DNP Project Presentations
Spring 2025

Southern Illinois University Edwardsville
School of Nursing

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Welcome

Dear DNP Scholars,

Congratulations on reaching this significant milestone in your doctoral journey! We are proud to celebrate your scholarly achievements during the Spring 2025 DNP Project Presentation Days, taking place virtually on May 1 and in person on May 2. Presentation days are a special opportunity for you to showcase your scholarly projects, engage in meaningful dialogue with faculty and peers, and highlight the real-world impact of your work on nursing practice and patient outcomes. Your commitment to evidence-based practice and advancing health outcomes reflects the highest standards of excellence in the nursing profession.

Best wishes as you prepare for graduation!

Dr. Jerrica V. Ampadu
Interim Assistant Dean of Graduate Programs

Mission, Vison, and Values

School of Nursing Mission

The Southern Illinois University Edwardsville (SIUE) School of Nursing educates, empowers, and engages learners to achieve excellence in nursing. Our commitment to inclusive excellence in nursing education, practice, service, and scholarship is reflected in out innovative programs, extensive partnerships, and equitable opportunities. We empower learners by fostering a supportive community that celebrates student success with an emphasis on diversity, equity, and inclusion. Our graduates are prepared to lead change and advance health equity of diverse populations.

School of Nursing Vision

The Southern Illinois University Edwardsville (SIUE) School of Nursing aspires to be a premier institution for nursing education, recognized for developing a diverse nursing workforce and advancing health equity in an evolving healthcare landscape.

School of Nursing Values

Compassion, Integrity, Excellence, Inclusivity, Collaboration, and Creativity

Presentation Day Details

Day 1: Virtual Poster Presentations – May 1, 2025

Location: Zoom
Time: 8:00 AM CST – 9:30 AM CST
Zoom Registration: https://siue.zoom.us/meeting/register/71p-y4KDRkyudTN9oB2UDA

Schedule:
08:00 – Login to Zoom
08:15–08:45 – Each student gives a 2–3-minute project overview
08:45–09:15 – Breakout rooms for audience Q&A
09:15–09:30 – General Q&A and close

Presenters:

- Peace Ezekwueche and Cynthia Phillips
- Grant Van Meter
- Kevin Derrickson
- Maleka Miller
- Emanuella Odiko-Pim

Day 2: In-Person Poster Presentations – May 2, 2025

Location: SIUE MUC, Legacy Room
Check-in Location: University Club Room (Second Floor)

Session 1A (09:00 – 10:30 AM)

- Emily Asby & Michelle Bender
- Christopher Galvin & Wyatt Robinson
- Maria Croy & Tessa Dietz
- Chandler Dorris & Riley Hughes
- Brittany Birdell & Abigail Camden
- Andrews Addae & Abdi Hassan
- Cierra Jethro & Kristine Vogt
- Jacqueline Estrada

Session 1B (10:30 AM – 12:00 PM)

- Kaitlyn Harris & Savannah Pieper
- Molly Fleming & Elizabeth Penick
- Shelby Murphy & Marrisa Tucker
- Brian Tillery
- Robert Elston
- Madeleine Caito

- Kelly Fleri
- Melonica Luanne Kozil & Miyoung Luangphisay
- Marissa Hogg & Karima Laadimi
- Heidi Ortyn & Carly Schlupp

Session 2A (12:30 – 2:00 PM)

- Linsey Kreul
- Chileme Ochulor & Kelechi Uduma
- Adrian Henson
- Nwamaka Orji
- Sreekala David
- Kayla Everding
- Nmaju Obasi
- Ulunmna Lawson & Andrea Martin

Session 2B (2:00 – 3:30 PM)

- Kara Littlejohn & Anna Talley
- Christopher DeBoe & Courtney Musselman
- Justin Blythe
- Evan Alling
- Courtney Howell & Jill Passwater
- Lana Keigley
- Kathryn Semon
- Ada Malone
- Katheryn Speaks
- Demarco Brownlee & Lindsey James

External Presentations

Jennifer Durbin – Leadership Wellness in Healthcare
Conference: BJC Healthcare Research Symposium | Date: Nov 1, 2024 | Faculty Lead: Dr. April Schmidt

Jocelyn Lane-Prifti – Tobacco Cessation and Opioid Use Disorder
Conference: 28th Annual Nursing Research Conference | Date: Apr 9, 2025 | Faculty Lead: Dr. Kristin Elmore

Laura Harmon & Rachel Hodo – Intimate Partner Violence Education
Conference: 28th Annual Nursing Research Conference | Date: Apr 9, 2025 | Faculty Lead: Dr. Tracy Cooley

Lana Keigley – EMR Systems for Global Missions
Conference: National EBP Conference | Date: Apr 17, 2025 | Faculty Lead: Dr. Bernadette Sobczak

Anna Poirier – Engaging Rural Patients in Smoking Cessation
Conference: Madison Area Nursing Symposium | Date: Apr 24, 2025 | Faculty Lead: Dr. Bernadette Sobczak

Acknowledgments

We extend our gratitude to:
Project leaders and Mentors
Content experts and Stakeholders
Clinical partners and Community collaborators
Family and friends who supported this journey

Scholar Projects & Abstracts (Ordered by Presentation)

1. **Peace Ezeekwueche and Cynthia Phillips**

Project Title: Implementation and Evaluation of an Evidence- Based Postpartum Discharge Education Video App: A Quality Improvement Project
Faculty Lead: Dr. Amy Hamilton
Content Expert: Dr. Amy Reed
Abstract: The United States has the highest maternal mortality rate, with 60% of preventable deaths occurring during the postpartum period. Findings from studies suggested that standardized, quality, concise, health-literate, and culturally sensitive postpartum education will equip postpartum patients with the needed knowledge. There are variations in postpartum discharge education by providers and nurses, leading to incomplete and inconsistent information for postpartum patients. Discharge educational videos on tablets have been proven feasible and effective as a discharge education tool. Stakeholders at the site bought an evidence-based pregnancy application and education program. They selected nine postpartum videos out of 103 videos in the library to be utilized for discharge education. Objective To implement and evaluate an evidence-based postpartum discharge education video app in the postpartum unit of the project site. Methods Postpartum nurses at the site received training on the iPads and the new workflow through a PowerPoint presentation. The training was completed in person prior to project implementation. Data collection included pre-and post-surveys, with 50 participants completing the pre-survey and 46 participants completing the post-survey using Microsoft Forms. The data was exported to Excel for analysis and discussion. Conclusion The implementation of the postpartum educational video on bedside tablets was successful. It was integrated into the workflow process, improving and standardizing the workflow for discharge education. Surveys gathered from the nurses reported satisfaction with the discharge videos.

2. **Grant Van Meter**

Project Title: Intraoperative Hypotension: Strategies for Prevention and Treatment
Faculty Lead: Dr. Amy Hamilton
Content Expert: Dr. Lauren Douglass
Abstract: Intraoperative hypotension (IOH), defined as a mean arterial pressure (MAP) below 65 mmHg, is a critical perioperative concern linked to complications such as myocardial injury, acute kidney injury, and prolonged recovery times. It is also a key quality measure under the Merit-based Incentive Payment System (MIPS). Variability in IOH management among anesthesia providers highlights the need for targeted education to ensure consistent, high-quality care. This quality improvement project aimed to enhance knowledge, confidence, and adherence to best practices through an educational intervention guided by Patricia Benner's Novice to Expert Model. The intervention included a pretest, an educational video tailored to providers' experience levels, and a posttest. Key topics included MAP monitoring, preoperative risk assessment, fluid management, and the use of vasopressors to prevent IOH. Thirty-seven anesthesia

providers participated, of whom 76% (n=28) were Certified Registered Nurse Anesthetists (CRNAs). Pre-intervention assessments revealed substantial knowledge gaps, particularly in identifying MAP thresholds and evidence-based management strategies. Post-intervention results demonstrated a statistically significant improvement in knowledge, with participants achieving an average increase of 2.4 correct answers ($p<0.001$). Confidence levels also rose significantly, with the percentage of providers feeling "Very Confident" increasing from 13.5% (n=5) to 54.1% (n=20) ($p<0.001$). This project underscores the value of structured, experience-tailored education in addressing knowledge gaps, standardizing IOH management practices, and enhancing patient safety. It also serves as a scalable model for improving adherence to quality metrics in healthcare.

