

# SCHOLARSHIP SYMPOSIUM

# 2026

HOSTED BY THE WEHRHEIM  
SCHOOL OF NURSING



**FRIDAY APRIL 24, 2026 8:00AM**  
**GORDINIER HALL • BOLGER CONFERENCE**  
**CENTER**

# PROGRAM

## 29TH ANNUAL SCHOLARSHIP SYMPOSIUM

7:30 Registration & Breakfast

8:00 Welcome: Dr. Cayleigh Minter WSON Faculty, Dr. Gail Gasparich- Provost

8:15 Keynote Address: Dr. Teresa Hartmann

9:15 Ashley Chrismer- MSN FNP Track Podium Speaker

9:30 Desiree Goodrich- MSN FNP Track Podium Speaker

9:45 Jessica Moore- MSN FNP Track Podium Speaker

10:00 Hannah Coldren- MSN FNP Track Podium Speaker

10:15 Break and Class Photo

10:30 Words of Encouragement- Dr. Daniel Wubah- President

10:30 Mary Carl- MSN FNP Track Podium Speaker

10:45 Roberto Holder-Orta- MSN FNP Track Podium Speaker

11:00 Na Wu-Arnold- MSN FNP Track Podium Speaker

11:15 Kerri Myer- MSN FNP Track Podium Speaker

11:30 Working Lunch - Poster Viewing

12:00 Poster Group A

12:30 Poster Group B

13:00 Matthew Morrison- MSN FNP Track Podium Speaker

13:15 Kyrsten Baysinger- MSN FNP Track Podium Speaker

13:30 Krystal Little- MSN FNP Track Podium Speaker

13:45 Diane Swartz- MSN FNP Track Podium Speaker

14:00 Melanie Kerstetter - MSN School Nurse Track Podium Speaker (pre-recorded)

14:15 Break

14:30 Jeryl Simon- MSN Nursing Education Track Podium Speaker

14:45 John McEntee- MSN FNP Track Podium Speaker

15:00 Recognition of Post-Master Students - Dr. Marc Harris- Dean of College of Science and Technology  
Awards and Closing

15:30 Reception at Raney Cellars (Sponsored by our Chapter of Sigma Theta Tau - Xi Chi



# POSTER SESSIONS

## PRESENTERS

### **Group A**

**12:00pm**

Kendall Grace Barrick

Kimberly Clark

Courtney Fackler

Nayat Hurtado Cristia

Chelsea Lentz

Adriana Prieto-Grave de Peralta

Kristyn Schnur

### **Group B**

**12:30pm**

Meghan Faria

Tamara Favier Pillot

Meagan Hall

Kristen Hossler

Morgan Miller

Payton Salsgiver

Kristina Weaver

Please join faculty in viewing the posters, and engaging with the presenters.

# Keynote Address: Dr. Teresa Hartmann



**Teresa Hartmann Ph.D, RN  
Assistant Professor**

**Wehrheim School of Nursing  
Faculty**



Teresa Hartmann, PhD, RN, graduated from Lancaster General Hospital School of Nursing with a Diploma in Nursing and an Associate of Science degree from Franklin and Marshall College in 1982. Fearing that a BSN would soon be required as entry into practice and she would lose her job, she enrolled in Millersville University's RN-BSN program, graduating in 1987. As a pre-hospital and Emergency Department nurse, she desired to learn more and enrolled in the MSN Clinical Nurse Specialist program in Burns, Emergency, and Trauma Nursing at Widener University, graduating in 1992. She then taught at the former St. Joseph Hospital School of Nursing and the former Lancaster College of Health Sciences. Over the years, Dr. Hartmann further held positions in Professional Development and Case Management in the Emergency Department. She started to teach as an adjunct professor at Eastern Mennonite University. She was offered a full-time faculty position with one caveat—she had to return to school to earn her PhD. Teresa attended Widener University to earn her PhD in Nursing Science in 2016. Her research agenda was focused on financial competency in nursing. That same year, Dr. Hartmann became a full-time faculty member at Millersville University and has taught in all of the nursing degree programs. Her passion is to ensure that healthcare providers are able to appropriately use evidence to provide high quality, cost-effective care.

Dr. Hartmann has been married to Eddy for 41 years and they have two children, Zac and Emily. Her favorite place to be is sitting on a beach.

Dr. Hartmann has served Millersville Nursing students for ten years, and looks forward to retirement at the conclusion of the 2026-2027 academic year. The Wehrheim School of Nursing is grateful for the time, knowledge, expertise, scholarship, mentorship, and friendship she has shared over the years. Thank you for everything. You leave behind a lasting legacy and will be missed terribly by colleagues, students, and alumni alike. Best of luck in your next chapter!

*Congratulations on Retirement Dr. Hartmann!*

# Enhancing Medication Safety Through Brown Bag Reviews: A Synthesis of Evidence on Polypharmacy Reduction in the Geriatric Population



**Kendall Grace Barrick BSN, RN  
MSN-FNP Track**

**Faculty Advisor:  
Dr. Michele Chronister**

**Background:** A frequent issue discovered during outpatient appointments and emergency department visits is a lack of understanding of medications, or patients being unaware of what medications they take. Without a comprehensive medication list and review there is an increased risk of polypharmacy, inappropriate medications, medication reactions, and adverse events. The purpose of this capstone project was to explore if using a brown bag medication review in adults older than 65 during outpatient visits with a nurse practitioner reduces polypharmacy, medication interactions, and improves patient safety.

**Methods:** The CINAHL, PubMed, Health Source, and Medline complete databases were searched for scholarly journal articles with date parameters 2015-2026. The Johns Hopkins Evidence Based Practice (EBP Model) evidence level and quality guide was used to evaluate articles.

**Results:** The overarching theme that emerged from the review and synthesis of the literature reflects that utilization of a brown bag medication review improves patient understanding of medications and adherence. It was also frequently noted that a comprehensive medication review identified potentially inappropriate medications according to the BEERS list and STOPP/START criteria. Identification of these medications can assist with discontinuation, aiding in the reduction of polypharmacy. It was also noted that removal of these inappropriate medications reduced adverse effects like falls and confusion, improving patient safety and improving outcomes.

**Conclusion:** The synthesis of evidence indicates that conducting a comprehensive medication review utilizing the brown bag method is an effective strategy for enhancing patient safety and optimizing clinical outcomes by reducing polypharmacy and minimizing potentially inappropriate medication use.

# Beyond the Black Boxed Warning: Examining Depression Outcomes in Patients Treated with Isotretinoin



**Kyrsten Baysinger BSN, RN  
MSN-FNP Track**

**Faculty Advisor:  
Dr. Cayleigh Minter**

**Background:** Severe acne is associated with psychosocial burden including depression, anxiety, social withdrawal, and diminished self-esteem. Isotretinoin is the most effective treatment for moderate-to-severe acne, but it carries a black boxed warning for psychiatric adverse effects of depression and suicidality leading to ongoing controversy and prescribing hesitancy. The purpose of this capstone project is to answer the following question: In adolescents and adults with moderate-to-severe acne, does treatment with isotretinoin, compared with baseline mood or no isotretinoin therapy, improve, worsen, or have no effect on depressive symptoms?

**Methods:** CINAHL, PubMed, and Wiley Online Library databases were searched for peer-reviewed scholarly articles. Inclusion criteria included English language research studies published within the last 10 years that evaluated depressive symptoms or psychiatric outcomes in patients receiving isotretinoin therapy. Systematic reviews, meta-analyses, cohort studies, prospective comparative studies were included. The Johns Hopkins Evidence-Based Practice Evidence Level and Quality Guide was used to evaluate articles, and the results were organized in an evidence table.

**Results:** The literature suggests that isotretinoin therapy does not appear to increase overall neuropsychiatric risk or worsen depression in most patients and may be associated with improved mood as acne severity improves. Several studies identify the importance of baseline mental-health screening and need for ongoing screening throughout therapy. Psychiatric risk is often associated with pre-existing mental-health conditions than with isotretinoin use alone.

