating patients received diabetic and self-management education as well as care coordination if needed at least twice during the project. There were several limitations related to the pandemic that impacted participation including staffing, rescheduling of patients, dependence on phone communications, and initial engagement amongst providers. Results from 18 uncontrolled diabetics who received CHWs services showed a decrease in the average HbA1c by 3.04% over a 3-month period. The patient's benefited by an approval in their HbA1c and the CHC was able to meet their strategic goal to improve HbA1c across the system. Without an additional financial burden to the organization, the proven benefits of the CHW led intervention was shown to be an effective and sustainable program within the CHC.

## Southern Illinois University Edwardsville April 29, 2022

11:00 a.m. Session

#### **Leah Deaton**

Post-Master's Doctor of Nursing Practice

#### Critical Care Orientation Escape Room

Newly licensed nurses often feel unprepared and lack confidence as they transition from academia to practice. Education Specialists who oversee training programs for newly graduated nurses are challenged to create education modalities that are meaningful, engaging, and promote critical thinking. The purpose of this project was to create an Educational Escape Room to reinforce principles of safe medication administration for new nurses entering critical care areas in a large pediatric hospital. Escape Rooms engage learners through gamification and activelearning principles to improve knowledge synthesis and retention. Eighty-three newly hired critical care RNs participated in the Educational Escape Room during house-wide orientation in 2021. Hospital educators and Quality and Safety liaisons identified the Escape Room learning objectives to align with hospital safety metrics and needs. Based on survey data, all learners felt that the Educational Escape Room met the identified objectives including high engagement, utilization of medication error mitigation strategies, and increased confidence in future medication administration. Due to early project success, exposure to the Educational Escape Room was expanded to include all newly hired Registered and Graduate Nurses in the hospital as a part of hospital-wide nursing orientation starting in January of 2022. Educational Escape Rooms are a highly engaging immersive learning modality that can increase confidence and competence in newly graduated Registered Nurses thereby easing their transition from academia to practice. Escape Rooms can also be easily adapted to help learners negotiate a myriad of learning gaps.

## Southern Illinois University Edwardsville April 29, 2022

11:00 a.m. Session

#### Hollie Yoder

Post-Master's Doctor of Nursing Practice

Hypertension Management in Primary Care Using Target: BP Meeting Patient Goals and Quality Measures

Hypertensive disease is a global problem impacting millions of individuals aged 18 years and above. Uncontrolled hypertension management can lead to significant complications and death. Primary care providers are challenged to improve patient outcomes in patients with hypertensive disease while complying with clinical quality measures for high blood pressure as outlined by the Center for Medicare and Medicaid Services Merit-based Incentive Payment System (MIP) performance measures. The purpose of this project was to improve high blood pressure in patients diagnosed with primary hypertension utilizing the American Heart Association (AHA) and the American Medical Association (AMA) Target: Blood Pressure (BP) program in conjunction with telemedicine. Telemedicine offered a patient/provider connection to address this global problem and engage in patient education and follow up. The AHA/AMA Target BP program provided a backdrop for patient education, guidance, and standardized tools for primary care providers to improve patient outcomes and (MIP) performance measures as well as the system levels Best in Class Goals for hypertension management. Since project implementation, the overall average improvement in hypertension management comparatively from 2020 to 2021 was 2.8% with improved internal quality reporting Best in Class scores from 1.19 to 1.52 through SMBP and telemedicine visits. By implementing SMBP with the use of telemedicine, providers can improve hypertension management, thus improving patient care and quality measures outlined by the Center for Medicare and Medicaid's Shared Savings Program.

Southern Illinois University Edwardsville April 29, 2022 1:00 p.m. Session

Jordan Swanberg

Doctor of Nursing Practice Nurse Anesthesia Specialization

#### Perioperative Tube Feeding Guidelines for the Pediatric Burn Patient

Pediatric burn patients require an astronomical amount of nutritional support to promote wound healing and prevent unwanted side effects. These patients often require multiple surgeries, and consequently, when following standard NPO guidelines, these patients go for hours without any nutritional support. For this reason, a protocol was implemented on how to administer tube feedings throughout the perioperative process safely. The purpose of this project was to give a PowerPoint presentation to the providers that tested their current knowledge on how to manage tube feedings in the operative setting best. A single group design consisting of CRNA's and an anesthesiologist was given an evidence-based protocol on managing perioperative tube feedings for this patient population. The results of the post-presentation survey concluded that the providers gained new knowledge on how to manage tube feedings in the perioperative setting best and were willing to implement the protocol if hospital policy allowed them. A limitation was getting the cooperation of each department head to go along with the protocol. In conclusion, if the protocol can get the support of each medical team, it can then be implemented in an actual surgical case. From there, its effectiveness can be evaluated for improved patient outcomes.

Southern Illinois University Edwardsville April 29, 2022 1:00 p.m. Session

#### **Katherine Pozzo**

Doctor of Nursing Practice Nurse Anesthesia Specialization

#### Neuraxial Anesthesia for Total Joint Arthroplasty

Total joint arthroplasty is one of the most common surgical procedures performed in the United States. Exponential growth is expected due to our aging patient population, the obesity epidemic, and continued improvements in technique. General anesthesia for these procedures has been associated with increased postoperative complications, including enhanced risk for deep vein thrombosis, blood loss, and postoperative nausea and vomiting. In direct comparison, neuraxial anesthesia has demonstrated superior outcomes, including reduced blood loss, DVT and PONV risk, as well as a reduced need for postoperative opioid consumption due to enhanced pain control. The main objective of this project was an improvement in postoperative pain scores and implementation of best practice guidelines regarding total joint arthroplasty. Following a retrospective chart review, a change process towards utilization of neuraxial anesthesia as the main anesthetic modality for total joint arthroplasty was implemented. A prospective chart review was then conducted to compare and contrast anesthetic modalities and outcome measures. Final statistically analyzed data was then presented in PowerPoint form to all available anesthesia and surgical staff. A completion survey was conducted to validate the efficacy of the change process. Principally, this project demonstrated superior results concerning reduced postoperative pain scores when neuraxial anesthesia was provided for total joint arthroplasty procedures.