3. **Kevin Derrickson**

Project Title: Sepsis: Early Identification and Bundled Care
Faculty Lead: Dr. April Schmidt
Content Expert: Dr. Ann Popkess
Abstract: Abstract Treating sepsis is a significant challenge for healthcare professionals across the country as the number of patients suffering from sepsis continues to increase. Sepsis, when not addressed, will often result in severe consequences for patients, including severe sepsis and septic shock, which are often accompanied by high rates of mortality. Utilizing the components of the SEP-1 (SEPSIS-1) bundle may prove beneficial to early identification and treatment for this life-threatening physiological response to infection. Utilizing the SEP-1 bundle is a way for providers to improve patient outcomes through application of evidence-based best practice to drive the identification and care of patients in the acute care setting. The use of an electronic health record to improve the identification of sepsis patients can improve the administration of life saving antibiotic therapy within the recommended 1-hour time frame after blood cultures and potentially mitigate the severity of this life-threatening systemic infection. The plan-do-study-act methodology is an excellent tool organizations use improve the early recognition of sepsis to integrate an EHR alert software to improve early recognition of sepsis and compliance with the SEP-1 bundle. This study explores how the use of the EHR impacts and optimizes the approach to sepsis bundled care. Key words: Sepsis, Bundle, Blood culture, Antibiotics, Electronic health record (EHR), Early identification, Compliance, Improvement, Plan Do Study Act, Culture

4. **Maleka Miller**

Project Title: Bridging the Gap: Integrating Cultural Humility Simulations to Strengthen Nursing Communication and Equity in Care
Faculty Lead: Dr. April Schmidt
Content Expert: Dr. Sheri Compton-McBride
Abstract: Preparing undergraduate nursing students to deliver culturally responsive care is crucial for delivering patient-centered care as healthcare diversifies. Cultural

competence is commonly emphasized in nursing education. Cultural humility, an ongoing process of self-reflection, openness, and lifelong learning, is less frequently referenced in nursing curricula. This quality improvement project aimed to enhance undergraduate nursing students' communication and cultural responsiveness skills by incorporating a Cultural Humility Simulation into a baccalaureate and master's level nursing program. Integrating Leininger's Sunrise Model and tenets of cultural humility, the simulation involved a scenario focusing on an African American patient diagnosed with sickle cell anemia. The simulation addressed multiple concerns, such as bias, mistrust, and disparities in pain management. Twenty-nine nursing students participated in pre- and post-simulation assessments using the SE-12 Clinician Communication Scale to measure self-efficacy and interpersonal sensitivity. The results suggested significant improvements in students' confidence, specifically in identifying patient concerns, structuring conversations, and planning discussions collaboratively with patients. The findings also highlight the effectiveness of simulation-based education in fostering empathy, cultural humility, and communication skills essential for delivering patient-centered care.

5. **Emmanuella Odiko-Pim**

Title: Mock Code Training in New Graduate Nurse Residency Programs
Project Lead: Dr. April Schmidt
Content Expert: Dr. Katie Wollerman
Abstract: An individual’s survival rate after cardiac arrest, where cardiopulmonary resuscitation (CPR) is administered within 3-5 minutes, is approximately 50%. By maintaining proficiency in life-saving techniques, which can rapidly decline without frequent practice, the patient’s chance of survival during life threatening situations is increased. As new graduate nurses transition from student roles to professional practice, they often face challenges that test their confidence and competence, particularly in high-stress, life-threatening situations. Nurse residency programs are crucial, as they set standards in helping nurses with less than 12 months of experience build the necessary skills and behaviors for effective patient care. Incorporating mock code training within these residency programs provides a hands-on, simulation-based learning environment for practice in a controlled setting. The overall goal of this project was to incorporate mock code training into a new graduate nurse residency program to facilitate a smoother transition into practice, leading to better-prepared nurses, increased job satisfaction, and improved nurse retention rates. The project was quasi-experimental and participating new graduate nurses completed pre-and post-surveys before and after the mock code simulation. Out of the 60 participants, 45 pre- and post-surveys were received. The post-survey results indicated that the mock code training significantly improved new nurse confidence with performance in emergencies, bolstering teamwork, communication, and stress management skills, which are essential in delivering high-quality care.

6. **Emily Asby and Michelle Bender**

Project Title: Enhanced Recovery After Surgery Protocol for Colorectal Surgical Patients

Faculty Lead: Dr. Matthew Bednarchik

Abstract: This Enhanced Recovery After Surgery (ERAS) protocol for colorectal surgical patients is a project requested by the anesthesia team at a small hospital in central Illinois. The facility seeks a protocol for its patient population with research to support the recommendations. An extensive database search of publications (English) utilizing keywords was performed. Large-scale studies regarding current ERAS protocols were reviewed, and individual studies were conducted on each component. Best practice recommendations were based on studies that included meta-analyses, large prospective cohorts, and randomized control trials (RCTs) and were scrutinized. Additionally, the most recent ERAS guidelines (fourth update) were reviewed to determine the validity of each recommendation. All recommendations were made after evaluating the best and most current evidence. The various components of the ERAS protocol that were prudent to anesthesia providers were vetted via quality research trials and studies. A comprehensive protocol from preoperative through surgery into the postoperative phases was completed, and an educational presentation was provided to the anesthesia staff to support the recommended protocol.

7. **Christopher Galvin and Wyatt Robinson**

Project Title: Developing an Algorithm for the Use of Magnesium Sulfate and Ketamine for Analgesia

Faculty Lead: Dr. Matthew Bednarchik

Abstract: Ketamine and magnesium sulfate are both NMDA receptor antagonists that can have beneficial effects on perioperative pain management. With the increase in the opioid epidemic nearing 100,000 deaths in a single year and over 100 million Americans dealing with chronic pain, many anesthesia providers are looking for better ways to provide pain relief during and after surgeries. The synergistic effects of ketamine and magnesium sulfate can reduce the amount of opioids administered while still achieving adequate pain control. Our goal is to assess the effectiveness and potential adoption of a magnesium sulfate and ketamine infusion protocol for abdominal and orthopedic surgical procedures at an acute care hospital in Illinois. We conducted a pre and post-test on 16 anesthesia providers, twelve CRNAs and four Anesthesiologists. The tests contained information about the opioid epidemic, pharmacodynamics and pharmacokinetics of both magnesium sulfate and ketamine, as well as compliance with the infusion protocol. Between the pre and post-test, we held an informational presentation of the extensive research we have conducted. The results showed a significant improvement in the scores between the pre and post-tests from the anesthesia providers. There was also a huge favor in implementing the infusion protocol graded by using a 5-point Likert scale by the providers. With such support for implementing the protocol, the anesthesia providers at

the acute care hospital in Illinois will be able to provide adequate analgesia coverage without administering excessive opioids or utilizing an opioid only technique. Rather, they will be able to use a multimodal analgesic approach that will increase patient satisfaction while limiting opioid usage.

8. **Maria Croy and Tessa Dietz**

Project Title: Impact of the Anatomage Table on Student Registered Nurse Anesthetists' Confidence & Understanding of Anatomical Structures for Brachial Plexus Nerve Blocks

Faculty Lead: Dr. Matthew Bednarchik

Content Expert: Dr. Chaya Gopalan

Abstract: Cadaver dissection lab has been considered the ideal teaching modality for students to experience advanced understanding, expertise, and training in anatomy. Implementing virtual dissection, such as the Anatomage table (AT), in education has been relatively new; evidence has shown that virtual dissection tables can enhance students' learning retention of anatomy compared to students without access. Implementing virtual dissection tables in the education of student registered nurse anesthetists who do not have access to a cadaver lab may improve confidence and understanding of anatomy relevant to peripheral nerve blocks. This project aimed to integrate an interactive experience with SRNAs utilizing the Anatomage table (AT) to reinforce brachial plexus anatomy relevant to upper extremity peripheral nerve blocks. This study used anonymous pre- and post-workshop surveys to acquire data for analysis. The surveys included open-ended, multiple-choice, and Likert scale questions. In the pre-survey, 39% of students reported low confidence in understanding upper extremity anatomy relevant to peripheral nerve blocks of the brachial plexus. In the post-survey, 83% of students reported that utilizing the AT during this workshop improved their understanding of anatomical structures of the brachial plexus. In the post-survey, students' confidence in brachial plexus nerve blocks increased from 67% to 79%. Overwhelmingly, in the post-survey, 90% reported that implementing the AT would help review pertinent anatomy during the Nurse Anesthesia program. Further investigations into virtual dissection tables and enhancing anatomy education are warranted to improve the utilization of tools to reinforce essential anatomical knowledge in a multimodal approach.

9. **Chandler Dorris and Riley Hughes**

Project Title: The Impact of High-fidelity Simulation on Student Registered Nurse Anesthetists' Identification and Management of Medication Errors and Vasoplegia

Faculty Lead: Dr. Matthew Bednarchik

Content Expert: Dr. Whitney Heischmidt

Abstract: Mitigating and managing critical scenarios is a key factor of a successful nurse anesthetist providing safe patient care. High-fidelity simulation acts as a training tool that

provides a positive learning environment to generate knowledge about infrequent critical scenarios. This project simulated vasoplegia and medication errors, both of which can contribute to significant patient morbidity and mortality. As part of the second-year student registered nurse anesthetist's (SRNAs) curriculum, SRNAs participated in high-fidelity simulations followed by a debriefing session. This project aimed to improve clinical knowledge and confidence in managing vasoplegia and medication errors. During the debriefing session after the simulations, SRNAs were educated on the pathophysiology and treatment options for vasoplegia while also being taught mitigation strategies and how to respond to medication errors. The high-fidelity simulations took place at the Southern Illinois University Edwardsville Nurse Anesthesia simulation lab while utilizing current literature to create high-fidelity simulations to teach vasoplegia treatment and medication error mitigation. The project evaluations from participants showed improved confidence and knowledge of vasoplegia and medication errors across all questions within the pre- and post-simulation evaluation.