**Conclusion:** Evidence supports the safe use of isotretinoin for moderate-to-severe acne when clinically indicated. Isotretinoin does not appear to independently worsen depressive symptoms for most patients. Regular screening of patients for depression and suicidality remain essential and, if necessary, providers should incorporate interdisciplinary collaboration to ensure safe and comprehensive care.

# Emergency Department-Initiated Buprenorphine and Its Impact on Treatment Engagement in Patients With Opioid Use Disorder



**Samantha Beck BSN, RN, CEN  
MSN-Nursing Leadership Track**

Faculty Advisor:  
Dr. Jessica Borthwick

**Background:** Opioid use disorder (OUD) continues to contribute to morbidity and mortality in the United States. Emergency departments (EDs) play a vital role in caring for these patients. Despite frequent ED visits, many OUD patients experience gaps in treatment initiation and follow-up care. The purpose of this capstone project is to evaluate whether ED-initiated buprenorphine, compared to usual symptomatic management, improves engagement in outpatient treatment.

**Methods:** A literature review was conducted using PubMed, MEDLINE, and CINAHL databases to identify peer-reviewed articles published between 2016 and 2026. The John Hopkins Evidence-Based Practice (JHEBP) model guided the evaluation of peer-reviewed articles, ensuring an accurate approach to evidence synthesis.

**Results:** High-quality evidence demonstrated that ED-initiated buprenorphine significantly improves engagement in outpatient treatment. Quality improvement and program evaluation studies supported the effectiveness of implementing buprenorphine in emergency department settings.

**Conclusion:** ED-initiated buprenorphine is an evidence-based intervention that improves treatment engagement in patients experiencing OUD. Implementing standardized protocols in the ED can enhance patient outcomes and support long-term recovery.

# GLP-1 Receptor Agonists and Increased Anxiety Risk in Perimenopausal Women



**Mary Carl BSN, RN, PCCN  
MSN-FNP Track**

Faculty Advisor:  
Dr. Cayleigh Minter

**Background:** Glucagon-like peptide-1 (GLP-1) receptor agonists are currently popular in primary care prescribing. They are sought after to help those with type 2 diabetes, weight management, and several other conditions. Due to the increased prescribing of these medications, there have been several studies seeking to further understand the associated side effects. A specific example of a side effect that is being studied is whether or the use of these drugs is associated with an increase of anxiety in those with underlying anxiety disorders. The purpose of this capstone project was to determine whether, in perimenopausal women with a history of anxiety, does the use of GLP-1 receptor agonists, compared with those not using GLP-1 medications, lead to an increased incidence or severity of anxiety symptoms within 6-12 months of treatment initiation?

**Methods:** The PubMed, APA PsychInfo, CINAHL and Medline databases were used to search for scholarly articles with date parameters of 2021- 2026. The Johns Hopkins Evidence-Based Practice Evidence Level and Quality Guide was used to evaluate articles. The inclusion criteria included women and anxiety; exclusion criteria: published greater than five years old and non-English language.

**Results:** Themes identified that some GLP-1 agonists can increase anxiety, usually within the first several weeks of initiation and then typically resolve. Higher percentages of psychiatric adverse effects of GLP-1 agonists were found in women, according to retrospective pharmacology databases, menopausal states do lead to an increase of anxiety for women.

**Conclusion:** There is a small correlation with an increase of anxiety for those who are GLP-1 agonist naïve in the female population. This is not the case with every patient, but research showed that the frequency was statistically higher with women than with men. Whether or not the patient has a history of anxiety should be considered when prescribing GLP-1 agonists.

# Standardizing the HEART Score in Urgent Care: An Evidence-Based Practice Initiative to Improve Chest Pain Risk Stratification and Reduce Emergency Department Referrals



**Ashley Chrismer BSN, RN**  
**MSN-FNP Track**

Faculty Advisor:  
Dr. Jessica Borthwick

**Background:** Acute chest pain is a common complaint seen in urgent care settings, which often results in referrals to the emergency department (ED). There is inconsistency between providers' judgments that may result in unnecessary referrals to the ED, increased healthcare costs, and the unwarranted utilization of resources. The HEART score is a validated risk stratification tool used in emergency departments to identify patients who are low risk for major adverse cardiovascular events (MACE).

**Methods:** A literature review of the CINAHL Complete, PubMed, and Medline Complete databases was conducted for peer-reviewed scholarly journal articles with date parameters of 1/2016-1/2026. The Johns Hopkins Evidence-Based Practice Evidence Level and Quality Guide was used to evaluate articles relevant to the use of HEART scores in evaluating acute chest pain.

**Results:** Five main themes emerged from the literature: High sensitivity and safety, with low MACE rates with the use of the HEART Score; reduction in hospital admissions; improved risk stratification compared to variable clinical judgement, the importance of provider adherence when implementing a risk stratification tool; and limited data related to specific use in the urgent care setting.

**Conclusion:** Standardized implementation of the HEART Score for patients presenting with acute chest pain in urgent care settings supports safely reducing unnecessary referrals to the emergency department compared to the inconsistency of clinical judgment of providers. Additional research in the urgent care setting is recommended to evaluate outcomes outside the emergency department to validate safety and resource utilization.

# Improving Outcomes in Disparate Diabetic Populations



**Kimberly Clark BSN, RN  
MSN-FNP Track**

Faculty Advisor:  
Dr. Michele M. Chronister

**Clinical Question:** Can community-based health interventions reduce preventable hospitalizations compared with usual care in underinsured or uninsured working adults younger than 65 with diabetes over a five-year period?

**Background:** Disparate diabetic populations experience significantly poorer health outcomes due to barriers such as lack of insurance, low socioeconomic status, lower levels of education, and cultural and language challenges.

**Methods:** Databases were searched, articles were reviewed and 23 were selected.

**Analysis:** Findings were consistent across all studies that these interventions were effective.

**Conclusion:** These findings provide practical, evidence-supported guidance for primary care providers seeking to improve outcomes among highly underserved diabetic populations.

# The Effects of Coenzyme Q10 Supplementation on Insulin Resistance and Glycemic Control in Adults: A Review of the Evidence



**Hannah Coldren BSN, RN  
MSN-FNP Track**

**Faculty Advisor:  
Dr. Michele Chronister**

**Background:** Insulin resistance is a hallmark finding of multiple metabolic diseases including type 2 diabetes. Increased lack of physical activity and obesity within the United States has led to a growing portion of the population being undiagnosed or within the early stages of insulin resistance. Current practices offer guidance on improving glycemic control after diabetes has been diagnosed but provide little guidance on adjunctive interventions targeting insulin resistance in its early stages. The purpose of this capstone project was to evaluate and synthesize current evidence regarding the question: In adults with insulin resistance, does Coenzyme Q10 supplementation, compared to placebo, reduce insulin resistance and improve glycemic control?

**Methods:** A database search was completed on CINAHL, PubMed, and MedLine in January and February of 2026 for scholarly journal articles published between 2019 and 2026. The Johns Hopkins Evidence-Based Practice Evidence Level and Quality Guide was used when evaluating the articles.

**Results:** The reviewed evidence suggests that CoQ10 supplementation improved insulin resistance and glycemic control in those with type 2 diabetes or PCOS. However, therapy dosing and duration were inconsistent and showed that individuals on statin therapy do not benefit from CoQ10 supplementation for improving glycemic control and insulin resistance.

**Conclusion:** Current evidence suggests that CoQ10 supplementation may be beneficial as an adjunctive therapy for improving glycemic control in adults by reducing fasting blood glucose, fasting insulin, HbA1C, and HOMA-IR levels/scores. However, more high-quality randomized controlled trials are needed to further establish optimal dosing, long-term safety and efficacy, and outcomes among different populations.

# School Playground Safety Interventions: Evidence for Structured Recess and Injury Prevention



**Nicole Coyne BSN, RN  
MSN- School Nurse Track**

Faculty Advisor:  
Dr. Jessica Borthwick

**Background:** Playground injuries remain a significant concern among elementary school students, with falls and equipment-related incidents occurring most frequently during recess. These injuries can result in emergency department visits, missed school days, and potentially long-term consequences. The purpose of this capstone project was to answer the following question: In elementary school students, how does a structured playground safety program, compared to current or unstructured recess practices, affect students' safety behaviors and the rate of playground-related injuries?