## Southern Illinois University Edwardsville April 29, 2022 1:00 p.m. Session

Kristin Wolff
Sadie Spilker
Doctor of Nursing Practice
Nurse Anesthesia Specialization

Development and Evaluation of Enhanced Recovery After Surgery Protocols for General Abdominal and Orthopedic Surgery with Focus on Preoperative Hydration and Multimodal Management in Preoperative and Postoperative Phases

Enhanced Recovery After Surgery (ERAS) is described as an evidence-based, patient-centered, interdisciplinary team developed protocol utilized to decrease the patient's stress response to surgery, maintain preoperative physiologic function, and expedite recovery (American Association of Nurse Anesthetists [AANA], 2017). Existing evidence displayed the benefits of utilizing ERAS protocols in various surgical procedures, including general and orthopedic cases. Studies showed one must employ the preoperative, intraoperative, and postoperative components of the ERAS protocols to achieve maximum benefits. A critical access hospital in Illinois utilized some components of ERAS protocols, mainly the intraoperative portions, but lacked the full utilization. Goals of the review included obtaining current evidence-based practices regarding preoperative hydration and multimodal analgesic management for general abdominal surgery and orthopedic surgery. A voiceover PowerPoint and protocol summarizing fluid management and multimodal analgesic management findings and implications for practice was emailed to the designated providers. Once providers viewed the information, the providers evaluated via an anonymous survey. The goal of improving the knowledge of the healthcare providers regarding these topics was proven successful via the post-implementation survey. The evidence displayed the tremendous impact ERAS protocols can have on practice.

## Southern Illinois University Edwardsville April 29, 2022 1:00 p.m. Session

Paige Dickey
Melissa Gerlach
Doctor of Nursing Practice
Nurse Anesthesia Specialization

The Effectiveness of Using the Anatomage Table as a Learning Adjunct to Peripheral Nerve Blocks Among Student Registered Nurse Anesthetists

In anesthesia programs across the country, learning advanced level human anatomy and physiology concepts provides a large foundation for which skills used in clinical application are learned. Student registered nurse anesthetists (SRNAs) are clinically trained to perform a variety of invasive procedures in practice including peripheral nerve blocks (PNBs). This project aimed to implement a supplemental, hands-on learning activity to improve overall PNB education, ultimately improving patient care and safety. A series of guided lessons were created to help the students walk through the anatomy of PNBs utilizing the Anatomage table (AT). SRNAs attended a workshop where they went through these lessons and then applied their knowledge to ultrasound images. An anonymous survey was given to students prior to and after the workshop to assess their confidence with the blocks. The pre-survey revealed that only 24.1% of students were confident in completing a PNB with guidance. Student confidence rose to 82.8% after attending the AT workshop. Incorporating the AT in an ultrasound guided PNB lab improved knowledge of the anatomy associated with each block. Having resources, such as these, available to SRNAs will lead to the production of strong nurse anesthesiologists, proficient in regional anesthesia.

# Southern Illinois University Edwardsville April 29, 2022 1:00 p.m. Session

Harry Senaldi

Doctor of Nursing Practice Nurse Anesthesia Specialization

The Use of Point of Care Ultrasound to Assess Gastric Contents and Determine Aspiration Risk in the Obese Patient Presenting for Elective Surgery

Pulmonary aspiration of gastric content is a potentially injurious and fatal complication of anesthesia. Obese patients with a BMI ≥ 35 presenting for elective surgery are at an increased risk of aspiration due to increased gastric pressure, delayed gastric emptying, and higher gastric volumes. Point of care ultrasound (POCUS) is a tool that allows the nurse anesthetist to assess gastric content and assign aspiration risk based on the scan results. A knowledge improvement project in the form of a lecture and hands-on tutorial focused on using POCUS to assess gastric content and assign aspiration risk was designed. This project was implemented for the anesthesia providers at a community hospital in central Illinois. Four pre and post-test surveys were collected which demonstrated an improvement in knowledge and a high willingness to utilize the tool in the future. All anesthesia providers agreed upon the value that POCUS brings to preoperative assessment of gastric content and determination of aspiration risk, and that this tool could be used in other patient populations including those with chronic kidney disease and diabetes mellitus.

# Southern Illinois University Edwardsville April 29, 2022 1:00 p.m. Session

Lynexis P. McVey
Ashley Shulman
Doctor of Nursing Practice
Nurse Anesthesia Specialization

### Development of a Protocol to Manage Postdural Puncture Headache

In obstetric laboring patients, neuraxial anesthesia is a common form of analgesia. However, neuraxial procedures are not without risk. Accidental dural puncture (ADP) is a potential risk with any epidural procedure. Patients who experience ADP are at a greater risk of developing postdural puncture headache (PDPH). The presentation of PDPH is commonly described as a dull, throbbing, headache worsening upon standing and relieved with supine positioning (Patel et al., 2020). Symptoms of PDPH may range from mild to debilitating and develop within five days of ADP. A variety of treatment options exist for PDPH ranging from conservative to invasive. The purpose of this project was to introduce a standardized evidence-based treatment protocol for patients suffering from PDPH. A comprehensive review of the literature revealed the most recent evidence on contributing factors, prevention, and treatment of PDPH. The project study design utilized a non-experimental pre and post-evaluation method completed by nine anesthesia providers. The post-evaluation was collected following the educational PowerPoint presentation to analyze knowledge gained. Overall participants improved their rates of correct responses. Thus, implementation of the PDPH algorithm was directed at improving patient outcomes and enhancing provider knowledge.