10. Brittany Birdsell and Abby Camden

Project Title: Enhanced Recovery After Cardiac Surgery Protocol
Faculty Lead: Dr. Mary Zerlan
Abstract: Coronary artery disease is the leading cause of heart disease within the United States, with over two million open heart surgeries performed annually, costing the healthcare system billions of dollars. Enhanced Recovery After Surgery (ERAS) protocols for cardiac surgery allow for standardization of multidisciplinary care, resulting in better patient outcomes and reduced healthcare costs. The host facility's anesthesia department lacked an ERAS protocol specific to cardiac surgery patients, although there was a solid foundation of knowledge among the group. This project aimed to create an ERAS protocol for patients undergoing open heart surgery at the host facility to allow a more consistent approach to the perioperative management of these patients. An educational handout regarding the ERAS protocol for cardiac surgery was created and disseminated to the group. A post-education survey was utilized to assess the individual's understanding of the protocol and the various components of ERAS specific to cardiac surgery patients. Results of the survey showed that a majority understood the principal components of ERAS protocols for cardiac surgery patients. Limitations included small sample size, sampling bias, and lack of generalization to a larger population due to the customization of the protocol to the host facility's needs and resources.

11. Andrews Addae and Abdi Hassan

Project Title: Ultrasound Guided Peripheral IV Insertion Protocol at Hillsboro Area Hospital
Faculty Lead: Dr. Mary Zerlan
Content Expert: Dr. Kevin Stein
Abstract: This project aimed to develop a structured, three-tiered educational program to introduce and reinforce the benefits of ultrasound-guided peripheral intravenous (PIV)

placement for registered nurses in emergency room and preoperative settings. The primary objectives were to enhance nurses' proficiency in using ultrasound for patients with difficult intravenous access and to improve first-attempt IV placement success rates. The educational program was implemented in three phases. The first phase consisted of a literature review presentation delivered via an educational PowerPoint to all project stakeholders. The second phase of the project involved hands-on training. The participants practiced ultrasound-guided PIV placement on each other to develop familiarity and technical skills. In the third phase, participants applied their newly acquired skills to patients under the supervision of designated superusers and approved colleagues. A nine-point Likert scale was used to evaluate participants' confidence and satisfaction with ultrasound-guided PIV placement. Post-training results indicated that 66.7% of participants felt confident using the ultrasound machine, 50% reported confidence in independently performing ultrasound-guided IV insertion, and 66.7% expressed strong overall satisfaction with the training. Additionally, 66% of participants stated they would recommend the program to others. The implementation of this educational initiative has the potential to increase nurses' confidence in utilizing ultrasound for PIV placement, leading to improved first-attempt success rates. Enhanced competency in ultrasound-guided IV insertion is expected to result in cost savings due to reduced supply usage, increased patient satisfaction by minimizing needle sticks, and improved efficiency in patient care delivery.

12. Cierra Jethro and Kristine Vogt

Project Title: Pediatric Preoperative Medication Management and NPO Guidelines
Faculty Lead: Dr. Mary Zerlan
Content Expert: Dr.Valerie Griffin

Abstract: Pediatric preoperative medication management and NPO guidelines can be a source of confusion for anesthesia providers, patients, and caregivers alike. With 18% of children under the age of 12 using prescription medications, clinicians must know and be able to communicate instructions on presurgical fasting and medication regimens effectively. At a pediatric tertiary care center in Missouri, ambiguous NPO and medication guidelines have led to frequent violations and non-compliance among patients and caregivers. The purpose of this project was to develop concise, updated guidelines for anesthesia providers and caregivers. A comprehensive literature review was performed to identify current evidence-based recommendations for NPO guidelines and medication management for pediatric patients. The evidence-based recommendations were found and compiled into an educational presentation and pamphlets for all anesthesia staff. Anesthesia staff completed a pre-presentation and post-presentation questionnaire consisting of ten multiple-choice knowledge questions to assess the providers' current knowledge regarding preoperative medication and NPO guidelines. Overall, anesthesia providers scores increased, demonstrating an increase in knowledge regarding preoperative medication management and NPO guidelines. Providers also reported that the information provided would impact their practice.

13. Jacqueline Estrada

Project Title: Integration of the Codonic Safe Labeling System into Critical Access Hospitals to Decrease Medication Errors

Faculty Lead: Dr. Mary Zerlan

Content Expert: Dr. Lauren Douglass

Abstract: Medication errors in anesthesia present significant risks to patient safety, particularly in critical access hospitals with limited resources. Anesthesia providers act as both prescribers and pharmacists, making safe medication administration practices crucial. This project examined the impact of integrating the Codonic Safe Labeling System to enhance medication safety. A literature review highlighted the prevalence and cost of medication errors, especially in small hospitals serving rural populations. The project involved an educational presentation to key stakeholders, with post-assessment surveys indicating positive reception despite limited participation. Findings suggest that standardized labeling and barcode scanning technology can improve patient safety and compliance with industry standards. However, further implementation in larger facilities is needed to draw broader conclusions.

14. Kaitlyn Harris and Savannah Pieper

Project Title: Effectiveness of an Open Education Resource within a Doctoral Nurse Anesthesia Program

Faculty Lead: Dr. Jenna Tebbenkamp

Content Expert: Dr. Juliet Gray

Abstract: The financial burden of textbooks remains a significant challenge for nurse anesthesia students, impacting accessibility and overall utilization. Traditional textbooks, while containing critical academic content, are often expensive, cumbersome, and quickly outdated. This project explores the implementation of an Open Educational Resource (OER) as a cost-effective, digital alternative to traditional textbooks in the Southern Illinois University Edwardsville (SIUE) Doctor of Nursing Anesthesia Program. Specifically, it evaluates the transition to a free electronic version of Essentials of Physiology for Nurse Anesthetists by Dr. Chaya Gopalan. A literature review was conducted to assess the benefits and limitations of this OER, focusing on affordability, student satisfaction, equity, and academic success. Studies indicate that OERs reduce financial strain and enhance accessibility while maintaining comparable academic performance to traditional resources. However, student satisfaction and clarity ratings for this OER transition were slightly lower. A survey-based methodology was employed to compare student perceptions and performance outcomes between cohorts using traditional textbooks and the OER. The study also looked at demographic trends and found that younger students were more satisfied with OERs. Results demonstrated that while the traditional textbooks had the highest satisfaction and clarity ratings, this OER showed promise in accessibility and financial relief. Although this OER adoption did not

significantly impact academic performance, improvements in content clarity and supplementary materials would optimize its effectiveness. This study highlights the potential for OERs to reduce educational costs while maintaining success, emphasizing the need for continued evaluation and refinement of digital learning resources in nurse anesthesia education.

15. Molly Fleming and Elizabeth Penick

Project Title: Emotional Intelligence Training: A standardized post-simulation debrief for SRNA students

Faculty Lead: Dr. Jenna Tebbenkamp

Content Expert: Dr. Catherine Daus

Abstract: Student nurse anesthetists navigate both clinical and interpersonal challenges during their student tenures. Southern Illinois University Edwardsville's School of Nursing Anesthesia program recognizes the importance of fostering emotional intelligence skills to facilitate the successful transition into the operating room environment and future anesthesia practices. Emotional intelligence can enhance communication and self-awareness among members of the healthcare team. A simulation experience was previously developed as an adjunct to current training methods. Students and faculty stakeholders identified a need for a standardized approach to debriefing that would not only provide feedback but allow students an opportunity to examine their experiences. A literature review was conducted to identify elements that contribute to a successful simulation debrief. Environmental factors, tactical adjuncts, and feedback tools were found to enhance debrief success. The facilitators led anesthesia students through the previously developed simulation and then incorporated various elements of debriefing tactics in a structured debriefing session. The Debriefing Assessment for Simulation in Healthcare – student version (DASH-SV), was utilized to evaluate the effectiveness of the sessions. Nursing anesthesia student participant responses demonstrated that the organized debriefing was well-received and aided in the educational experience of the simulation and training. Though the DASH results were positive, students were also reassessed on the Mayor Salovey Caruso emotional intelligence test, which did not show any improvement in overall emotional intelligence scores post-training in comparison to their pre-admission scores. Many barriers were recognized including a lack of consistency in administration of the MSCEIT assessment, small sample size, and scheduling conflicts that students may experience when balancing the post MSCEIT assessment with their course and clinical requirements.

16. Shelby Murphy and Marissa Tucker

Project Title: Enhancing Knowledge of the Anesthesia Machine: Alternative Learning Styles for SRNAs

Faculty Lead: Dr. Jenna Tebbenkamp

Content Expert: Dr.Kevin Stein

Abstract: The anesthesia machine is arguably the most critical device that certified registered nurse anesthetists (CRNAs) must master to perform anesthesia safely. However, learning the mechanical complexities of operating these machines —including their various models— can be challenging for Student Registered Nurse Anesthetists (SRNAs). Currently, the primary methods used for training students on the anesthesia machine are textbooks and rubrics. To further enhance the knowledge of first-year SRNAs regarding the anesthesia machine, an educational video was curated to emulate rubric information and provide detailed explanations of the anesthesia machine checkout procedure using a step-by-step approach. After viewing the video tutorial, the SRNAs were allowed to apply their acquired knowledge by performing anesthesia machine checkouts in a lab-based setting. Data collection was performed using pre- and post-intervention surveys with standardized questionnaires. Data was then analyzed via t-test analysis to identify statistical significance related to the study intervention. Findings show that video tutorials and kinesthetic learning opportunities improve SRNAs' understanding of the anesthesia machine and their confidence in its use.