**Methods:** A comprehensive literature review was conducted using CINAHL, Medline, and PubMed using EBSCO. Searches were limited to peer-reviewed articles published between 2016 and 2026. Keywords included "playground safety," "elementary school students," "injury prevention," and "safety education." Quantitative, qualitative, mixed-methods, and systematic review studies were included. The Johns Hopkins Evidence-Based Practice (JHNEBP) Evidence Level and Quality Guide was used to appraise the level and quality of evidence.

**Results:** The literature consistently shows that structured recess programs and safety education interventions improve students' safety behaviors during recess. Interventions that included staff training, clear safety rules, and environmental modifications were most effective. Barriers identified included limited resources, inconsistent supervision, and insufficient staff training. Overall, findings support the implementation of structured, evidence-based playground safety programs to reduce risk behaviors and promote safer play environments.

**Conclusion:** Evidence suggests that structured recess and safety education programs positively influence student safety behaviors and may reduce the risk of playground injuries. Implementing interventions with strong staff involvement is essential for sustainability. School nurses and educators play a critical role in promoting safe, active play while balancing developmental needs and injury prevention.

# Are the Bugs Still Bugging You? School Nurse-Led Interventions to Reduce Head Lice Prevalence and Improve Preventive Behaviors in Elementary Students



**Courtney Fackler BSN, RN, CSN  
MSN-School Nursing Track**

**Faculty Advisor:  
Dr. Michele Chronister**

**Background:** Are the Bugs Still Bugging You? addresses a common concern of recurrent head lice infestations in elementary schools and their effects on students, parents, teachers, and the school community. Although evidence-based clinical guidelines exist, school policies and practices for lice infestation and management vary across schools, exposing a gap in practice and knowledge. This capstone project addresses the question: In elementary school students, does a school nurse-led head lice education program combined with structured parent communication, compared to usual school practices, reduce the prevalence of head lice infestation and improve preventive behaviors?

**Methods:** This capstone project used an extensive search strategy across the CINAHL and PubMed databases, focusing on peer-reviewed journal articles published from 2016 to 2026, with specific inclusion and exclusion criteria. Studies were evaluated using the Johns Hopkins Evidence-Based Practice (JHNEBP) model to support a methodological approach to synthesis.

**Results:** Three main themes were identified from the synthesis: the prevalence and management of head lice infestations; the impact of educational interventions on awareness, knowledge, and preventive behaviors among students, parents, and staff; and the effectiveness of school-nurse interventions to reduce the recurrence of head lice infestations and associated stigma.

**Conclusion:** The key takeaway of this capstone project is that school nurse-led education and structured parent communication can increase awareness, knowledge, and improve attitudes regarding head lice prevalence and preventive behaviors. This capstone project identified the need for more research on long-term outcomes and impacts on the school community.

# Improving Recognition of Perimenopause in Primary Care: A Comprehensive Evidence-Based Review of Standardized Screening Practices



**Meghan Faria BSN, RN  
MSN-FNP Track**

Faculty Advisor:  
Dr. Michele Chronister

**Background:** Perimenopause is a common transition in midlife women that can cause physical and emotional symptoms affecting quality of life. Despite how frequently these symptoms occur, they are often not recognized in primary care due to inconsistent screening and symptom variability (Santoro et al., 2021). Many symptoms overlap with chronic disease management, which can make identification more difficult for clinicians. Delayed recognition may lead to prolonged symptom burden and delayed treatment. The purpose of this evidence-based practice review was to determine whether standardized screening for perimenopause improves symptom recognition and management in primary care.

**Methods:** A literature search was conducted using CINAHL, PubMed, and Cochrane databases. Studies published within the last 10 years were evaluated using the Johns Hopkins Evidence-Based Practice appraisal tools. Fifteen articles met inclusion criteria.

**Results:** Evidence showed that perimenopausal symptoms are diverse and frequently overlooked during routine visits. Structured assessment tools improved symptom recognition and supported earlier clinical discussion and management.

**Conclusion:** The evidence supports incorporating structured symptom screening into primary care visits for women aged 40–55. Earlier identification may improve patient education, treatment decisions, and overall quality of care.

# Vaccination Uptake in School-Aged Children in Community Primary Care: High-Yield Family Nurse Practitioner Strategies

**Background:** Childhood vaccination remains one of the most effective preventive health interventions; however, vaccination uptake among school-aged children continues to be inconsistent in many community primary care settings in the United States. Missed opportunities during office encounters, fragmented follow-up, and increasing parental hesitancy further contribute to lower vaccination uptake. These gaps are clinically important because they increase the risk of vaccine-preventable illness, school absenteeism, and avoidable healthcare utilization. Family nurse practitioners (FNP) are well positioned to implement practical, evidence-based strategies that improve vaccination uptake while maintaining family-centered communication and trust. The clinical question guiding this capstone project was: In school-aged children receiving care in community primary care settings, how does an FNP-led, structured vaccination promotion strategy, compared with standard care, influence vaccination uptake?

**Methods:** A literature search was conducted in PubMed, MEDLINE, CINAHL, Cochrane Library, Scopus, and PsycINFO during February and March 2026 for studies published from 2021 to 2026, with supplementary grey literature and citation searching. Search terms combined vaccination uptake, school-aged children, primary care, reminder or recall, and nurse-led interventions. Inclusion criteria were English-language human studies, randomized controlled trials, and systematic reviews. Evidence was selected using a PRISMA-informed process, then appraised using the Johns Hopkins Evidence-Based Nursing Evidence Level and Quality Guide.

**Results:** The search identified 360 records. After removal of duplicates, screening, and eligibility review, 15 sources were included in the final synthesis. Evidence supported reminder or recall interventions (especially short message service-based outreach), standing orders, and presumptive clinician recommendation as high-yield strategies for improving vaccination uptake and timeliness.

**Conclusion:** The main takeaway from this project is that FNPs can improve vaccination rates in school-aged children by using organized, evidence-based strategies in primary care. Approaches such as reminder or recall systems, standing orders, and routine vaccine recommendations can help children receive vaccines on time, reduce missed opportunities, and support more equitable care across families and communities.



**Tamara Favier Pillot BSN, RN  
MSN-FNP Track**

Faculty Advisor:  
Dr. Cayleigh Minter

# Resistance Training vs. Weight Loss for Reducing Dementia Risk in CAIDE-identified High-Risk Adults: A Comprehensive Review of Evidence-Based Practices



**Desiree Goodrich BSN, RN  
MSN-FNP Track**

Faculty Advisor:  
Dr. Cayleigh Minter

**Background:** Dementia risk is strongly associated with metabolic syndrome, cardiovascular risk factors, insulin resistance, and unfavorable body composition patterns. The Cardiovascular Risk Factors, Aging, and Incidence of Dementia (CAIDE) Risk Score is a validated tool for identifying adults at elevated long-term risk of dementia. Traditional prevention strategies emphasize weight loss and reductions in body mass index (BMI); however, emerging evidence suggests that lean muscle mass and muscle quality may be more predictive of metabolic and cognitive outcomes than BMI alone. The purpose of this evidence-based practice synthesis was to evaluate whether structured resistance training programs designed to increase lean muscle mass are more effective than weight loss focused on BMI reduction for lowering dementia risk scores and reducing metabolic pathways associated with type III diabetes in adults aged 45-75 identified as high risk by the CAIDE Dementia Risk Score.

**Methods:** An evidence review was conducted using specific databases, search terms, and article selection. Peer-reviewed systematic articles, randomized controlled trials, quasi-experimental studies, and high-quality narrative reviews were all organized and synthesized. The articles selected focused on resistance training, aerobic exercise, body composition, insulin resistance, CAIDE Dementia Risk Scoring, and cognitive outcomes. Studies were appraised using the John Hopkins Nursing Evidence-Based Practice (JHNEBP) tools. Evidence included dementia risk prediction studies, exercise intervention trials, and metabolic-cognitive reviews.