Southern Illinois University Edwardsville April 29, 2022 1:00 p.m. Session

### **Andrew Screnchuk**

Doctor of Nursing Practice Nurse Anesthesia Specialization

### Difficult Labor Epidural: Intrathecal Catheter Management

Labor epidural analgesia is the most common method used to control pain associated with labor and vaginal delivery in the United States. However, the epidural catheter placement can cause accidental dural puncture in about 1 to 6% of laboring patients. Initiation of continuous intrathecal analgesia provides a good alternative to another attempt of epidural placement in certain types of the laboring population. While other countries have published referral guidelines of managing accidental dural puncture, the United States lacks such practice standards. The application of Accidental Dural Puncture Management with Intrathecal Catheter (ADPMIC) guidelines, used in other countries for difficult epidural placement in parturients, have offered effective and safe analgesia and anesthesia with fewer complications, and better patient outcomes. The anesthesia providers at the host institution had limited understanding of continuous intrathecal catheter's benefits and uses. The purpose of this project was to educate anesthesia providers on ADPMIC principles and introduce a management protocol for laboring patients customized to host facility resources. An educational PowerPoint presentation was used to lecture on the ADPMIC principles and introduce the evidence-based protocol. A postpresentation survey was used to assess protocol understanding and willingness towards implementation. Survey results verified providers improved comprehension of the ADPMIC principles and wiliness to implement the protocol into their practice. The immediate impact of the project was the adoption of the standardized reference tool when anesthesia providers encounter difficult epidural placement in labor.

# Southern Illinois University Edwardsville April 29, 2022 1:00 p.m. Session

**Kwame Adu-Affum** 

Doctor of Nursing Practice Nurse Anesthesia Specialization

### Introduction of Enhanced Recovery After Cesarean Section (ERAC) Protocol

Cesarean section is one of the most performed in-patient surgeries worldwide (Wilson et al., 2018; Liu et al., 2020). Births by cesarean section have been increasing globally. Cesarean birth rate has remained above 31% in the United States, even with the consistent two percent decrease in birth rate per year (Martin et al., 2019). Illinois has also maintained a high cesarean birth rate above 30% (Hamilton et al., 2021). Cesarean patients experience inflammatory and neurohormonal changes with many adverse effects in direct response to surgical stress (Mullman et al., 2020). The post-cesarean physiological effects, including pain, reduced gastric motility, pulmonary complications, delayed ambulation, prolonged hospitalization, delayed mother-baby bonding, and fatigue, directly impact maternal health, and indirectly affect the neonates (Gramlich et al., 2017). Improved anesthesia care can mitigate against the physiological stressors of cesarean surgery to promote rapid surgical recovery, improved safety, and patient satisfaction. The Society of Obstetric Anesthesia and Perinatology adopted ERAC in 2019 to provide standardized, evidence-based, multidisciplinary care to cesarean patients (SOAP, 2019). The objectives of ERAC can be achieved by adopting, implementing, and complying with the developed ERAC protocol by healthcare providers, specifically anesthesia providers, in the community hospital.

# Southern Illinois University Edwardsville April 29, 2022 1:00 p.m. Session

Adam Bruinius
James Clancy
Doctor of Nursing Practice
Nurse Anesthesia Specialization

Identifying Facilitators and Barriers for a Successful Student Registered Nurse Anesthetist's Clinical Experience

Student registered nurse anesthetists experience a wide variety of barriers and facilitators to their clinical education; often rotating through several clinical sites during their nurse anesthesia educational program (NAEP) tenure. Existing evidence suggests SRNAs must be proficient in seeking, accepting, and utilizing feedback from clinical preceptors (Algiraigri, 2014). Accepting constructive criticism may be challenging for SRNAs as they are highly skilled, competent nurses who are now entering rigorous NAEPs as novices. Reverting from preceptor to preceptee can be a difficult transition for SRNAs. This project aimed to identify barriers and facilitators to a successful SRNA clinical education through a literature review and survey data obtained from SRNAs across the United States. The literature review and survey results revealed a need for continuing education on adult learning theory and improved communication skills in the clinical realm.

Southern Illinois University Edwardsville April 29, 2022 1:00 p.m. Session

Sarah Tobias
Addison Hohner
Doctor of Nursing Practice
Nurse Anesthesia Specialization

### Intrathecal and Epidural Dexmedetomidine for Obstetric Patients

The use of dexmedetomidine in spinals and epidurals can be beneficial for obstetric patients. The combination of dexmedetomidine with local anesthetics for neuraxial anesthesia potentiates the effect of the blockade while eliminating the undesirable side effects associated with opioid administration. This project used a non-experimental, pre-test/post-test design to assess key stakeholders' current use and intended future use of dexmedetomidine in neuraxial anesthesia for obstetrical patients. The goal of this project was to review current evidence-based literature regarding the use of dexmedetomidine as a neuraxial adjunct for obstetric anesthesia. The aim of this project was to summarize the results of the literature review into a PowerPoint presentation for a group of anesthesia providers at a tertiary medical center in central Illinois. Knowledge of the risks and benefits of dexmedetomidine and willingness to use dexmedetomidine as an adjunct were assessed via anonymous pre- and post-presentation surveys. Evidence via the post-presentation survey demonstrated an increase in provider understanding of the risks and benefits of dexmedetomidine as a neuraxial adjunct, as well as optimal dosing for spinal and epidural anesthesia in the obstetrical population.