17. Brian Tillery

Project Title: Enhancing Medical Education with 3D printing: A DNP Initiative
Faculty Lead: Dr. Jenna Tebbenkamp
Content Expert: Dr. Chaya Gopalan

Abstract: 3D printing serves a niche role in enhancing medical education by providing interactive, patient-specific models that improve understanding of anatomy and surgical procedures. These models assist in preoperative planning, intraoperative guidance, and postoperative evaluation, leading to reduced surgery times, enhanced surgical precision, and better patient outcomes. This project explored how 3D-printed models could improve understanding of tracheal stenosis among second-year nurse anesthesia students at Southern Illinois University Edwardsville. During a hands-on session, students interacted with 3D-printed models of both normal and stenotic tracheas, allowing them to better visualize and understand airway anatomy. Encouraging results were found, with students reporting increased confidence in managing difficult airway scenarios and a deeper understanding of tracheal conditions. The success of this project highlights how 3D printing can be integrated into medical curricula to improve training and patient safety. The widespread adoption of 3D-printed models could revolutionize how medical professionals are trained and prepare them for complex, patient-specific challenges.

18. Robert Elston

Project Title: Reducing Stress for Student Registered Nurse Anesthetists: Development of a Streamlined Wellness Reflection Submission
Faculty Lead: Dr. Jenna Tebbenkamp

Abstract: Student registered nurse anesthetists (SRNA) experience higher than normal levels of stress throughout their training, which often leads to the utilization of

maladaptive coping mechanisms. Exit interviews at a large Midwestern university's nurse anesthesia (NA) program revealed that the wellness reflection submission process contributed to this stress. In response, this project explored streamlining the wellness reflection submission process to reduce stress. A literature review confirmed the prevalence of stress among SRNAs, highlighting factors such as heavy coursework, challenging clinical experiences, and lack of preceptor support. Participants attended an informational presentation, and they completed the new wellness submission process, as well as a post-survey upon completion of the new submission process. The revised wellness reflection submission process was constructed using a Qualtrics form that required minimal time and effort from students. Results showed a strong correlation that the revised submission process reduced stress and was more efficient. While limited by a small sample size, this project demonstrated the potential for improving SRNA well-being through streamlined wellness initiatives. Future research should explore broader stress reduction strategies, including preceptor training and online stress management programs. Continuous evaluation and revision of wellness programs remain essential for supporting successful training of SRNAs.

19. Madeleine Caito

Project Title: Optimal Neuraxial Dexmedetomidine Dosing for Obstetric Patients
Faculty Lead: Dr. Rebecca Collier
Content Expert: Dr. Matthew Bednarchik
Abstract: Neuraxial anesthesia, the gold standard for pain management during labor and cesarean section, is often enhanced with adjuvant medications (Li et al., 2020; Wang et al., 2022). Dexmedetomidine, a selective alpha-2 adrenergic agonist, has emerged as an innovative neuraxial adjunct due to its ability to prolong sensory and motor blockade, reduce shivering, and decrease opioid requirements without significant adverse maternal or neonatal effects (Liu et al., 2019a; Shen et al., 2020; Sun et al., 2020; Wang et al., 2019; Yang et al., 2018). The anesthesia department at a Level 3 Perinatal Center in central Illinois routinely administers neuraxial dexmedetomidine for elective cesarean sections and breakthrough labor analgesia but lacked an evidence-based dosing protocol. This project aimed to develop and introduce an evidence-based neuraxial dexmedetomidine dosing chart and secure buy-in from participants. Survey results demonstrated strong support for the tool, highlighting the chart's clinical relevance, effectiveness, flexibility, and ease of use. Future projects should revisit this topic as more research, particularly high quality RCTs conducted in the United States, emerges on the use of neuraxial dexmedetomidine in OB anesthesia.

20. Kelly Fleri

Project Title: Dexmedetomidine as an Adjuvant in Peripheral Nerve Blocks
Faculty Lead: Dr. Rebecca Collier
Content Expert: Dr. Nicholas Collier

Abstract: Anesthesia providers utilize peripheral nerve blocks (PNBs) as the primary anesthetic or in combination with general anesthesia to decrease perioperative pain and narcotic use (Gadsden, 2021). Demedetomidine, an alpha-2 agonist, when administered perineurally, causes peripheral vasoconstriction and works synergistically with local anesthetics to extend block duration (Rao & Rajan, 2021). This project aimed to develop evidence-based dosing guidelines for perineural dexmedetomidine at a tertiary care center in central Illinois. The literature revealed the ideal dose for extending block duration while minimizing side effects is 50-60 mcg or 0.5 mcg/kg total body weight (Andersen et al., 2021; Zhao et al., 2020). A PowerPoint presentation displayed the findings from the review to a convenience sample of anesthesia providers. After implementation, a Qualtrics posttest assessed the effectiveness of the presentation, quality of the speaker, dosing recommendations, and provider buy-in and confidence with utilizing dexmedetomidine as an adjunct in PNBs. Almost 70% of participants reported they were more likely to add dexmedetomidine as an adjunct in PNBs than before implementation. The short-term impact of this project was a culture shift toward using perineural dexmedetomidine. The long-term goal of this project includes widespread acceptance and use of perineural dexmedetomidine to extend postoperative analgesia, possibly in lieu of continuous catheters. Keywords: peripheral nerve block, dexmedetomidine, Precedex, perineural, adjunct, continuous catheter

21. Melonica Luanne Kozil and Miyoung Luangphisay

Project Title: Ultrasound and Neuraxial Anesthesia in Obstetrics
Faculty Lead: Dr. Rebecca Collier
Content Expert: Dr. Wesley Gallagher

Abstract: Central neuraxial blocks (CNBs) are preferred for labor analgesia and anesthesia (Taylor et al., 2019). Anatomical landmarks are palpated to guide placement, but spinal deformities, edema, obesity, or a history of back surgery may cause difficult neuraxial access (Karmakar & Chin, 2022). Preprocedural ultrasound (US) for neuraxial anesthesia may mitigate the limitations of palpation. Increased patient safety, increased first-pass success rate, decreased needle trauma, and decreased complications are potential benefits of preprocedural neuraxial US (Bae et al., 2023; Chin et al., 2018; Perlas et al., 2016). This project aimed to develop a preprocedural neuraxial US stepwise guide for obstetric anesthesia providers at a Level 3 Perinatal Center in central Illinois. The evidence-based stepwise guide was demonstrated to participants. Following the presentation, a hands-on skills session reinforced the technique to support practice change. Participation was voluntary. A pretest-post design evaluated this quality improvement project. Participant demographics, familiarity with preprocedural US, effectiveness of implementation, and buy-in for the stepwise guide were examined. Participants (n = 10) reported improved knowledge and comfort with preprocedural US after implementation. Findings suggested preprocedural US and the stepwise guide may offer OB anesthesia providers an advantage when caring for patients with difficult neuraxial access.

22. Marissa Hogg and Karima Laadimi

Project Title: Optimal Anesthesia and Analgesia for Surgical Cancer Patients
Faculty Lead: Dr. Rebecca Collier
Content Expert: Dr. Judy Liesveld
Abstract: Cancer remains the leading cause of death worldwide, with nearly 10 million lives lost in 2020, according to the World Health Organization (2022). In 2021, the United States recorded 1,777,566 new cancer diagnoses and 608,366 cancer-related deaths (CDC, 2024). Cancer affects multiple body systems, requiring various treatments, such as surgery, radiation, and systemic therapies (WHO, 2022). As the prevalence of cancer increases, more anesthesia providers care for oncology patients. This project aimed to develop an evidence-based protocol for the intraoperative anesthetic care of surgical oncology patients. The literature reviewed lacked conclusive evidence to support the initiation of a best practice anesthetic protocol; however, trials did furnish insight into how inhalational agents, total intravenous anesthesia, and common analgesics may influence the immune system and tumor microenvironment, especially with certain types of cancer. These findings were shared via a PowerPoint presentation, literature review matrix, and interactive discussion at the host facility. Participants evaluated implementation with a post-survey. This project provided awareness on the potential influence anesthetic agents may have on cancer recurrence and long-term survival rates.