**Results:** Major themes showed that resistance training and multidomain exercise programs improve executive cognitive function, muscle quality, insulin sensitivity, and metabolic brain signaling. Randomized trials have demonstrated cognitive benefits of resistance training that are independent of weight loss. Multidomain lifestyle interventions reduced CAIDE Dementia Risk Scores in high-risk adults. Multiple studies reported that muscle quality and muscle-to-fat ratios were more strongly associated with brain structure and metabolic risk than BMI alone. Evidence also indicates that exercise improves brain insulin sensitivity and supports mechanisms linked to reduced risk of type III diabetes. Weight loss alone showed inconsistent associations with late-life cognitive protection.

**Conclusion:** Evidence supports structured resistance training and sarcopenia prevention-exercise as key strategies for dementia risk reduction in CAIDE-identified high-risk adults. Muscle quality and mass appear to be more clinically meaningful targets than BMI reduction alone. Nurse practitioners should incorporate resistance training programs, body composition awareness, and multidomain exercise and lifestyle interventions into dementia prevention strategies.

# Fueling the Transition: The Role of Evidence-Based Nutritional Strategies in Restoring Hormonal Balance and Managing Symptoms During Menopause



**Meagan Hall BSN, RN  
MSN-FNP Track**

Faculty Advisor:  
Dr. Cayleigh Minter

**Background:** Menopause causes estrogen decline, leading to vasomotor and other symptoms that can negatively impact quality of life (QOL). Many women seek natural diet-based remedies for these imbalances. The purpose of this capstone project was to answer the following question: In menopausal women experiencing estrogen imbalances which nutrition modification is most impactful on hormone balance and symptom management?

**Methods:** A systematic review (2021–2026) of CINAHL, Medline, and ScienceDirect was utilized for high-level evidence (systematic reviews and randomized controlled trials) on dietary interventions for menopausal symptoms. Once duplicates were removed, articles were screened based on their focus on nutritional interventions and estrogen balance related to menopausal symptoms, excluding studies that involved hormone therapy, post-cancer menopause population or low quality evidence. Eighteen final articles were reviewed using the Johns Hopkins EBP Level and Quality Guide. An evidence table is provided.

**Results:** Phytoestrogens and plant-based diets emerged as the most beneficial nutrition modifications. Meta-analyses found that isoflavones, particularly soy and red clover, significantly reduced daily hot flashes and vaginal dryness. Comprehensive reviews frequently revealed that plant-derived supplements (soy, red clover, etc.) improve overall menopausal symptom scores, also including hot flashes. In one RCT, a low-fat vegan (soy-rich) diet noticeably reduced hot flashes. Probiotic supplementation also exhibited large improvements in total menopausal and vasomotor symptom scores. In contrast, several supplements (e.g. cassis polyphenol) exhibited no benefit.

**Conclusion:** Dietary modification centering around whole plant foods and phytoestrogen-rich foods (e.g. soybeans, legumes, whole grains) seem most effective for restoring hormone balance and relieving menopausal symptoms. These nutritional interventions, often paired with weight loss, markedly reduce hot flashes and improve overall well-being. Incorporating evidence-based supplements (phytoestrogens, probiotics) may further boost symptom relief. Healthcare providers should consider recommending these nutrition approaches as part of comprehensive menopause care

# The Impact of Cultural Health Screenings on Improving Blood Pressure Control and Self-Management in African American Adults With Hypertension



**Roberto Holder Orta BSN, RN  
MSN-FNP Track**

Faculty Advisor:  
Dr. Cayleigh Minter

**Background:** Hypertension is a significant global health problem, and its effective management remains a daily concern for healthcare providers. The African American population is disproportionately affected, particularly individuals aged 40 and older. This group requires tailored approaches to care that account for cultural considerations, self-management practices, and unique perspectives related to health and illness. The author investigates whether health screenings that incorporate culturally relevant factors, compared with standard health screenings, lead to improved blood pressure control and enhanced self-management among African American patients.

**Methods:** A comprehensive search strategy was used across multiple databases such as CINAHL and PUBMED/MEDLINE, focusing on scholarly articles from 2021 to 2026. Evidence in fifteen sources were found. The evidence found provided more information on how cultural factors, when properly addressed, can influence better blood pressure control in the African American population over 40 years of age. Was worked with the Johns Hopkins Evidence-Based Practice Evidence Level to evaluate the evidence.

**Results:** Among the fifteen sources reviewed, it was found that the way African Americans over 40 perceive having hypertension does not change significantly as a group, and most believe that simply changing eating habits is more beneficial than using medication to control blood pressure. On the other hand, the use of health screening, along with cultural factors, yielded positive results in controlling blood pressure and reducing blood pressure-related complications.

**Conclusion:** Health screening together with cultural factor is a great indicator to improve blood pressure control and self-management in African Americans..

# Optimizing Endometriosis Care with Anti-Inflammatory Nutrients



**Background:** Traditionally, management of the symptoms of endometriosis include hormonal medications and abdominal surgery. A holistic approach is warranted for women trying to conceive or who want a natural management option for a better quality of life with endometriosis. This capstone project focuses on utilizing a non-inflammatory diet to aid in the management of symptoms associated with endometriosis.

**Methods:** The PubMed, Science Direct and CINAHL databases were searched for scholarly journal articles with date parameters from 2020-2025. Inclusion and exclusion criteria were applied, including peer-reviewed and English language. The Johns Hopkins Evidence-Based Practice Evidence Level and Quality and guide was used to evaluate the articles. There were 13 articles used in total, ranging in levels and quality of evidence, provided in an evidence table.

**Results:** There were three themes identified. The themes included supplements, diets, and individual nutrients to aid in the management of pain and improve quality of life for women with endometriosis. Evaluation of the dietary changes were evaluated via quality of life, and symptom surveys.

**Conclusion:** The key takeaways from the article reviews and literature synthesis include low inflammatory diets, food, and specific nutrients reduce inflammation in the body, thus aiding in the management of endometriosis associated pain. Despite advances in the management of endometriosis and other inflammatory diseases, there remains a significant educational gap among healthcare providers regarding holistic treatment measures including dietary modifications that may improve patient outcomes and quality of life.

**Kristen Hossler BSN, RN  
MSN-FNP Track**

Faculty Advisor:  
Dr. Cayleigh Minter

# Evaluating Early Postpartum Depression Screening and Education Programs for Mothers and Fathers and Their Effects on Family and Infant Outcomes



**Nayat Hurtado Cristia BSN, RN  
MSN-FNP Track**

Faculty Advisor:  
Dr. Jessica Borthwick

**Background:** Postpartum depression (PPD) affects both mothers and fathers and is associated with impaired parental mental health, disruptions in family functioning, and adverse infant developmental outcomes. Despite clinical guidelines recommending routine screening, implementation remains inconsistent, particularly for fathers. The purpose of this capstone project was to answer the following question: Among postpartum families with infants younger than 12 months, does universal routine screening combined with structured education for postpartum depression, compared with usual postpartum care, improve parental mental health, family functioning, and infant developmental outcomes?

**Methods:** PubMed and CINAHL databases were searched for peer-reviewed scholarly articles published between 2021 and 2025. Search terms included postpartum depression, paternal postpartum depression, screening, education, digital interventions, and mHealth. Clinical guidelines and systematic reviews were also examined. Evidence was evaluated using the Johns Hopkins Evidence-Based Practice Evidence Level and Quality Guide.

**Results:** The literature consistently supports the effectiveness of early screening, cognitive behavioral therapy, and digital or mHealth interventions in reducing depressive symptoms. Evidence further highlights the importance of including fathers in screening and educational strategies. Findings suggest that integrated screening and education may improve parental psychological outcomes and potentially enhance family and infant outcomes.

**Conclusion:** Universal routine screening combined with structured educational interventions represents a promising family-centered strategy to address postpartum depression. Integrating these practices into standard postpartum care may improve parental mental health and support healthier family and developmental outcomes.