# Southern Illinois University Edwardsville April 29, 2022 2:30 p.m. Session

Brent Hitchens Darrell Risinger

Doctor of Nursing Practice Nurse Anesthesia Specialization

The Development of an Evidenced-Based Guideline for the Anesthetic Management of Surgical Cases Utilizing Evoked Potential Monitoring

Intraoperative neuromonitoring is used to alert the surgeon, anesthesia provider, and neuromonitoring technician of changes before permanent nerve injury occurs. There are many factors that can affect neuromonitoring quality including hypothermia, hypotension, positioning, anemia, and anesthesia medications. Anesthetic medications can have a profound inhibitory effect on the nervous system, leading to decreased amplitude and prolonged latency of evoked potentials (EP) signals. Anesthesia negatively affects neuromonitoring and the ability to measure EP signals that can alert the surgeon of potential injury. Total intravenous anesthesia (TIVA) is a type of general anesthesia that utilizes only intravenous medications administered by infusion or bolus. This anesthesia technique can provide safe and optimal conditions for effective EP signal monitoring. Despite the use of TIVA for EP monitoring surgical cases, significant variance in this technique existed among anesthesia providers at a tertiary care center in central Illinois. A guideline was implemented at the host facility focusing on best practice recommendations in anesthesia management for surgical cases requiring EP monitoring. The guideline was implemented via a PowerPoint presentation along with a post-implementation survey. Results indicated provider acceptance of the TIVA guideline for EP cases and demonstrated that the presentation and guideline were effective tools that could aid in the facility's ability to administer optimal anesthesia. The continued use of the guideline has the potential to improve patient safety, ensure reliable results, and optimize outcomes in patients undergoing EP surgical procedures.

Southern Illinois University Edwardsville April 29, 2022 2:30 p.m. Session

Jennifer Ashton
Katherine Rosner
Doctor of Nursing Practice
Nurse Anesthesia Specialization

### Pediatric Distraction Methods for the Perioperative Period

Most pediatric patients will experience anxiety to some degree during the perioperative period. Unrecognized and untreated anxiety can lead to complications during the induction of anesthesia and may manifest as maladaptive behaviors that can last up to 6 months postoperatively. Multiple modalities are typically utilized to provide the greatest amount of anxiety relief with minimal side effects. Nonpharmacological methods of distraction have been proven effective when used in combination with pharmacological agents, as well as when used alone. The goal of this project was to create and present an educational resource tool regarding pharmacological and nonpharmacological distraction methods for pediatric patients during the perioperative period. Following a brief educational presentation, participants were asked to complete an anonymous and voluntary 10-question survey to evaluate the value and efficacy of the resource tool. Overall, participants expressed an increase in knowledge and preparation in caring for pediatric patients after the presentation. Approximately one-third of the participants were not aware of the negative effects of untreated anxiety, further demonstrating a need for education on this topic. Increasing staff education at the host facility, as well as providing a variety of recommendations for distraction techniques, will better equip anesthesia providers to tailor distraction interventions to individual patient needs, resulting in a more pleasant operative experience for the entire family unit.

# Southern Illinois University Edwardsville April 29, 2022 2:30 p.m. Session

James Canny
Nathan Carroll
Doctor of Nursing Practice
Nurse Anesthesia Specialization

# Development of Evidence-Based Rubrics and Instructional Videos for Anesthesia Induction Sequences

Safe and effective induction of anesthesia is a vital component of any anesthesia provider's skill set. Although both typical sequence and rapid sequence induction are common procedures, much variance in technique exists among providers. Clear, standardized rubrics are an important element in teaching these skills. The purpose of this project was to update the typical and rapid sequence induction rubrics for the Southern Illinois University-Edwardsville Nurse Anesthesia Program with the current best practice recommendations. To utilize and reinforce observational learning, instructional videos were also created to accompany the updated rubrics. These materials were presented to the student registered nurse anesthetists (SRNAs) in the course NURS 529 - Orientation to Nurse Anesthesia Practicum prior to beginning clinical rotations. The SRNAs completed a 20-question pretest and viewed the rubrics and instructional videos. One week later, the SRNAs completed an identical posttest and overall evaluation of the educational experience. Results showed that scores improved between the pretest and posttest (78% and 89%) respectively) indicating a potential gain in knowledge and skills. Survey results indicated overall buy in and acceptance of the new materials by the SRNAs. These results highlight the importance of multimodal learning in mastering critical, high-level skills such as induction of anesthesia.

# Southern Illinois University Edwardsville April 29, 2022 2:30 p.m. Session

Nick Nguyen

Doctor of Nursing Practice Nurse Anesthesia Specialization

### Computer-Based Learning Module: Local Anesthetic Systemic Toxicity

Local anesthetic systemic toxicity (LAST) is the result of rapid absorption of local anesthetics (LAs) into the systemic circulation resulting in toxic plasma levels of the drugs. With the advent of ultrasound-guided regional anesthesia and improvements in injection techniques, the incidence of LAST has decreased significantly over the years. Even though LAST is rare, it is a potential, life-threatening complication associated with any administration of LAs. Providers and staff members taking care of patients receiving LAs should be astutely aware of potential complications so that LAST signs and symptoms can be recognized, and treatments can be implemented as swiftly as possible. The project aimed to develop and implement a computerbased learning module about LAST and its management. The module was disseminated via HealthStream, a web-based learning management system, to RNs, CRNAs, and Physician Anesthesiologists at a tertiary care center in central Illinois. The project was based on a nonexperimental pretest-posttest single group design to assess participants' knowledge before and after implementation of the CBL module. The module was completed by 116 participants, and results were evaluated. The average pretest score was 55%; the average of the posttest was 87% with an average of 1.3 attempts, which was 32% higher compared to the pretest. This project identified knowledge deficits regarding LAST and emphasized the necessity for further education on LAST. Thus, this project supported the use of a CBL module as a means to educate providers and staff members and will help promote awareness, vigilance, and readiness among healthcare providers; and patient safety.