23. Heidi Ortyn and Carly Schlupp

Project Title: Revision of an Enhanced Recovery After Surgery Protocol for Bariatric Surgery
Faculty Lead: Dr. Rebecca Collier
Content Expert: Kyle Hardiman
Abstract: Bariatric surgery has emerged as an effective treatment option for obesity. Long-term weight loss leads to the resolution of many obesity-related comorbidities (Zhou et al., 2021). Bariatric patients are at an increased risk of complications in the perioperative period, and with more patients seeking surgery as a treatment option, a standardized treatment plan is essential. Bariatric enhanced recovery after surgery (ERAS) protocols are evidenced-based, multidisciplinary care pathways that lower perioperative complications and promote faster recovery (Stenberg et al., 2022). This quality improvement project aimed to review current literature to update an existing bariatric ERAS protocol. The protocol revisions were introduced to anesthesia providers via a PowerPoint presentation highlighting the recommended changes with supporting evidence from the literature review. Copies of the updated ERAS protocol were available for participants to critique. Demographics of the convenience sample and buy-in for the protocol updates were assessed with a posttest. Results indicated that participants supported the proposed revisions and were willing to adopt the protocol into practice with limited barriers. A standardized bariatric ERAS protocol containing the most up to date

interventions may lead to improved postoperative analgesia, decreased nausea and vomiting, and increased patient satisfaction (Stenberg et al., 2022).

24. Linsey Kreul

Project Title: Improving Maternal Wellbeing and Postpartum Depression Through Implementation of Virtual Maternal Support Group Therapy

Faculty Lead: Dr. Tracy Cooley

Content Expert: Joanna Luong

Abstract: Depression is one of the most common and debilitating mental health disorders in America (Mental Health America, 2024). Women are particularly vulnerable during their childbearing years, and untreated postpartum depression (PPD) can interfere with infant care and increase the risk of maternal self-harm or suicide. Social isolation is a key risk factor, as mothers often have limited support while adjusting to strict newborn schedules. Research shows that strong social support is linked to lower PPD scores. The objective of this QIP at a national telehealth company aimed to evaluate whether virtual support group therapy could provide accessible social support and empowerment to improve maternal wellness. The primary outcome measure was a pre- and post-Likert scale survey assessing mothers' perceived support, loneliness, and depressive symptoms. Despite marketing and scheduling efforts, live support group sessions were attempted over four months with no participation. As an alternative intervention, an educational brochure on PPD was distributed to pregnant employees, followed by a Likert scale survey measuring its impact. The brochure covered symptom awareness, encouragement to seek help, and resources for virtual therapy. Among the 12 respondents, 100% reported feeling more supported, better prepared for symptoms, and empowered to seek help. Additionally, 58.3% expressed interest in joining virtual group therapy. Findings suggest that PPD education and promotion of virtual therapy should continue at this telehealth company to support pregnant and postpartum women. Future efforts may explore additional engagement strategies to encourage participation in virtual support groups.

25. Chileme Ochulor and Kelechi Uduma

Project Title: Implementation of Evidence-Based Practice Change: Assessing the effectiveness of education and a standardized depression screening for African immigrants in the United States.

Faculty Lead: Dr. Tracy Cooley

Content Expert: Charlotte Robinson, DNP MSN-ED RN

Abstract: Depression is a multidimensional global health issue affecting millions, with a significant proportion of adults in the United States experiencing clinical depression (Park et al., 2019, p. 1). Evidence supports that immigrants in the US do not receive mental health services at the same rate as nonimmigrants, potentially impacting their mental health, well-being, and communities (Rodriguez et al., 2021, p. 1, paras. 1 - 3). This study aimed to improve the mental health of African immigrants through

educational interventions targeting depression. Using the Plan-DoStudy-Act (PDSA) model, we evaluated the effectiveness of depression screening and education. Participants (N = 30), including undocumented residents, asylum seekers, immigrants, and U.S. citizens aged 21Ð65, were recruited through convenience sampling and screened using the Patient Health Questionnaire-9 (PHQ-9). A pre-and post-survey design was implemented to assess changes in depression awareness and detection. Findings revealed a critical need for depression interventions, as the number of participants identified with depression increased from 3 out of 30 in the pre-assessment to 6 out of 24 after the intervention. Barriers such as stigma, cultural beliefs, and language challenges were observed, yet participants engaged actively, and medical providers supported the screening initiative. The successful integration of PHQ-9 in primary care underscores the necessity of routine depression screening, culturally responsive education, and targeted mental health interventions to enhance care for African immigrant communities.
Keywords: depression, African immigrants, mental health disparities, PHQ-9, depression screening, mental health education.

26. Adrian Henson

Project Title: Implementing Substance Use Disorder Screening in Mental Health
Faculty Lead: Dr. Tracy Cooley
Content Expert: Shellie Wear, FPA-APRN, PMHNP-BC, FNP-BC, Tracy Pacini, DNP, APRN, FNP-BC, PMHNP-BC
Abstract: Patients with underlying mental illness are at higher risk for substance use disorder (SUD). The goal of this project was to implement a standardized tool at a telehealth company for mental health providers to screen for substance use disorders. A staff meeting was conducted to provide education on the TAPS (Tobacco, Alcohol, Prescription medication, and other Substance use) tool, which was then integrated into practice. The TAPS tool was used to assess 77 patients. After 8 weeks of implementation, staff members were surveyed to evaluate their perceptions of the tool and identify barriers to screening. The primary outcome of the initial survey indicated that staff recognized the importance of screening for SUD and expressed interest in continuing to use the TAPS tool. However, identified barriers included time constraints, unfamiliarity with resources following a positive screen, and unfamiliarity with the TAPS tool. Three months after implementation, participants were surveyed again. The secondary outcome revealed that the TAPS tool was not consistently used after the initial phase. However, staff who continued using the TAPS tool found it easy to use and valuable in their assessments. This project highlights the potential to enhance substance use screening practices for patients seeking mental health services.

27. Nwamaka Orji

Project Title: Improving Depression Screening in Patients with Chronic Paim Syndrome and Enhancing Education on Depression

Faculty Lead: Dr. Tracy Cooley
Content Expert: Dr. Rebecca Luebbert
Abstract: Depression affects more than 280 million people worldwide. Chronic pain is common among U.S. adults, affecting approximately 20.9% (51.6 million persons). Research suggests that pain and depression have a common descending pathway in the central nervous system and have a biochemical basis primarily involving serotonin and norepinephrine. The PHQ-9 is an evidence-based screening and diagnostic tool for depression. The primary goal of this initiative was to enhance timely and appropriate depression assessment, diagnosis, and treatment for individuals with comorbidities like chronic pain syndrome. A pre-education survey was administered to assess baseline knowledge, followed by an educational intervention. A post-education survey was collected and analyzed. Results indicated that staff recognized the importance and feasibility of implementing this screening protocol in their clinic, as the PHQ-9 completion rates increased from 70% to 97%. Additionally, the findings suggest that readily available assessment tools and staff education contributed to positive and improved patient outcomes.

28. Sreekala David

Project Title: The Effects of Mindfulness on Work-related Stress and Burnout in Psychiatric Nurses.
Faculty Lead: Dr. Tracy Cooley
Content Expert: Dr. Kristen Elmore
Abstract: Psychiatric nurses often face emotional trauma, exposure to violence, and heavy workloads, making them particularly susceptible to occupational burnout caused by workplace stress. This burnout can negatively impact not only the physical and emotional well-being of nurses but also the quality of patient care. Mindfulness-based stress reduction (MBSR) programs have emerged as a promising holistic approach to addressing this issue by promoting present-moment awareness, emotional regulation, and positive thinking. The purpose of this brief study was to evaluate the impact of mindfulness meditation on stress and burnout among nurses working on a psychiatric unit and to offer recommendations for future research. Using search terms such as mindfulness, meditation, mindfulness-based stress reduction, burnout, stress, occupational stress, and psychiatric nurses, the literature was reviewed to assess the effectiveness of MBSR interventions. Findings indicate that mindfulness meditation significantly reduces stress and burnout in psychiatric nurses. These interventions have been shown to improve resilience, emotional regulation, and compassion, suggesting that mindfulness meditation may serve as an effective strategy for supporting nurse well-being and enhancing patient care. Keywords: Mindfulness-Based Stress Reduction (MBSR), Burnout, Psychiatric Nurses, Occupational Stress, Mindfulness Meditation, Emotional Regulation

29. Kayla Everding

Project Title: Diabetes Mellitus Type 2: Use of Blood Glucose Log to Enhance Self-Management and Provider Follow-up

Faculty Lead: Dr. Katie Wollerman

Content Expert: Dr. Kate Traum

Abstract: Type 2 diabetes mellitus has become one of the most common chronic conditions in the United States. Although this condition is preventable, millions of people are affected, and rates of diagnosis continue to rise. If left uncontrolled, type 2 diabetes mellitus can result in other serious health complications. Managing this disease has become essential in not only preventing long-term complications but also improving patients' overall quality of life. Due to the significance of managing type 2 diabetes mellitus, a blood glucose log was implemented in a primary care setting located in St. Louis, Missouri. The intervention goal was to improve patient education and improve provider follow-up on type 2 diabetes mellitus. Compliance with the blood glucose logs was monitored from both the patient's and provider's standpoint. Nine participants were compliant with the blood glucose logs and follow-up. A pre-and post-questionnaire using the Likert scale model was used to determine patients' perceptions towards managing their diabetes using the blood glucose logs. Most participants (89%) either agreed or strongly agreed that blood glucose logs would be beneficial for provider follow-up and the management of type 2 diabetes mellitus. In addition, a questionnaire was used to evaluate the provider's perception of the use and benefits of blood glucose logs. All providers (100%) agreed that blood glucose logs would be beneficial in improving provider follow-up and providing patient education. This project indicated further interventions are needed for improvement in type 2 diabetes mellitus management and provider follow-up. Keywords: "Type 2 diabetes mellitus self-management," "Interventions for self-management of type 2 diabetes mellitus," "Self-management with use of blood glucose logs," "Provider follow-up with type 2 diabetes mellitus patients," and "Educational tools for type 2 diabetes mellitus patients"

30. Nmaju Obasi

Project Title: Enhancing Providers' Management of Perinatal depression.