# Anxiety Screening in Secondary School-Aged Students with Recurrent Somatic Complaints: An Evidence-Based Practice Analysis



**Melanie Kerstetter BSN, RN, CSN  
MSN School Nurse Track**

**Faculty Advisor:  
Dr. Cayleigh Minter**

**Background:** Secondary school nurses frequently encounter students with generalized, subjective complaints such as headache, stomachache, nausea, dizziness, fatigue, and unexplained pain, often repeatedly, with no clear cause. These symptoms are often linked to underlying mental health issues including stress, anxiety, and depression. Despite this association, no protocol exists for conducting mental health screening for students with these issues. Early recognition of common mental health disorders such as anxiety is critical, as delayed diagnosis and treatment can lead to other negative outcomes and decreased wellbeing. Providing secondary school nurses with evidence-based screening protocols could facilitate timely recognition and intervention.

**Methods:** A thorough search was performed within CINAHL, PubMed, MEDLINE, and APA PsycInfo databases to identify English-language, peer-reviewed studies related to anxiety screening for secondary students with recurrent somatic complaints published between 2020 and 2026. The Johns Hopkins Evidence-Based Practice Guide for Nurses was used to evaluate and synthesize articles, assessing evidence quality and relevance to school nursing practice.

**Results:** Evidence supports using brief, validated screening tools to identify anxiety and emotional distress in students with recurrent somatic complaints. Several tools were identified as reliable and appropriate for school use. School nurses are well-positioned to play a key role, but structured protocols, training, and collaboration with school staff are needed. Early identification facilitates timely intervention and may improve student wellbeing. Research gaps remain regarding best practices for secondary school settings and the role of school nurses.

**Conclusion:** No single anxiety screening tool was identified as superior; however, brief, validated tools such as the Generalized Anxiety Disorder Assessment-7 (GAD-7) and Distress Questionnaire-5 (DQ5) are promising for school use. Implementing protocols and training for school nurses can improve early identification and intervention, supporting student mental health and wellbeing. Further research should seek to establish best practices and improve screening in secondary schools.

# Beyond the Prescription: Redefining PCOS Care Through Provider-Led Management



**Background:** There is a need for patient-centered, holistic standards beyond medication for Polycystic Ovary Syndrome (PCOS).

**Methods:** Systematic review of the EBSCO, PubMed, and Scopus databases.

**Results:** Medication-only management was associated with poor outcomes. Comprehensive management led to significant improvements. Both patients and providers identified system-level barriers.

**Conclusion:** Provider-led, multidisciplinary management of PCOS offers clear advantages over medication-only treatment, resulting in improved patient outcomes and reduced symptom burden

**Chelsea Lentz BSN, RN, CCRN  
MSN-FNP Track**

Faculty Advisor:  
Dr. Jessica Borthwick

# Integration of Technology-Assisted, Measurement-Guided Interventions in Adult Primary Care: Effects on Identification, Symptom Severity, Adherence, and Access for Anxiety and Depression



**Krystal Little BSN, RN  
MSN-FNP Track**

Faculty Advisor:  
Dr. Michele Chronister

**Background:** Depression and anxiety are highly prevalent mental health conditions in primary care environments, yet frequently remain underrecognized and undertreated despite national screening recommendations. Technology-assisted, measurement-guided approaches have been developed to improve symptom identification, monitoring, and treatment support for adults in primary care.

**Methods:** A literature review was conducted using PubMed, CINAHL, and APA PsycNET to identify peer-reviewed studies published in the past five years. Search terms included primary care, digital mental health, telehealth, collaborative care, measurement-based care, depression, and anxiety. Sources included randomized controlled trials (RCTs), systematic reviews, observational and qualitative studies, and national clinical guidelines. The Johns Hopkins Nursing Evidence-Based Practice (JHNEBP) model was applied to appraise the quality of the evidence.

**Results:** Evidence supports technology-assisted, measurement-guided interventions, including collaborative care models, digital cognitive-behavioral therapy, symptom-tracking tools, and integration of telepsychiatry within primary care. RCTs demonstrated improved patient engagement, increased access, and reductions in depression and anxiety symptoms, especially among underserved populations.

**Conclusion:** Integrating technology-supported, measurement-guided approaches into adult primary care improves identification and management of depression and anxiety, reduces symptom burden, and improves treatment adherence.

# The Impact of Standardized Interprofessional Education on Communication and Collaborative Practice Readiness in Undergraduate Nursing Students



**Almina Masic BSN, RN  
MSN-Nursing Education Track**

**Faculty Advisor:  
Dr. Jessica Borthwick**

**Background:** Effective interprofessional collaboration is essential for safe, high-quality patient care, yet undergraduate nursing programs often rely on non-standardized educational practices that provide inconsistent experience to interprofessional learning. Standardized interprofessional education (IPE), including simulation, team-based learning, and structured collaborative activities, has been proposed as a strategy to strengthen nursing students' readiness for collaborative practice and communication. This review integrates current evidence to determine whether implementing standardized IPE, compared with non-standardized or traditional education practices, improves readiness for collaborative practice and communication among undergraduate nursing students.

**Methods:** A comprehensive literature search was conducted across CINAHL, ScienceDirect, and PubMed, limited to 2016-2025. Search terms included combinations of interprofessional education, undergraduate nursing students, collaborative practice, teamwork and communication. The study selection and identification followed the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) guidelines. From the retrieved literature, 16 reports met the inclusion criteria. Eligible studies included undergraduate nursing students or mixed health-profession groups with reportable nursing outcomes and assessed standardized IPE interventions. All studies were appraised using the Johns Hopkins Nursing Evidence-Based Practice (JHNEBP) Appendix E and F tools.

**Results:** Standardized IPE consistently improved nursing students' readiness for collaborative practice and communication. Simulation-based IPE demonstrated the strongest effects, with meta-analytic findings showing significant improvements in teamwork and communication. Quasi-experimental and mixed methods studies reported improvement in RIPLS scores, interprofessional communication skills, role understanding and collaborative competency. Students described increase in confidence, better understanding of professional roles, and improved ability to engage in team-based decision making.

**Conclusion:** Findings from the reviewed literature indicate that standardized IPE enhances undergraduate nursing students' readiness for collaborative practice and communication more than non-standardized or traditional approaches. The evidence supports integrating standardized IPE into undergraduate nursing curricula to better prepare students for effective interprofessional collaboration and communication in modern healthcare.

# Nurse Practitioner Treatment in the Out-of-Office Setting to Reduce Emergency Department Utilization



**John McEntee BSN, RN, CEN  
MSN-FNP Track**

Faculty Advisor:  
Dr. Michele Chronister

**Background:** Emergency department utilization for the treatment of non-urgent medical conditions is a global issue. Countries around the world have developed systems to reduce emergency department utilization by having physicians and advance practice providers assess and treat patients in the out-of-office setting. This capstone project seeks to explore how nurse practitioners could work in the out-of-office setting, asking the question: in community-dwelling adults who require medical assessment for acute medical concerns, does early nurse practitioner-delivered assessment and treatment in the out-of-office setting such as a patient's home, in conjunction with 911 systems, compared to usual practice, reduce emergency department visits and improve clinical outcomes?

**Methods:** A guided search was conducted within PubMed, MEDLINE, and HealthSource databases looking for articles published between 2015 to 2025. The Johns Hopkins Evidence Based Practice Models for Nursing and Healthcare Professionals Evidence Appraisal Tool was used to evaluate each article on level and quality of research.

**Results:** The following themes were identified during the synthesis: Patient access for out-of-office medical care, nurse practitioners as quality medical providers, a desire to innovate how patient care is delivered, and how out-of-office access decreased emergency department utilization. Patient and provider surveys along with quantitative results confirmed that out-of-office models are effective and that nurse practitioners provide high level patient care.

**Conclusion:** Other countries have demonstrated that systems where primary care providers are involved in delivering out-of-office care, whether through a patient referral line or in conjunction with 911 systems, is not only possible but easily achievable.

# Improving Chronic Wound Care: Provider Initiated Dietary Interventions



**Morgan Miller BSN, RN  
MSN-FNP Track**

Faculty Advisor:  
Dr. Cayleigh Minter

**Background:** Chronic wound care and management is a complex process that often encompasses more than just the physical treatment of the wound. There is a large correlation between a patient's nutrition status and their ability to heal. This capstone project explores that relationship and addresses the question: In patients with chronic wounds, what is the best primary care initiated dietary measure that can be implemented to optimize wound healing?