Southern Illinois University Edwardsville April 29, 2022 2:30 p.m. Session

Kourtney Chapman Mia Rhodes Jordan Smith Doctor of Nursing Practice Nurse Practitioner Specialization

### Exploring the Use of Telehealth in a School -Based Health Center

The benefits of remote telehealth assessment kits and their use in school-based settings were explored in this Quality Improvement project. The primary goal was to examine rural schoolbased settings and explore options to fulfill healthcare care gaps. A secondary objective was to explore telehealth systems and identify one that provided thorough diagnostic evaluation abilities. A tertiary objective was to educate potential users of the identified system and assess the perceived ease of use and practicality. A cohort of 58 doctoral candidates and 11 staff members from a local school district were educated on the advantages of using telehealth and received a demonstration of TytoCare's medical exam kit. In the pre-survey, only five (7.25%) respondents reported being very familiar with the process of telehealth. However, 53 (76.81%) reported being very or somewhat familiar of the benefits of telehealth. After the interactive demonstration, the post-survey revealed 53 (91.38%) participants felt comfortable using telehealth in their future practice. Furthermore, 56 (96.55%) participants felt confident they could use the demonstrated skills in future practice. The use of telehealth may be a viable option to meet healthcare gaps in rural settings. However, the adoption of these practices would require support from healthcare providers and their respective clinics. An option for project continuation would be to perform a cost-analysis of the difference between using these telehealth systems versus implementing an in-person clinic. Additionally, a future project could implement this system in an underserved area to identify the advantages and disadvantages of use in practice.

Southern Illinois University Edwardsville April 29, 2022 2:30 p.m. Session

Emma Hanney
Kaitlin Springer
Doctor of Nursing Practice
Nurse Practitioner Specialization

### Improving Depression Surveillance at the We Care Clinic

Depression is one of the most underdiagnosed and untreated disorders. Unmanaged depression can lead to emotional suffering, decreased productivity, reduced income, impaired relationships, and an increased risk for comorbidities (Sinisalchi et al., 2020). It can affect anyone, however, individuals who are non-white, female, undereducated, disabled, pregnant or postpartum, have low socioeconomic status, or lack social support are at an increased risk (United States Preventative Services Task Force, 2019). The Southern Illinois University Edwardsville We Care Clinic provides primary care to minority patient populations who are uninsured and have chronic comorbid health conditions. Despite providing care to a high-risk population for depression, the clinic did not have a standardized process to screen patients; therefore, an evidence-based quality improvement project was developed to address this inconsistency in care. The project's goals were to develop a depression screening protocol for adult patients, improve staff knowledge of depression screening, and increase depression surveillance. Methods utilized included staff education, pre-and post-implementation staff surveys, and patient screenings. Results demonstrated an overall increase in the number of depression screenings conducted, improved staff confidence in administering depression screenings, and staff recognition of the protocol as a useful tool in clarifying when to screen patients. Continued use of the depression screening protocol has the potential to identify patients with depression and improve patient outcomes.

## Southern Illinois University Edwardsville April 29, 2022 2:30 p.m. Session

Alexandra Evans
Alexandria Molaro
Alex Niebrugge
Doctor of Nursing Practice
Nurse Practitioner Specialization

### Creating a Guideline for STI Testing in the Pediatric Population

Sexually transmitted infection (STI) prevention, education, screening, and management in pediatric primary care settings are of importance due to increasing number of cases yearly. Almost half of the 26 million new STIs that occurred in 2018 were among young people 15-24. An opportunity existed in a rural pediatric primary clinic, for improved adherence to Centers for Disease Control and Prevention (CDC) or American Academy of Pediatrics (AAP) recommendations to screen/test patients. An evidence-based project (EBP) was developed to address this concern. Project objectives included: developing STI screening guidelines for preteen to young adults, developing a screening algorithm, providing alternative testing options, improving provider knowledge on STI testing/treatment, and increasing STI surveillance. A STI screening/testing guideline was developed/implemented in this facility. Project methods included a pre-and post-implementation survey, PowerPoint presentation, and data collection. In June-August 2020, two patients were tested for STIs based on symptom presentation. Since STI guideline implementation, 40 patients were screened in July 2021-September 2021, with 7 patients tested via CDC guidelines. The post-evaluation survey showed significant improvement in overall confidence/knowledge the providers/staff felt regarding STI screening/testing. Outcomes of this project included a 250% increase of STI testing, improvement in provider/staff knowledge of STI screening, and increased staff comfort with STI conversations. We encourage pediatric providers to implement STI screening protocols in their practice as screening can lead to earlier detection/diagnosis of STIs.

# Southern Illinois University Edwardsville April 29, 2022 2:30 p.m. Session

Kelsey Beard Morgan Lippert Doctor of Nursing Practice Nurse Practitioner Specialization

### Increasing Obesity Education in the Underserved and Latino Population

Obesity is a rapidly growing health problem in the United States. Certain populations are at high risk for developing obesity including the Latino population and underserved communities. This Quality Improvement project aimed to develop a more patient centered approach for primary care providers use to deliver obesity education to an at-risk Latino population. The project was completed at a clinic in southern Illinois where the majority of the population is underserved and Spanish speaking. Obesity education tools in both Spanish and English were given to the patients in order to decrease the language barrier and improve patient education and understanding about obesity. Nineteen patients were eligible and participated in the quality improvement project based on BMI. Each completed a survey before and after they were provided with the education tools. Results of the project showed that 52.5% of the participants marked the tool as very useful, and 47.4% marked somewhat useful. No participants marked the tool as not useful. All of the participants reported an increase in obesity knowledge.