Faculty Lead: Dr. Katie Wollerman

Content Expert: Dr. Ashley Wittler

Abstract: Abstract Perinatal depression (PD) is the primary non-obstetric reason for hospitalizing mothers during the childbearing period (Kroska & Stowe, 2020). Early detection of symptoms and appropriate treatment are crucial to prevent health deterioration and achieve complete remission. It is recommended that depression screening occur once during pregnancy and again after childbirth, extending up to 12 months, as most suicides among women take place during this period (Dama & Lieshout, 2023). A practice gap was identified at a target facility, which indicated the need to

enhance providers' knowledge to treat PD effectively. This project introduced a standardized treatment protocol and education for providers to increase their comfort levels in managing PD based on an evidence-based treatment recommended by the American College of Obstetricians and Gynecologists (ACOG, 2023). To gather initial provider knowledge and comfort level with PD, a qualitative survey was administered to evaluate participants' experiences and practices. Sixteen pre-test survey questions were distributed and analyzed. The pre-survey results highlighted limitations in providers' practices and comfort levels when treating PD, revealing that less than 30% of providers felt comfortable managing PD, 43% consult mental health specialists for their depressed patient, 14% report they frequently assess maternal depression, and 57% often refer their depressed patient for psychotherapy. In the future, providers may adopt this protocol in various clinical settings. Moreover, family and women's health nurse practitioners can leverage these treatment protocols to enhance their knowledge base.

31. Ulunma Lawson and Andrea Martin

Project Title: Enhancing Education for Caregivers of Asthmatic Children
Faculty Lead: Dr. Katie Wollerman
Content Expert: Dr. Myjal Garner
Abstract: Asthma is one of the most common non-communicable diseases, carrying a significant burden. According to the Centers for Disease Control (2023), 6.5% of children under the age of 18 have asthma, and rates are higher in those who live below the poverty threshold. Asthmatic caregivers play an essential role in the health outcomes of asthmatic children. The WE CARE Clinic operates in an underserved community where many families reside in low socioeconomic conditions. In these areas, the rates of asthma exacerbation are higher, resources for families are lower, and support for mental health is less abundant. This project focused on supporting families in this community, bridging the gaps in asthma knowledge, as well as creating mentally and emotionally supportive environments to decrease asthma disease-related complications and depression rates among the asthma caregiver population by improving education. The project was evaluated using both pre-test and post-test scores from the caregivers. When comparing these scores, caregivers demonstrated an improved understanding of knowledge regarding asthma management, medication use and administration methods, increased knowledge of exacerbation prevention, and enhanced understanding of personal mental health needs. Multifactorial asthma education and awareness equip asthma caregivers with the information they need to manage asthma and reduce adverse asthma events. Both children and their caretakers are affected by an asthma diagnosis, and both parties must be adequately supported and educated to improve outcomes

32. Kara Littlejohn and Anna Talley

Project Title: Implementation of Simulation of Learning for Advanced Health Assessment Students in a DNP Program

Faculty Lead: Dr. Kristin Elmore
Content Expert: Dr. Ashley Wittler
Abstract: Implementation of Simulation of Learning for Advanced Health Assessment Students in a DNP Program Keywords Advanced health assessment, head-to-toe exam, standardized patient, in-person simulation, advanced health assessment, NP student, competency Abstract Confidence and competence in advanced nursing practice are essential for delivering patient-centered care. Many nurse practitioner students enter their clinical rotations with limited confidence in their advanced assessment skills, particularly during their first clinical year. This project aimed to develop a simulation-based learning experience that allows nurse practitioner students to practice advanced health assessment skills in a supportive, judgment-free environment. This setting enables students to ask questions, refine their techniques, and learn from mistakes before engaging with patients in a clinical setting. An extensive literature review was conducted to support the implementation of in-person simulations designed to enhance students' preparedness for clinical practice. Stakeholder feedback indicated high satisfaction with the simulations, and as a result, these in-person training sessions will continue to be integrated into the curriculum to better equip nurse practitioner students for their clinical experiences. The simulations had a positive impact on students' comfort levels and confidence in conducting advanced head-to-toe assessments across multiple body systems. By the end of the simulations, all students reported at least some level of confidence, with a significant number of them feeling fully confident in their abilities. This suggests that in-person simulations are an effective educational tool for enhancing clinical examination skills.

33. Christopher DeBoe and Courtney Mussleman

Project Title: Evidence-based practices for non-surgical and non-pharmacological management of musculoskeletal disorders: In Guatemalans with limited economic and educational resources.
Faculty Lead: Dr. Kristin Elmore
Content Expert: Dr. Bernadette Sobczak
Abstract: Many Guatemalans work in agriculture, have a low level of education, and live in poverty. Musculoskeletal disorders (MSK) are a prevalent occupational hazard in agriculture due to manual tasks. Exercise and physical therapy are often the first-line treatment for common musculoskeletal complaints. This project educated a Guatemalan medical mission team with limited resources on the best practices for the non-pharmacological and non-surgical management of their most encountered musculoskeletal disorders. The medical mission team completed an educational module on MSK differential diagnoses, red flags, and interventions. A pre and post-test was conducted to measure participants' baseline and post-module confidence and knowledge. Participant competency levels were improved by 22 percent. An electronic medical record was created with a drop-down menu to capture the prescribing of MSK exercises

and therapy aids. Sixty-seven interventions were prescribed. This project was the first of its kind for this medical mission. The project improved the confidence and knowledge of MSK disorders for medical mission team members. The project educational module and therapy aids will be utilized for future medical mission trips.

34. Justin Blythe

Project Title: Impact of Improving the Quality and Frequency of Stroke Education on an Inpatient Stroke Unit

Faculty Lead: Dr. Kristin Elmore

Content Expert: Dr. April Schmidt

Abstract: Early, high-quality stroke education in the acute setting leads to improved patient outcomes, health literacy, patient and family empowerment, and secondary stroke prevention upon discharge from the hospital. Lack of stroke education in the acute setting leads to missed opportunities for secondary prevention and health management. In today's healthcare environment, barriers exist in ensuring high-quality stroke patient education is initiated early in the acute setting. One barrier is the time available for nurses to sit down and educate their stroke patients at the bedside. This project utilized an electronic-based educational platform on an inpatient stroke unit which relieved the time burden on nurses to provide this crucial education to newly diagnosed acute ischemic stroke patients. Results showed that this new process improved patient understanding of the management of their new diagnosis, with 85.7% of patients who were surveyed demonstrating increased knowledge vs 14.3% with no improvement. Results also demonstrated that bedside nurses preferred this platform over traditional teaching methods. Limitations of the project include lower than anticipated patient volumes at the time of project implementation and difficulty in consistently utilizing the process change by all nurses on the unit. This quality improvement project was used to create a more efficient and effective method of patient education which can be used in the future to reduce nursing workload burden on other stroke units.

35. Evan Alling

Project Title: Increasing Colorectal Cancer Screening Rates Using Interactive Video Presentations

Faculty Lead: Dr. Kristin Elmore

Abstract: Colorectal cancer (CRC) is the second leading cause of cancer-related deaths in the United States, but early detection significantly improves survival rates. Despite the effectiveness of screening, participation remains suboptimal, particularly in rural communities. This project aimed to increase CRC screening rates through interactive video-based education in a rural primary care setting. Videos provided specific information, reduced screening-related anxiety, and facilitated direct scheduling and contacts for screening exams. The study was implemented at Jersey Community Hospital’s primary care clinic, utilizing artificial intelligence (AI)-generated videos

accessible via QR codes. Patients engaged with educational content, enabling informed decision-making regarding CRC screening options, including colonoscopy, sigmoidoscopy, and FIT-DNA testing. The project sought to improve screening adherence and participation by addressing barriers such as limited health literacy and provider communication time constraints. Preliminary findings suggest increased engagement with CRC screening resources. Future improvements include integrating scheduling capabilities within electronic medical records (EMRs) and expanding accessibility through multilingual content. This initiative demonstrates the potential of scalable, interactive education to enhance preventive healthcare efforts in underserved populations.