**Methods:** The systematic review employed a comprehensive search strategy across PubMed, Science Direct, and MEDLINE complete databases, targeting scholarly articles from 2010-2025. The Johns Hopkins Evidence Appraisal tool was used as a guide to evaluate various articles and ensure a thorough approach to evidence synthesis.

**Results:** Macronutrients, like protein, and micronutrients, like Vitamins A, B, C, and Zinc, are linked to enhanced wound healing abilities. Malnutrition is associated with increased complications and infections. A patient who is nutritionally supported correlates with increased wound-healing rates and better overall patient outcomes.

**Conclusion:** The key takeaway is the profound influence of nutritional status on wound healing. Maintaining proper nutrition is essential for achieving positive outcomes in patients with chronic wounds. Therefore, assessment and optimization of nutritional status should be integrated as part of a comprehensive treatment plan for patients with chronic wounds. Clinical Question: In patients with chronic wounds, what is the best primary care initiated dietary measure that can be implemented to optimize wound healing?

# Enhancing Transition-to-Practice: The Role of Formal Mentorship Supporting Newly Graduated Nurse Practitioners



**Background:** Newly graduated nurse practitioners (NPs) often face significant challenges in clinical competence development, role transition, and job satisfaction during their first year. Addressing these issues is crucial for healthcare quality and workforce stability, making this topic highly relevant for nursing educators, healthcare administrators, and researchers.

**Methods:** A systematic literature review was conducted using CINAHL and PubMed, with date parameters of 2016-2026, to identify studies examining the impact of formal mentorship programs on newly graduated nurse practitioners in their first year of practice. Search strategies incorporated controlled vocabulary, including CINAHL Headings and Medical Subject Headings (MeSH), in combination with keyword terms related to nurse practitioner transition to practice, formal mentorship, clinical competence, job satisfaction, and retention. Peer-reviewed research articles, program evaluations, and evidence-based practice reports were included.

**Results:** Based on existing research, formal mentorship programs are expected to improve early clinical skill acquisition, enhance satisfaction with role transition, and increase one-year retention compared with standard onboarding alone.

**Conclusion:** Understanding how mentorship influences NPs' transition to practice can inform organizations' development of effective onboarding strategies that foster confidence, satisfaction, and workforce stability among new NPs.

**Jessica Moore BSN, RN  
MSN-FNP Track**

Faculty Advisor:  
Dr. Michele Chronister

# Cardiac Amyloidosis: Update in Risk Stratification and Diagnosis in the Family Practice Setting



**Matthew Morrison BSN, RN  
MSN-FNP Track**

Faculty Advisor:  
Dr. Michele Chronister

**Background:** Cardiac amyloidosis is an underrecognized and frequently misdiagnosed cause of heart failure, particularly in older adults. Early manifestations such as carpal tunnel syndrome (CTS), unexplained left ventricular hypertrophy, and heart failure with preserved ejection fraction (HFpEF) often occur several years before cardiac amyloid diagnosis. Delayed recognition in primary care contributes to worse outcomes despite the availability of emerging medications capable of modifying the disease process. The purpose of this evidence-based practice project (EBP) was to answer the following question: In adult patients at risk for cardiac amyloidosis in primary care, how does structured red flag screening and risk stratification, compared with routine cardiovascular assessment, impact timely diagnosis and clinical outcome?

**Methods:** CINAHL and PubMed were searched for peer-reviewed, english-language articles published within the last 5 years using the search terms “cardiac amyloidosis” AND “carpal tunnel” AND “primary care” AND “screening”. Results were further filtered for peer reviewed articles only. Articles were evaluated and leveled using the Johns Hopkins Evidence-Based Practice model. Evidence included systematic reviews, cohort studies, expert consensus, case reports, and implementation studies.

**Results:** Major themes identified include CTS as an early indicator of risk, the importance of a structured approach to red-flag screening in primary care, and the role of noninvasive imaging modalities in diagnosis. Additional themes also identified improved outcomes with earlier recognition and referral. The evidence supports targeted screening of older adults with red-flag symptoms rather than universal screening.

**Conclusion:** Cardiac amyloidosis remains underdiagnosed in primary care despite identifiable early warning signs. Incorporating structured screening algorithms for patients with CTS and red-flag symptoms may reduce delays in diagnosis and improve longevity or quality of life in this patient population.

# Cultivating Well-Being: The Impact of Therapeutic Gardening and Agriculture-Based Interventions on Cognitive and Psychosocial Outcomes in Long-Term Care



**Kerri Myer BSN, RN, CCRN**  
**MSN-FNP Track**

Faculty Advisor:  
Dr. Cayleigh Minter

**Background:** Older adults residing in long-term care (LTC) facilities frequently experience cognitive decline, depressive symptoms, agitation, and reduced quality of life. Given the risks associated with polypharmacy, nonpharmacologic, person-centered interventions are increasingly prioritized. Therapeutic gardening and agriculture-based programs have emerged as promising interventions within geriatric care environments.

**Methods:** A systematic literature search was conducted using PubMed, CINAHL, and Scopus for articles between October 2025 and January 30, 2026. Studies were limited to peer-reviewed publications from 2005 to 2024 involving adults aged 60 years or older in institutional or geriatric care settings. Eligible interventions included structured horticultural therapy, therapeutic gardening, sensory gardens, or agriculture-based programming with measurable cognitive, psychological, or functional outcomes. Non-empirical publications and studies without defined outcome measures were excluded. Included studies were critically appraised using the Johns Hopkins Nursing Evidence-Based Practice (JHNEBP) tool to determine the level and quality of evidence.

**Results:** Sixteen studies met inclusion criteria. Five were Level I systematic reviews and meta-analyses demonstrating significant reductions in depressive symptoms and improvements in psychological well-being. Two Level II randomized or experimental studies and nine Level III observational or quasi-experimental studies supported improvements in cognition, engagement, stress recovery, and physical functioning.

**Conclusion:** Evidence from Level I, II, and III studies consistently support structured horticultural therapy and agriculture-based interventions as beneficial for improving psychosocial well-being, cognitive function, and engagement in older adults. Findings suggest these interventions may serve as effective nonpharmacologic adjuncts within long-term care settings, particularly for residents experiencing depression, agitation, or social isolation. By promoting meaningful activity, stress reduction, and physical engagement, therapeutic gardening may enhance overall quality of life while reducing reliance on psychotropic medications. Further research is warranted to standardize intervention protocols and evaluate long-term sustainability across diverse institutional environments.

# Impact of Nurse Mentoring Programs in Reducing Turnover in Long-term Care Facilities



**Jacqueline Nordhoff BSN, RN  
MSN Leadership Track**

Faculty Advisor:  
Dr. Jessica Borthwick

**Background:** Nurse turnover in long-term care facilities, compounded by a persistent nursing shortage, continues to create significant financial and quality of care risk. Formal nurse mentoring programs have been identified as a potential strategy to decrease nursing turnover. In the challenging long-term care setting, where nursing turnover according to the Centers for Medicare and Medicaid services is 46% for all nurse staff, mentorship may enhance job satisfaction, reduce burnout, and improve retention beyond what is achieved without a nurse mentoring program.

**Methods:** The systematic review included a comprehensive search strategy across PubMed, CINAHL, and Medline databases, targeting peer reviewed scholarly articles in English from 2021 to 2026. The Johns Hopkins appraisal tools were utilized to guide the evaluation of studies and ensure rigorous review and synthesis of the data.

**Results:** Across all study types, formal nurse mentoring programs were consistently linked with improved retention. Mentored nurses demonstrated higher levels of job satisfaction, improved transition to practice when new graduates, and stronger commitment and intent to stay than those nurses that were not mentored. Mentoring Programs that were structured and sustained over longer periods of time produced the greatest nurse retention results.

**Conclusion:** The synthesis of the evidence supports that nurse mentoring programs are an effective tool in increasing nurse retention and decreasing nursing turnover. Although individual studies varied in rigor and consistency the evidence creates a case that nursing mentorship can be employed as a nurse retention tool. Integrating formal nurse mentoring programs into practice may improve overall satisfaction, staffing, and provide long-term workforce stability. Further research may be necessary to determine impact and effectiveness within long-term care settings.