# Southern Illinois University Edwardsville April 29, 2022 2:30 p.m. Session

### Michele Hartke

Doctor of Nursing Practice Psychiatric Mental Health Nurse Practitioner Specialization

### Implementation of Childhood Trauma Questionnaire in a Primary Care Setting

Background Childhood abuse, neglect and unusual stressful or traumatic conditions are common pediatric issues, with most Americans having experienced one kind of these adverse childhood experience (ACE) resulting in mental and physical issues in adulthood (Centers for Disease Control, 2010). Implementing a routine screening for patients will assist in identifying health concerns and can improve outcomes for the patient. Aim The aim of this project was to implement the use of a brief screening tool in a primary care medical office setting to assess for traumatic childhood experiences that have impact on a patient's current morbidities. Theoretical Framework This quality improvement project was guided by the Biopsychosocial Model. The model demonstrates the complex interplay of the three major dimensions (biological, psychological, and social) in the development of psychiatric disorders. Methods The Childhood Trauma Questionnaire (CTQ) was administered to all patients seen at a rural central Illinois clinic. The office staff completed a brief questionnaire at the end of the initial implementation period. A 5-point Likert scale was used to evaluate the findings from the project. Results Implementation of the CTQ screening tool in primary practice demonstrated that a screening process could be successfully implemented. Participants agreed that the CTQ was easy to understand and administer and a feasible screening tool to use in practice. Conclusions Implementing the CTQ was considered feasible and quick to administer at no cost to the facility. Further research should include replicating this QI project to a larger scale to validate findings from this study.

## Illinois and Indiana Nurse Anesthetists Virtual Conference May 15, 2021

### **Emily Lester**

Doctor of Nursing Practice Nurse Anesthesia Specialization

### Best Practice in the Perioperative Anesthetic Management of Infants with Gastroschisis

Gastroschisis, a severe abdominal wall defect, occurs in approximately 1 in every 2,000 fetuses. Despite care advancements, gastroschisis is associated with significant morbidity and mortality including prolonged time to tolerance of enteral feeds, prolonged ventilator support, and increased intensive care unit length of stay and hospital costs. A recent practice change in the care of infants with gastroschisis at a tertiary care facility in central Illinois lead to the request for an integrative review of the available literature and subsequent development of a comprehensive guideline discussing best-practice perioperative recommendations pertinent to the care of infants with gastroschisis. Through review of the available literature and development of a comprehensive guideline, this project aimed to facilitate the delivery of standardized, evidencebased care to infants with gastroschisis in the perioperative setting, potentially reducing the associated morbidity and mortality. An educationall PowerPoint and comprehensive guideline were presented to the anesthesia providers at the project host facility, followed by a short survey. Results of the post-implementation survey were positive and revealed an increase in provider knowledge and overall approval and acceptance of the guideline. With the continued use of the knowledge and comprehensive guideline presented in this project, the potential to improve patient outcomes exists.

# DNP POSTER PRESENTATION Southern Illinois University Edwardsville Sigma Theta Tau International

**Epsilon Eta Chapter November 16, 2021** 

### **Ashley Wittler**

Post-Master's Doctor of Nursing Practice

# Improving Access to Reproductive Life Planning Following Implementation of One Key Question® in Practice

Inadequate reproductive life planning education is a widespread problem for women in the United States. This lack of attention has significant consequences and leaves women without necessary guidance on many topics, including contraceptive choices and the importance of preconception health. Nearly 50 percent of women in the United States rely on less-effective birth control or use none at all. Unfortunately, these statistics have resulted in around 80 million unintended pregnancies each year worldwide. The effect of this absence in patient education has been linked to increased incidence of short-interval pregnancies, maternal morbidity, fetal morbidity, and child abuse and neglect. The goal of this quality improvement project was to initiate the use of an evidence-based reproductive life planning tool, known as One Key Question®. This tool provides a simple yet effective, way to open the conversation of reproductive planning and educate the patient on maximizing health prior to starting a family. This project sought feedback from the staff involved with the implementation. The results overwhelmingly supported the ease of use and saw the majority supporting the desire for continued use in practice. Over 75 percent of staff members felt that using One Key Question® in practice positively impacted patient interactions. The use of this educational tool introduces the discussion of family planning goals in an unbiased and positive way that patients readily accept. Long-term use would enable providers to incorporate evidence-based practice concepts into patient care. Overtime implementation of One Key Question® has the potential to positively impact the incidence of unintended pregnancy.

# DNP POSTER PRESENTATION Southern Illinois University Edwardsville Sigma Theta Tau International Epsilon Eta Chapter November 16, 2021

### **Nicholas Collier**

Post-Master's Doctor of Nursing Practice

# Development and Implementation of an Enhanced Recovery After Surgery Protocol for Thoracic Surgery

A high prevalence of lung and esophageal cancers leads to significant healthcare dollars utilized for treatment and management. Surgical resection is regarded as a key component for multidisciplinary treatment and management of these cancers. By standardizing multidisciplinary patient care and utilizing evidence-based practice, Enhanced Recovery After Surgery (ERAS) protocols for thoracic surgery have offered better outcomes with fewer complications and quicker return to baseline activity at reduced healthcare costs. A review of the literature was presented to key stakeholders. Through multidisciplinary collaboration, a thoracic ERAS protocol was developed at a tertiary care center. The anesthesia providers at the host facility were deficient in basic knowledge related to ERAS protocols and best practice management of thoracic surgery patients. An educational presentation was delivered utilizing Powerpoint to introduce ERAS principles and a standardized thoracic ERAS protocol. A post education survey demonstrated an enhanced understanding of ERAS principles and a high anesthesia provider intent to implement the protocol into their practice. Results of the project confirmed all respondents had a better understanding of ERAS principles and goals after the PowerPoint presentation. Limitations of this project are selection bias through volunteer participation and lack of generalizability with the protocol being customized to host facility needs and resources.