36. Courtney Howell and Jill Passwater

Project Title: Integrating Nutritional Education into Short Term Medical Mission Trips to Costa Rica

Faculty Lead: Dr. Bernadette Sobczak

Content Expert: Dr. Valerie Griffin

Abstract: Heart disease and diabetes are leading causes of death in the Central American nation of Costa Rica. The healthcare system struggles to meet the needs of patients with cardiovascular and non-communicable diseases in cities, but this is an even more significant problem for rural patients due to low resources. This project aimed to integrate and standardize dietary education for patients with diabetes and hypertension for an organization that performs regular short-term medical mission trips to Costa Rica. The quality improvement project was implemented in Costa Rica on a short-term medical mission in which medical professionals conduct wellness clinics. Local Costa Rican individuals attended the wellness clinics and received education based on results from their physical assessment. The project was evaluated by the total number of patients assessed versus those educated and by a qualitative post-project survey given to the medical professionals in the clinics. Of the 121 patients who attended, 46 patients met the criteria for education based on either their blood glucose or blood pressure. The survey for medical professionals showed positive feedback for ease of use, simplifying the language barrier, and benefiting the patient. This project identified health illiteracy and provided education to address common comorbidities. Limitations of the project include the language barrier and only adult participants. The short-term medical mission identified the need for a standardized practice and process for nutritional counseling of people with elevated blood glucose and blood pressure readings. Keywords: Costa Rica, Short Term Medical Mission Trips, Diabetes in Costa Rica, Cardiovascular disease in Costa Rica

37. Lana Keigley

Project Title: Establishing an Electronic Medical Record System for Global Medical Mission Trips

Faculty Lead: Dr. Bernadette Sobczak
Content Expert: Dr. Greg Jennings
Abstract: Despite providing annual patient care for fourteen years to one rural village in Honduras, only rudimentary paper medical documentation existed for one short-term global medical mission organization. A documentation system that allowed for secure, easy, and efficient documentation of a patient's medical history, health evaluation, treatment, and follow-up for identified diagnoses was needed. The project aimed to determine and address provider concerns about EMR adoption, improve continuity of care, and make care sustainable. Formal training on the use of the EMR began in November 2023. Policies, procedures, and healthcare provider training enhanced the assurance of patient healthcare confidentiality and quality documentation. Specific templates were developed by working closely with medical staff and nurses. Pilot trials of the new EMR were completed in December and January with fictional patient data to optimize the formatting for the system rollout in February 2024 in Honduras. Adopting an EMR achieved a secure process of medical record keeping that can be recycled and built upon year after year. The development of a user-friendly instruction manual was instrumental in implementing this project. This system can individualize templates for each user. It was advantageous to meet with each user to develop their template before the trip; although there were requests for modifications, they were quickly made operational. One challenge was late adopters. After implementing the system, we held a special meeting to review the EMR and discuss their specific template development. Overall, continuous collaboration and telehealth visits may be available in new modules.
Keywords: Short-term global medical mission, EMR, medical record documentation, continuity of care, sustainability, templates.

38. Kathryn Semon

Project Title: Preoperative Ostomy Education for New Ostomy Patients
Faculty Lead: Dr. Bernadette Sobczak
Content Expert: Dr. Mary Frazier
Abstract: Nearly one million people in the United States have ostomies, with approximately 100,000 new ostomies created annually. It is estimated that almost 30% of these new ostomy patients will experience postoperative complications, mainly in the first three months following surgery. This quality improvement project aimed to develop and deliver understandable preoperative information for patients scheduled to undergo ostomy surgery. This project was implemented in a central Illinois Colorectal Surgery clinic. Patients planned for ostomy creation or possible ostomy creation surgery were provided with an information packet about stoma care, supplies, support, and life with an ostomy at their preoperative clinic visit. A nurse provided and discussed this information with the patient at this appointment. A QR code was also provided in the packet so the patients could scan to watch a YouTube video that reviewed this information. A total of 10 patients completed a preoperative clinic visit. Patients received a short questionnaire

at their post-surgical clinic visit to evaluate the information provided. According to the ten-patient questionnaire feedback, 80% reported that their preoperative appointment was very helpful, and 70% reported that the pre-operative ostomy education was very helpful. The video was viewed 9 times. A post-project questionnaire was given to ostomy clinic staff, who provided positive feedback. This project successfully delivered preoperative information that was understandable to patients. Limitations included lulls in surgery scheduling, limited appointment time, and patients not scheduling postoperative visits for various reasons. In the future, scheduling and time restraints must be considered when providing this information. Keywords: ostomy, stoma care, preoperative ostomy education

39. Ada Malone

Project Title: Addressing Healthcare Provider Burnout in the Primary Care Setting
Faculty Lead: Dr. Bernadette Sobczak
Content Expert: D. Sheri Compton-McBride
Abstract: Healthcare provider burnout continues to be an ongoing phenomenon. It affects nearly half of all healthcare workers nationwide, resulting in poor patient outcomes, job destabilization, and high turnover rates, which place a significant burden on the nursing workforce and healthcare system. By recognizing the risk factors of burnout, organizations can address work-related factors and cultivate an environment of wellness for healthcare workers. The DNP project examines health provider burnout by identifying work-related factors within one large primary care organization. The Copenhagen Staff Burnout Inventory, a 19-item self-reported measure of work, personal, and client/patient burnout, was used to measure healthcare provider burnout. The inventory was distributed within a rural health organization employing 200 individuals, with 36 healthcare providers anonymously self-reporting levels of burnout over a 2-week period in July 2024. Copenhagen survey results revealed moderate to severe levels of burnout related to work (75%), personal (46%), and client or patient-centered (33%) experiences among healthcare providers. Several limitations to survey completion include time constraints, staff availability, schedule conflicts, and delays in project implementation. Strengths include addressing the topic of healthcare burnout, collecting formal data to quantify workplace burnout levels, and fulfilling the stakeholders' goal of creating and building a framework for workplace wellness initiatives. Survey findings will inform evidence-based strategies aimed at mitigating burnout and enhancing workplace well-being.

40. Katheryn Speaks

Project Title: Implementing Advanced Directive Counseling in the Primary Care Setting
Faculty Lead: Dr. Bernadette Sobczak
Abstract: Patient care in end-of-life situations oftentimes does not align with personal preferences and values surrounding death and dying. Limited time during face-to-face encounters with providers, lack of readiness to participate in advance care planning

(ACP) conversations, and avoidance of the topic due to its emotional sensitivity are a few barriers preventing discussion and documentation of patients' end-of-life care preferences. The purpose of this project was to educate patients on the benefits of ACP and begin conversations surrounding end-of-life care goals. Implementation of this quality improvement project took place in a suburban family practice clinic located in central Illinois. During the five-week implementation phase, patients who had appointments scheduled and met defined inclusion criteria, including an age over 60 years or a combination of two or more defined chronic health conditions, were electronically sent the Prepare for Your Care ACP educational pamphlet via the MyChart platform before their appointment. A short message accompanied the pamphlet and encouraged patients to review the educational material in preparation to discuss ACP with their PCP at their upcoming appointment. A total of 122 patients met eligibility criteria; however only 55% of these eligible patients had active MyChart accounts. Brief ACP discussions were held with 32 patients and 13 of those reportedly had completed ACP documents at home. This project was limited by patients' attitudes towards ACP and the inability to reach the target population electronically. Future intervention should utilize non-electronic means to effectively reach the target population.

41. Demarco Brownlee and Lindsey James

Project Title: The Development of a Nurse Practitioner Graduate School Mentorship Program

Faculty Lead: Dr. Bernadette Sobczak

Content Expert: Dr. Valerie Griffin

Abstract: Nurse practitioner graduate student burnout is increasing, and mentorship programs may help ease the transition from nurse to provider. Such programs are essential for building confidence, enhancing professional development, and improving clinical competence. Motivated by the success of a CRNA program and trends in national professional organizations, a graduate nursing program in Southern Illinois aims to develop a mentorship program for Family Nurse Practitioner (FNP) students. This quality improvement project seeks to enhance the FNP graduate student experience, improve retention rates, and foster collaboration within the profession. The program will be implemented at one of Illinois' top-ranked nursing schools, with participants consisting of current FNP graduate students and alumni. Two surveys were created for this project: an initial survey and a "Matchmaker" survey. The initial survey was designed to identify what outcomes potential mentors and mentees sought from a mentorship relationship. Surveys were distributed in June 2024 to 344 FNP program alumni and all first- and second-year FNP students and received 78 responses—15% from students and 85% from licensed APRNs. Results show that nearly all alumni and APRNs believe a mentorship program would have been beneficial during their graduate studies. Key preferences for a mentorship program that emerged were meetings that occurred every month, in-person meetings, and matching based on geographical location and gender. Further research with

larger sample sizes is needed to evaluate the program's success and the appropriateness of mentor-mentee pairings. The next phase will involve program implementation and outcome evaluation. Keywords: Mentorship, nursing, graduate, alumni, family nurse practitioner, mentorship program, transition to provider

42. Jennifer Durbin

Project Title: Leadership Wellness in Healthcare

Faculty Lead: Dr. April Schmidt

Abstract: High-stress environments place nurses in vulnerable positions for experiencing burnout (Stemley, 2022). Numerous factors contribute to this environment, including workplace violence, repeated exposure to pain and death, absence of leadership or leadership support, interpersonal conflicts, shift work, and staffing shortages (Stemley, 2022). The consequences of nurse burnout can affect not only the individual nurse but also the organization from a leadership and cultural perspective as well as the patients receiving care (Kelly et al., 2020). Burnout contributes to nurses leaving an organization or the nursing profession altogether. The nurse manager is especially vulnerable to burnout due to the demands of the duties attributed to the position (Ceravolo & Raines, 2019). Nursing leadership stability is linked to improved patient outcomes, highlighting the need to retain nurse leaders. However, many clinically competent nurses are promoted to leadership roles without formal training, which can lead to burnout due to the high stress associated with these positions (Spiva et al., 2020). Clinically competent nurses are often promoted to leadership positions without formal leadership training. This quality improvement project aimed to provide a wellness course on resiliency to leaders practicing in an acute care setting and measure compassion satisfaction and burnout levels before and after the intervention using the Professional Quality of Life (ProQOL) survey tool. Twenty-eight nursing leaders from a community acute care facility participated. Statistical analysis showed that the ProQOL survey mean score for burnout and compassion satisfaction had no clinical significance in pre-survey compared to post-survey scores. The compassion satisfaction score was 36.7 pre-intervention compared to a mean score of 36.8 (immediately following the intervention) and 37.8 (6 weeks post-intervention). The burnout mean score was 26 pre-interventions compared to a mean score of 25.5 (immediately following the intervention) and 24 post-survey (6 weeks post-intervention).