# Decreasing risk for falls in Older Adults through deprescribing medications: A Literature Synthesis



**Adriana  
Prieto Grave de Peralta BSN, RN  
MSN-FNP Track**

**Faculty Advisor:  
Dr. Jessica Borthwick**

**Background:** Polypharmacy is a problem for older adults who seek care for multiple health conditions and have various providers treating multiple diseases or symptoms. Those who have multiple comorbidities and see various providers have an increased chance of having five prescriptions or more. Polypharmacy also increases the risk for uncomfortable side effects, drug-drug interactions, allergies, confusion, falls, low quality of life, high dependency, hospitalizations and death. A potential solution is deprescribing, where discontinuing unnecessary medications can avoid those complications and significant medication expenses. The writer investigated if deprescribing medications compared to not deprescribing decreases the risk for falls in older adults 65 years or older.

**Methods:** A comprehensive search strategy was used across multiple databases such as CINAHL and MEDLINE, focusing on scholarly articles from 2021 to 2026. Evidence in fifteen sources were found. This evidence provided a superior insight into the act of deprescribing. The Johns Hopkins Evidence-Based Practice Evidence Level was used to evaluate the evidence.

**Results:** Among the 15 sources reviewed, it was found that deprescribing as a single intervention does not decrease the risk for falls in older adults, but the optimization and appropriate prescription of medications foster safety in older adults. Decreasing or discontinuing potentially inappropriate medications (PIMs) that may increase risk of falls in older adults is an appropriate intervention that may improve patient outcomes. Most prevalent medications identified among fallers were opioids, sedatives/hypnotics, antidepressants, diuretics, anticoagulants, anticonvulsants, benzodiazepines, antihistamines, antipsychotics, antimuscarinics, Tricyclics antidepressants, antihypertensives, skeletal muscle relaxant and antispasmodics.

**Conclusion:** Deprescribing in combination with other evidence-based interventions is a prominent response to decrease the risk of fall in older people.

# Reducing Emergency Department Visits and Hospitalizations Through Telehealth In Patients With Chronic or Complex Conditions



**Payton Salsgiver BSN, RN**  
**MSN-FNP Track**

Faculty Advisor:  
Dr. Cayleigh MInter

**Background:** The health care system has experienced an increase of admissions and visits to the emergency department in adults with chronic or complex health conditions. Since the start of the Covid-19 pandemic the health care system has seen a decrease of resources and staff with an increase in demands for care. Hospitals are constantly pushed toward providing care for increasingly complex patients in a more time effective manner. The addition of telehealth integrated and hybrid care models into our healthcare system has given healthcare workers an opportunity to streamline medical care remotely. This is providing increased in-person to those patients who truly need it. The purpose of this capstone project is to answer the following question: "In adults with chronic or complex conditions managed in primary or ambulatory care setting, does a telehealth integrated or hybrid care model, compared to fully in person, reduce emergency department visits and hospitalizations?"

**Methods:** A review of the literature was comprised from scholarly databases such as PubMed, Medline and CINAHL via EBSCO published between 2003 and 2026. The effects of telehealth integrated or hybrid care models was studied over primary care, ambulatory special care, and community-based settings. Peer reviewed literature focuses on populations like chronic disease management, mental health, oncology, and telehealth enabled triage services. The appraisal and level of quality of the included studies were based off the Johns Hopkins Evidence Based Practice Appendix E and F.

**Results:** Throughout the research conducted there were several themes that were notable in all studies. Telehealth supported chronic disease management by providing effective outpatient care and follow-ups while decreasing admission rates. Hybrid care models reveal decreased hospitalizations when telehealth was embedded in the structure of practice for the intended healthcare system. Results in telehealth implementation for higher acuity patients varied across different research studies. These mixed results show us the importance of emphasizing appropriate patient selection and appropriate telehealth model application.

**Conclusion:** Telehealth integrated and hybrid care models can reduce emergency department visits and hospitalizations among adults with chronic or complex conditions when appropriately applied to the patient's situation and setting. The evidence-based research presented in this paper can show how telehealth can enhance outpatient management and prevent avoidable hospitalizations compared to in-person care management.

# No Metal Left Behind: The Use of Drug-Coated Balloons in De Novo Coronary Lesions



**Kristyn Schnur BSN, RN, RCIS  
MSN Nursing Leadership Track**

Faculty Advisor:  
Dr. Jessica Borthwick

**Clinical Question:** In patients who have de novo cardiovascular lesions that are either small vessel ( $\leq 2.75$  mm) or at a bifurcation, would treating those lesions with a drug-coated balloon (DCB) be noninferior in regard to occurrences of major adverse cardiovascular events (MACE) and target lesion revascularization rates (TLR) in comparison to the standard practices?

**Background:** Current treatment strategies for coronary disease in small vessel or bifurcation lesions include placing drug-eluting stents (DES) or plain old balloon angioplasty (POBA). DCBs are only indicated by the FDA for treatment of in-stent restenosis.

**Methods:** Searches from CINAHL, PubMed, and gray literature yielded 14 results after review.

**Results:** Four studies conducted outside the United States had similar results in respect to DCB use in small vessel disease (SVD). More literature is needed to better understand clinical application in bifurcations.

**Conclusion:** DCB use in SVD is safe and effective. More data is needed for use in bifurcation treatment strategies.

# Getting “On-board” to Improve Retention of New Graduate Registered Nurses: A Critical Appraisal of Research Surrounding the Benefits of Nurse Residency Programs and Preceptorships



**Jeryl Simon BSN, RN**  
**MSN Nursing Education Track**

Faculty Advisor:  
Dr. Jessica Borthwick

**Background:** As the largest sector of healthcare workers, nurses are critical in ensuring quality care for patients; however, data from the U.S. Bureau of Labor Statistic (BLS) suggests that maintaining adequate healthcare staffing is getting progressively more difficult. Competing pay, rising staff incivility, lacking leadership, increasing nurse-to-patient ratios, and decreasing staff support are driving nurses out. Hospitals need to begin implementing interventions to reduce turnover and increase retention, especially of new graduate nurses. This Capstone Project aims to explore the relationship between structured new nurse orientation programs and staff retention.

**Methods:** This review is a result of a comprehensive search among databases (CINAHL, MEDLINE, PsycINFO) and grey literature. Research was conducted in January of 2026 to uncover data from the last five years. Studies were evaluated for level of research and quality using the Johns Hopkins Evidence-Based Practice Model (JHEBP).

**Results:** Sixteen articles were included after critical appraisal. Across all but one study, the use of nurse residency programs (NRP) and/or preceptorships increased retention and/or decreased turnover for newly graduated registered nurses.

**Conclusion:** Newly graduated registered nurses could be the solution to the nursing shortage, but issues bridging the gap between theory and practice threaten to impact if, and when, they will choose to leave the workforce. Interventions, such as NRP and preceptorship, help facilitate the transition to practice and improve retention rates for these nurses.

# Sugar Substitutes: What Research Reveals



**Diane Swartz MEd, BSN, RRT  
MSN-FNP Track**

Faculty Advisor:  
Dr. Michele Chronister

**Background:** Saccharin, an artificial sweetener regulated by the FDA in 1977, was viewed as an ideal solution for achieving sweetness with zero calories. It appeared that excessive sugar intake had an easy solution; replace sugar with an artificial sweetener. Since then, multiple artificial sweeteners have been FDA approved, but after decades of use, potential drawbacks are surfacing. This research review aims to bring awareness to areas of concern regarding the use of artificial sweeteners and to answer the question: In adults, does consumption of artificial sweeteners, compared with nonuse, increase the risk of adverse health outcomes?

**Methods:** This research review includes peer reviewed research articles published from 2021 to 2026. An extensive search of MEDLINE and CINAHL databases yielded the articles reviewed. The Johns Hopkins Evidence-Based Practice Model for Nursing and Healthcare Professionals was used to appraise the level and quality of each included study.

**Results:** Recent research findings indicate possible links between artificial sweeteners and increased appetite, lower gestation age at birth, cognitive decline, medication clearance interference, changes to gut microbiome, reduced efficacy of immunotherapy, and antibiotic-like activity.