# Southern Illinois University Edwardsville Sigma Theta Tau International Epsilon Eta Chapter November 16, 2021

### Erin O'Neal

Post-Master's Doctor of Nursing Practice

### Discharge Process Optimization

As the demands of the nurse become increased with higher acuity and documentation requirements, the delivery of discharge instructions is often one of the most, and at times, only, formal education opportunities between the nurse and the patient. Purpose It is imperative to modify the discharge process to ensure patients have the ability to confidently care for themselves after they leave the hospital. The aim of this project was to create a nursing discharge workflow that meets the educational needs of the patients. Methods This project was a quality improvement project designed to change the nursing workflow to provide a better discharge process for patients. Staff were educated on the process by creating an interactive module. Results The conclusion was that the discharge process workflow was effective in increasing patient satisfaction scores related to the discharge process, however ineffective in increasing overall patient satisfaction scores for the organization. Limitations The two main limitations were related to the data collected and the impact on nursing staff. The NRC patient satisfaction data is not specific to discharge process. Additionally, the COVID-19 pandemic created challenges for healthcare workers nation-wide during the timeframe this project was implemented. Conclusions/Implications for Practice It is important for healthcare to keep adapting to create a discharge process that engages patients and allows them a better understanding of their plan of care. The results suggest that implementing a standard discharge process may increase aspects of patient satisfaction, however will likely not drive overall satisfaction of the organization.

# Southern Illinois University Edwardsville Sigma Theta Tau International Epsilon Eta Chapter November 16, 2021

**Andrew Tharp**Post-Master's Doctor of Nursing Practice

Implementation of a Risk Assessment Tool to Increase Screening for Extragenital Gonorrhea and Chlamydia in Men Who Have Sex with Men

INTRODUCTION: Gonorrhea and chlamydia account for the majority of sexually transmitted infections (STIs) in the United States and are often thought to infect only the urogenital tract. Infections can also be harbored at extragenital sites (rectum and oropharynx), and these infections can increase susceptibility to HIV. Extragenital screening recommendations exist for populations deemed high risk, including men who have sex with men (MSM); yet, routine screening is not consistently completed. PURPOSE: To improve screening rates for extragenital gonorrhea and chlamydia in MSM within a primary care setting by using an STI risk assessment tool. METHODS: Clinicians completed a baseline knowledge survey. Clinicians were then provided education on extragenital STI infections and how to use the risk assessment tool. The risk assessment tool was given to eligible patients during preventative and STI screening office visits. Clinicians completed a follow-up questionnaire seven weeks after the risk assessment tool was implemented. RESULTS: Clinicians reported improved knowledge base with extragenital STIs and felt more comfortable screening patients when appropriate. Clinicians reported being more likely to offer extragenital screenings using the risk assessment tool. LIMITATIONS: Limitations included the number of clinicians participating as well as a narrow population focus. This limited the ability to evaluate the risk assessment tool for effectiveness. IMPLICATIONS FOR PRACTICE: Clinicians are better equipped to consistently offer extragenital STI screening to patients when appropriate. On a larger scale, this process may reduce susceptibility to HIV and create opportunities to discuss and offer HIV prevention options such as pre-exposure prophylaxis (PrEP).

# Southern Illinois University Edwardsville Sigma Theta Tau International Epsilon Eta Chapter November 16, 2021

### **Bethany Huelskoetter**

Post-Master's Doctor of Nursing Practice

### Increasing Low-Dose CT Screening in Primary Care

Lung cancer was ranked as the second most common cancer diagnosed in 2020 and had the highest death rate compared to all other cancers, excluding nonmelanoma skin cancers (ACS). Early detection is key in decreasing the mortality of lung cancer. A low dose CT (LDCT) is a yearly screening tool developed to detect lung cancer early in high-risk patients yet is much underutilized in primary care. The purpose of this project is to increase the number of LDCT orders placed for qualified patients to decrease the lung cancer mortality rate. There were two main methods for this project: education and mailed fliers. Provider education was increased with lunch and learn CME sessions and initiation of two new screening tools in the primary care offices. A flier was initiated to be mailed to be patients who may qualify for an LDCT. The project was 5 months long with a total of 157 LDCT ordered and performed by the targeted organization, a 65% increase in orders over baseline. Due to unexpected barriers and limitations of the mailed flier, it was unable to be sent out. The data for mailing took 60+ days to obtain via data analysts which was not enough time to get approval from marketing to mail fliers. This project was conducted on a smaller scale in one county, future replications can easily be implemented in a larger and more diverse primary care setting to reach more patients.

# Southern Illinois University Edwardsville Sigma Theta Tau International Epsilon Eta Chapter November 16, 2021

### **Amanda Whistler**

Post-Master's Doctor of Nursing Practice

### Diabetic Education in a Uninsured Patient Population

Patient education is an important factor in the management of Type 2 Diabetes. Successful outcomes can be causally related to proper patient education. Many times, patients are left with more questions than answers about their newly diagnosed condition. Some groups of patients are affected by prediabetes and diabetes more than other groups. Differences in health status or access to health care among racial, ethnic, geographic, and socioeconomic groups are referred to as health disparities. This is a major concern in the United States for health care providers. A spreadsheet was used to record the blood glucose levels of each patient weekly. An A1c was recorded during the first office visit and then an ending A1c was recorded after 91 days. These levels are used to evaluate the effectiveness of the education provided. Patient education was provided via Power Point presentation. Demographic and financial barriers provided a huge barrier to patient education. There were some patients who were unable to afford most Diabetic monitoring supplies. This caused several patients to decline participation in the project. Of the twenty patients, the average beginning A1c was 10.7 and average ending A1c of 8.6. In conclusion, there was a 2.1 reduction in A1c readings. This project has shown that proper patient education in the uninsured patient population can lead to a reduction in the A1c, thus preventing any future complications of Diabetes.