43. Jocelyn Lane-Prifti

Project Title: Tobacco Cessation in Patients Receiving Treatment for Opioid Use Disorder

Faculty Lead: Dr. Kristin Elmore

Abstract: Amidst the ongoing opioid epidemic occurring in the United States, greater understanding of the impact of the opioid crisis lends itself to improvement in and access to treatment resources and options. Tobacco use is another facet in the barriers to better

outcomes in treatment of OUD, and some evidence suggests that co-treatment of OUD and tobacco use facilitates positive results in OUD interventions. The purpose of this project was to assess attitudes and subjective perception of knowledge regarding tobacco use and cessation in 15 patients receiving treatment for OUD at the Medication-Assisted Recovery (MAR) Clinic in Jerseyville, Illinois, and using the results to determine the benefits of establishing a tobacco cessation program at the clinic. The format involved an educational component, a tobacco use and cessation brochure, and collection of identical 14-question Likert scale surveys prior to and after the distribution of the brochure to elucidate the change in attitudes toward tobacco use and cessation before and after reading the brochure. The pre-educational survey also contained a questionnaire that was used to collect qualitative information about the participants regarding their tobacco use. The results of the data from the surveys were analyzed by using the mean, median, mode, and standard deviation for each question, and were further studied using a paired two-tailed t-test to determine if the difference before and after educational intervention were statistically significant (p-value < .05). Though limited by small sample size, uniform patient population, subjective reporting, and time constraint, the results suggest significant changes in responses to eight of the 14 questions. These results imply potential success with implementation of a tobacco cessation program at the MAR Clinic.
Keywords: opioids, opioid use disorder, tobacco use, medication-assisted recovery

44. Laura Harmon and Rachel Hodo

Project Title: Intimate Partner Violence Education and Identification
Faculty Lead: Dr. Tracy Cooley
Content Expert: Dr. Allison Helmerichs
Abstract: According to the CDC, one in three women in the United States, has experienced rape, physical violence, and/or stalking by an intimate partner in their lifetime (2021). Despite this alarming statistic, intimate partner violence (IPV) remains a persistent public health crisis with no standardized approach to screening. This project aimed to address the initial steps in responding to IPV by focusing on provider education. Specifically, it sought to identify the educational needs of healthcare providers at the project site, develop an easily accessible educational presentation, and compile local IPV resources. Nursing staff and providers at the project site were sent a pre-survey link. A virtual education session was conducted and participants were provided with a post-survey to complete after viewing the presentation. Staff who participated in the pre-survey recognized the need for increased intimate partner violence (IPV) education and agreed additional training would be beneficial to their daily practice. Pre- and post-survey results found that 10% strongly agree and in the post-education survey 37.5% of respondents reported ‘strongly agree’. These results demonstrated a positive shift in perceived knowledge. Identified limitations of this study include small sample size and low survey completion rates. With the positive shift in post-survey responses, it was

demonstrated that by providing education, it is possible to make healthcare providers feel more comfortable when caring for survivors of intimate partner violence.

45. Anna Poirier

Project Title: Engaging Rural Family Practice Patients in Smoking Cessation
Faculty Lead: Dr. Bernadette Sobczak
Content Expert: Stacy Skelton
Abstract: Cigarette smoking remains the leading cause of preventable death and disability in the U.S. EHR data at one rural Wisconsin family practice clinic noted an above-average number of patients who smoke cigarettes. A standardized process to ask about tobacco use was lacking and there was frequent patient resistance to discussing smoking cessation. This quality improvement project sought to standardize the collection of tobacco use information, engage all cigarette smokers in cessation discussions, and offer evidence-based tobacco cessation interventions, including medications and/or referral to the WI Quitline. The population included one nurse practitioner's patients over two months. A standardized method to screen for tobacco use was implemented. The provider was trained on and utilized evidence-based smoking cessation discussion models and offered cessation interventions. The number of smokers seen, if a smoker engaged in cessation discussion, and if applicable, accepted referral to the WI Quitline and/or medication was recorded. A total of nineteen patients were cigarette smokers; thirteen engaged in tobacco cessation discussion and six refused. Five patients accepted medication, and one accepted a WI Quitline referral. Ultimately, the provider noted increased cessation discussions. However, resistance was met to the WI Quitline regarding concern for "government involvement." Limitations included an unavailable rooming medical assistant, a short implementation time, and a small sample size. It is reasonable to believe the provider will continue to perform enhanced monitoring for, discussion, and treatment of tobacco, which should lead to increased smoking cessation. Ideally, all clinic staff will engage in cessation efforts in the future. Keywords: smoking cessation, tobacco cessation, cigarette cessation, Quitline

46. Jocelyn Lane-Prifti

Project Title: Tobacco Cessation in Patients Receiving Treatment for Opioid Use Disorder
Faculty Lead: Dr. Kristin Elmore
Abstract: Amidst the ongoing opioid epidemic occurring in the United States, greater understanding of the impact of the opioid crisis lends itself to improvement in and access to treatment resources and options. Tobacco use is another facet in the barriers to better outcomes in treatment of OUD, and some evidence suggests that co-treatment of OUD and tobacco use facilitates positive results in OUD interventions. The purpose of this

project was to assess attitudes and subjective perception of knowledge regarding tobacco use and cessation in 15 patients receiving treatment for OUD at the Medication-Assisted Recovery (MAR) Clinic in Jerseyville, Illinois, and using the results to determine the benefits of establishing a tobacco cessation program at the clinic. The format involved an educational component, a tobacco use and cessation brochure, and collection of identical 14-question Likert scale surveys prior to and after the distribution of the brochure to elucidate the change in attitudes toward tobacco use and cessation before and after reading the brochure. The pre-educational survey also contained a questionnaire that was used to collect qualitative information about the participants regarding their tobacco use. The results of the data from the surveys were analyzed by using the mean, median, mode, and standard deviation for each question, and were further studied using a paired two-tailed t-test to determine if the difference before and after educational intervention were statistically significant (p-value < .05). Though limited by small sample size, uniform patient population, subjective reporting, and time constraint, the results suggest significant changes in responses to eight of the 14 questions. These results imply potential success with implementation of a tobacco cessation program at the MAR Clinic.
Keywords: opioids, opioid use disorder, tobacco use, medication-assisted recovery

Instructions for Peer Reviewers

As fellow DNP scholars, your insights are a valuable part of each other's learning process. Please use the Peer Evaluation Form to provide constructive feedback to your classmates.

- Rate the presentation using the 1–5 scale.
- Identify one key insight you gained from the presentation.
- Offer one suggestion that may help improve the project or presentation.

This process fosters mutual growth and contributes to a culture of excellence and collegiality in doctoral education. Your feedback is appreciated and should be returned at the close of the session.

Please rate the following criteria by selecting the appropriate score (1 = Needs Improvement, 5 = Excellent):

Criterion	1	2	3	4	5
Clear explanation of the project					
Engagement with the audience					
Contribution to nursing practice					
Overall quality of the presentation					

One thing I learned from this presentation:

_____

One suggestion for improvement:

_____

Instructions for Faculty Reviewers

Thank you for serving as a faculty evaluator for the Spring 2025 DNP Project Presentation Day. Your feedback is essential in supporting scholarly development and evaluating each student's application of evidence-based practice.

Please use the provided Faculty Evaluation Form to assess each scholar's presentation. Criteria include clarity, project relevance, methodological rigor, and overall professionalism. You are encouraged to provide both quantitative ratings and qualitative comments.

- Use the 1–5 scale to rate performance across each domain.
- Provide brief narrative feedback to highlight strengths and offer suggestions.
- Indicate whether the project should serve as a model for future cohorts.

Please rate the following criteria by selecting the appropriate score (1 = Needs Improvement, 5 = Excellent):

Criterion	1	2	3	4	5
Clarity of presentation and organization					
Relevance and rigor of project topic					
Application of evidence-based practice					
Analysis and interpretation of results					
Response to audience questions					
Professionalism and communication					

Overall Comments:

_____

Would you recommend this project as a model for future cohorts?

☐ Yes ☐ No ☐ With revisions