**Conclusions:** More research is needed to clarify the effects of artificial sweeteners. Until the question of safety is resolved, the use of artificial sweeteners should be evaluated by consumers so that an informed decision can be made whether to use them.

# Evaluating the Efficacy of SGLT-2 Inhibitors in Decreasing Hospital Readmissions and Symptom Severity in Congestive Heart Failure



**Carol Thach BSN, RN**  
**MSN-Nursing Education Track**

Faculty Advisor:  
Dr. Jessica Borthwick

**Background:** Congestive heart failure (CHF) continues to be a major cause of hospital admissions and readmissions, leading to illness, death, and healthcare expenses. Emerging research indicates that sodium-glucose cotransporter-2 (SGLT-2) inhibitors, originally prescribed for individuals with type 2 diabetes, may also provide cardiovascular benefits, including better outcomes for patients with heart failure. This capstone project addressed the following clinical question: Among adults with heart failure, does the addition of SGLT2 inhibitors to standard heart failure therapy, compared with standard therapy alone, improve heart failure symptoms and reduce hospital readmission rates?

**Methods:** A comprehensive literature review was conducted using SAGE Journals, EBSCOhost, Science Direct and PubMed databases to evaluate the effects of SGLT-2 inhibitors in CHF populations from 2016 to 2026. Articles were limited to full-text, peer-reviewed studies published in English. Each study was appraised using the Johns Hopkins Evidence-Based Practice Model for Nursing and Healthcare Professionals.

**Results:** Findings indicate that SGLT-2 inhibitors are associated with a significant reduction in hospital readmissions among CHF patients, regardless of diabetic status. Additionally, patients receiving SGLT-2 inhibitors reported improvements in symptoms such as dyspnea, fatigue, and exercise intolerance. These outcomes are driven by mechanisms such as osmotic diuresis, natriuresis, along with improved cardiac efficiency and reductions in both preload and afterload.

**Conclusion:** SGLT-2 inhibitors represent a promising treatment for congestive heart failure, with strong evidence showing reduced hospital readmission and improved symptoms. Incorporating them into standard care may improve outcomes and lessen healthcare burden, though further research is needed to assess long-term effects and refine patient selection.

# Probiotics for ACEs: A Systematic Review of Improved Mental Health and Inflammatory Markers with Correction of Dysbiosis



**Kristina Weaver BSN, RN  
MSN-FNP Track**

Faculty Advisor:  
Dr. Cayleigh Minter

**Background:** The Center for Disease Control reported adverse childhood experiences (ACEs) can have a significant effect on mental and physical health in adulthood, which is largely due to recurring or ongoing stress responses in the body, called Toxic Stress. This extreme psychological stress interferes with the balance of the gut microbiome, disrupting multiple body systems. The purpose of this capstone project was to answer the clinical question: Can correction of dysbiosis ameliorate the long-term psychological and physiological effects of trauma in adolescents and adults with numerous or high impact ACEs?

**Methods:** In January and February of 2026, the CINAHL and PubMed Complete databases were searched for scholarly journal articles with date parameters of 2019-2025. The Johns Hopkins Evidence-Based Practice Evidence Level and Quality Guide was used to appraise articles for level and quality, then organize them into an evidence table.

**Results:** Thirteen articles were selected and appraised, finding high- or low-quality evidence to either support or refute the clinical question. Overall themes identified included ACE connection to anxiety, depression, and physical maladies later in life. Further, ACE connection to dysbiosis, dysbiosis connection to disruptions in mental health, and downregulation of mental health disorders and inflammatory markers with correction of dysbiosis was identified.

**Conclusion:** Correction of dysbiosis through fecal microbe transplant or ingestion of probiotics can have a significant positive impact on mental and physical health, especially in the setting of an elevated ACE score.

# Cupping Therapy in Chronic Musculoskeletal Pain Management in Outpatient Adult Patients



**Na Wu-Arnold BSN, RN  
MSN-FNP Track**

Faculty Advisor:  
Dr. Michele Chronister

**Background:**Chronic musculoskeletal pain (CMP) is one of the most common reasons adults seek medical care and is a leading cause of disability worldwide. Conditions such as chronic low back pain, chronic neck pain, and osteoarthritis negatively affect functional ability and quality of life while contributing to substantial healthcare costs. Standard management of CMP includes pharmacologic therapy, physical therapy, exercise, and massage. Due to persistent symptoms and concerns about long-term medication use, interest in complementary therapies such as cupping therapy has increased as a potential adjunctive treatment.

**Methods:**A structured literature review was conducted using the PubMed database to identify peer-reviewed studies published between 2016 and 2026. To ensure high-level evidence, inclusion criteria were limited to systematic reviews, meta-analyses, and randomized controlled trials examining cupping therapy in adults with CMP.

**Results:** After title screening, abstract review, and full-text evaluation, 12 studies met the inclusion criteria and were included in the final analysis. Findings across studies suggested that cupping therapy, when used alongside standard treatment, may lead to modest reductions in pain severity and improvements in functional outcomes in adults with CMP.

**Conclusion:** Evidence indicates that cupping therapy may be a beneficial adjunct to standard pain management strategies for adults with chronic musculoskeletal pain. However, variability in study design, limited sample sizes, and a lack of long-term follow-up warrant cautious interpretation. Clinicians should engage patients in shared decision-making when discussing cupping therapy as part of a comprehensive pain management plan.

# Post-Master Student: Milfre Jimenez



MILFRE JIMENEZ MSN, RN

My name is Milfre Jimenez, MSN, RN, and I currently work in the observation unit at Lancaster General Hospital. I earned my Master of Science in Nursing from Marquette University and hold a Bachelor of Science in Molecular Biology from Kean University. I am currently pursuing my post-master's Family Nurse Practitioner certificate at Millersville University.

Throughout my nursing career, I have developed a strong commitment to providing comprehensive, patient-centered care, with a focus on health promotion across the lifespan. My experience in the observation unit has allowed me to care for patients with diverse and complex needs, strengthening my clinical judgment, prioritization skills, and ability to deliver compassionate, evidence-based care.

Following graduation, I plan to transition into a Family Nurse Practitioner role. While I am still exploring the specific setting in which I would like to practice, I am particularly interested in providing evidence-based primary care and advocating for my patients. My long-term goal is to contribute to improving patient outcomes through preventive care, education, and a holistic approach to health.

*Congratulations Milfre!*

# Post-Master FNP Student: Stephanie Myers



My journey in healthcare began shortly after high school as a CNA, followed by 13 years as a Medical Assistant before returning to school to earn my RN, and ultimately completing my master's degree in 2023. Over the past 12 years as an RN, I have been shaped by diverse experiences in community mental health, acute rehab, neuro and stroke care, acute hospital settings, and home health. Each role has deepened my compassion and strengthened my commitment to patient-centered care. Outside of nursing, I am an avid animal lover who finds joy in gardening, cooking, and baking—the simple yet meaningful ways I care for myself and others.



**STEPHANIE MYERS MSN, RN**

As a young single mother, I was supported by an incredible family who helped me raise my now 28-year-old son. Their love and steady presence carried me through seasons of challenge and growth, teaching me the true balance of resilience and love. My son is my greatest inspiration, and the unwavering support of my family has been the bedrock of my life. Just before my first clinical rotation, I lost my father to cancer. That sudden, searing loss shattered me, but it also awakened a profound purpose. I felt the weight of every patient's fragility, and it became my calling. In the depth of my grief, I found purpose. I became deeply aware of the sacred responsibility of caring for others in their most vulnerable moments. His journey, and his passing, ignited a calling within me that I carry into every patient encounter. That calling has led me to the UPMC Hillman Cancer Center where I have now accepted a role in breast oncology and inpatient hematology/oncology. I am humbled to walk this path alongside patients during their most vulnerable moments, honoring my father's memory, as I help guide others through their most vulnerable moments, carrying forward the love and lessons my father gave me. It is both a privilege and a profound honor to walk alongside patients and families during some of the most difficult chapters of their lives. In doing so, I carry my father with me—his strength, his memory, and the love that continues to guide everything I do.

*Congratulations Stephanie!*

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