# DNP POSTER PRESENTATION Southern Illinois University Edwardsville Sigma Theta Tau International Epsilon Eta Chapter November 16, 2021

### Nicolas Yemm

Post-Master's Doctor of Nursing Practice

### Utilization of Telephone Outreach and Telemedicine to Improve Diabetic Outcomes

Diabetic adherence is paramount to achieving adequate glycemic control. Telephone outreach and utilization of telemedicine can improve diabetic adherence through closer monitoring and removing barriers to access for care. The goal of the project was to improve the dashboard HbA1c quality metric within the IM office. The office dashboard HbA1c metric initially was in the "red threshold", which means <70% of patients aged 18-75 years old with diabetes had a HbA1c <8%. This project involved performing telephone outreach to contact diabetic patients who were due for office follow-up in order to offer telemedicine as a convenient option for patient evaluation. In addition, the secondary goals of the project included identifying social determinants presenting barriers to diabetic care plan adherence. The results indicated telephone outreach and supplementing office visits with telemedicine may help achieve better glycemic control in diabetic patients. This project demonstrated improvement in the HbA1c dashboard metric in the IM office to the "yellow threshold", indicating 71% of patients (18-75 years old) in the office with diabetes had a HbA1c <8%. Several limitations were identified, including a short implementation window (6 weeks), lack of ability to assess whether providers were instituting project recommendations, staff engagement, and internet bandwidth/technology literacy issues when using telemedicine. From a long-term implementation perspective, the project showed telephone outreach and telemedicine are useful tools that can positively impact poorly controlled diabetic patients to improve glycemic control. However, the limitations of the project will likely need to be addressed to achieve long-term implementation of the project methods.

# Southern Illinois University Edwardsville Sigma Theta Tau International Epsilon Eta Chapter November 16, 2021

### Jennifer Knight

Post-Master's Doctor of Nursing Practice

### In-Patient Observation Safety Assistant Practices

Introduction. Sitter usage is a patient safety practice used across healthcare organizations and the world. Sitters go by many other names, such as patient safety assistants, patient care assistants, care partners, and observation partners. There is literature that supports different variations of practices in healthcare facilities. A scoping review of the literature revealed multiple initiatives to reduce sitter cost and observation through nurse empowerment. Purpose of Root Cause Analysis. The purpose of this root cause analysis is to determine why personnel inconsistently use the sitter policy. The appraised data will be used to improve the sitter process at this agency. Conceptual Model or Theory. Joanne Duffy's Quality Caring Model guides this root cause analysis and professional practices. This theory will simultaneously recommend nursing interventions and better understand the patient sitter process through collaboration and interactive relationships. Methods. Email sent to registered nurses with QR code link to participate in an online survey questionnaire with a maximum of 21 Likert-scale and open-ended questions related to the agency sitter policy/ algorithm process. Results. The analyzed results from Qualtrics showed 45.7% of the staff feel that the sitter policy is hard to locate. Also, 87% of the staff recommended it would be easier to find if built into Epic. Conclusion. The Sitter Policy/ algorithm is hard to locate. Future work will involve placing the sitter policy/ algorithm on all computer desktops and providing education related to more accessible access to the policy.

# DNP POSTER PRESENTATION Southern Illinois University Edwardsville Sigma Theta Tau International Epsilon Eta Chapter

**November 16, 2021** 

### Jenna Tebbenkamp

Post-Master's Doctor of Nursing Practice

### Mindfulness and Meditation to Reduce Test and Evaluation Anxiety in Doctoral Nurse Anesthesia Students

Mindfulness and Meditation to Reduce Test and Evaluation Anxiety in Doctoral Nurse Anesthesia Students Background/Information A significant number of university students report experiencing test anxiety. Extreme anxiety has been reported as a cause of withdrawal from university studies. Certified Registered Nurse Anesthetists are required to complete an intense curriculum with tests and evaluations prior to passing a national board certifying exam, which is anxiety-provoking. Purpose The primary objective of this project was to provide mindfulness intervention information to be utilized by the DNP students and assess desires of having a mindfulness meditation practice to alleviate academic anxiety. Methods Following a lecture covering the effects of anxiety on academic performance, definitions of mindfulness meditation practices, and the usefulness of mindfulness meditation practices on alleviating academic anxiety, students were given a questionnaire to assess anxiety levels prior to evaluations, knowledge regarding the effects of anxiety on performance, and to assess desires of having a mindfulness or meditation practice to alleviate academic anxiety Results Students who reported interest in mindfulness meditation and were likely to utilize the intervention to alleviate anxiety increased for all cohorts in attendance. Limitations Most students expressed having prior knowledge of mindfulness meditation; however, it is unclear what knowledge students had of the topic, its effects on anxiety, whether it was previously practiced, or if they knew someone who practiced meditation. Conclusion/Implications for Practice The research implication includes the potential for mindfulness and meditation practices to decrease test and evaluation anxiety through increased self-efficacy in DNP students.

# Southern Illinois University Edwardsville Sigma Theta Tau International Epsilon Eta Chapter November 16, 2021

### **Gregory Jennings**

Post-Master's Doctor of Nursing Practice

### Short Term Medical Mission Trip Antibiotic Protocol

Background/Introduction: Short term medical mission trips are growing in popularity and with this growth the level of care provided must remain evidenced based. Mission groups traveling to developing countries consist primarily of volunteers. And while many of those serving on mission trips are medically trained, some have minimal healthcare knowledge. Pharmacists are not always available to dispense medications on mission trips and therefore it is common for registered nurses in the pharmacy to dispense the medications prescribed by the providers. Because the medications available on mission trips are limited, often times substitutions must be made, especially when it comes to antibiotics. Purpose: To help ensure that the standard of care was maintained, an antibiotic protocol was developed for a short-term medical mission trip in Guatemala. Methods: A pre-test will be given to all pharmacy team members on the trip to assess their baseline knowledge regarding antibiotics. After the pre-test, an educational session will be held to explain the protocol and how to utilize it. On the last day of the trip, a post-test will be given to the team to evaluate if antibiotic knowledge improved after learning and using the protocol to make appropriate antibiotic substitutions. Results: There was an increase in understanding of antibiotic substitutions after the educational session, and utilizing the protocol in the pharmacy. The participants reported an ease of use and demonstrated the understanding of the antibiotic protocol on the post test compared to the pre-test. Limitations: The long-term impact of the project cannot be evaluated on one mission trip. Conclusions/Implications for Practice: Long-term use of this protocol on future mission trips will be helpful for continued evaluation.