

**2021 DNP Project Abstracts**  
**Doctor of Nursing Practice Program**



## **Constance Bowie, DNP, MSN, FNP-C**

### **Project Chair**

Abida Solomon, PhD

### **Title**

Implementation of an Evidenced-Based Infection Control Toolkit to Improve Educational and Training Gaps in Long Term Care

### **Purpose**

The COVID pandemic has affected infection control (IC) programs in long-term care facilities (LTCF) throughout the United States (US). The population in LTCF is particularly at risk of fatalities from COVID due to a high staff turnover rate and a lack of training and oversight of IC parameters. This quality improvement project aimed to use educational materials from an IC toolkit to bridge training and compliance gaps in LTCF identified by the Infection Control Assessment Response (ICAR) tool. The goal of doing so was to improve the facilities' ICAR scores and their IC programs.

### **Methodology**

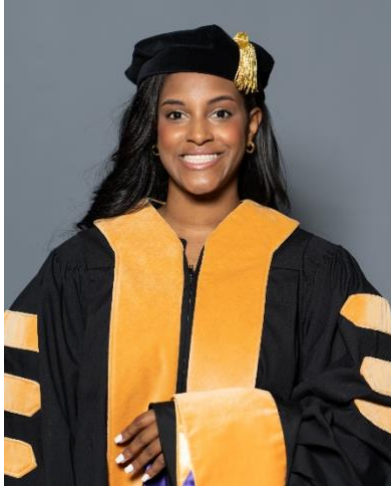
This project used a quantitative pre-/post-intervention assessment design with a face-to-face educational training session as the intervention. The pre-training ICAR scores of 4 LTCF were reviewed to identify non-compliance issues. Selected staff members were then taught skills such as handwashing, donning and doffing personal protective equipment, environmental cleaning, and other IC procedures by demonstration and return demonstration as detailed in the IC toolkit. A post-intervention ICAR assessment was conducted to determine whether the scores improved. An evaluation form was completed by each participant in the project to evaluate the trainer and toolkit's content.

### **Results**

Each facility showed improved post-training ICAR scores. The toolkit content and the training both received positive ratings for accessibility and implementation. Introducing the toolkit in LTCF helped implement IC practices. However, the LTCF show a need for consistent monitoring and training to ensure that IC standards are practiced.

## **Implication for Practice**

The introduction of the infection control toolkit in long term care facilities was helpful in implementing infection control practices. LTCF demonstrated a need for constant monitoring and training to ensure that infection control standards are practiced. The findings from this project are important to practice because a need for constant monitoring and training was identified to ensure implementation of infection control standards and measures.



## **Bianca Marie Darrington, DNP, MSN, FNP-C**

### **Project Chair**

Vivian Dawkins, PhD

### **Title**

Increasing Documentation Compliance of Referral Request for Fluoroscopic Guided Lumbar Puncture in the Electronic Medical Record: An Evidence-Based Project

### **Purpose**

Every year approximately 400,000 diagnostic lumbar punctures (LPs) are performed by neurologists and advanced practice providers (APPs) in the United States, making it one of the most common hospital procedures (Neiman, 2021). Initial LPs are performed at the bedside using anatomic palpation. Upon a failed bedside attempt, patients are referred to Diagnostic Imagine to have the procedure performed with fluoroscopy guidance. A Fluoroscopic Guided Lumbar Puncture (FL LP) request is made following a failed bedside attempt or if the patient has exclusion criteria. Detailed documentation and completion of the FL LP Referral Request are essential for prompt acceptance and scheduling of patients to prevent diagnostic testing and chemotherapy treatment delays. There are seven core questions deemed necessary for FL LP referrals however, many APPs were bypassing the seven questions and finalizing their order. The purpose of this project was to improve the documentation compliance of FL LP Referral Requests to prevent diagnostic and treatment delays.

### **Methodology**

This project employed a comparative, pre-post intervention, non-experimental design. The intervention was an educational presentation on the importance of accurate and complete documentation to APPs who commonly refer patients for FL LPs. The goal was to improve compliance in completing the form from the previous average of 57.8% found during a random chart audit in the summer of 2021 to at least 85% in the three months following the intervention (January 1, 2022-March 18, 2022) or until the sample size was obtained.

## **Results**

The outcome of this evidence-based practice project confirmed a significant difference in the FL LP request documentation compliance. The results of the Chi-square test were significant based on an alpha value, .05,  $\chi^2(1) = 12.58$ ,  $p < .001$ , suggesting improvement in compliance related to the educational intervention. Compliance rates of 57.8% in the summer of 2021 were improved to 78.33% during the first quarter of 2022.

## **Implication for Practice**

This improvement is expected to benefit efficient in the clinical area, decrease diagnostic and treatment delays and improve overall patient satisfaction and outcomes. The findings were consistent with improvements reported by other research studies that evaluated documentations compliance.



## **Arnitra Whaley Doucet, DNP, MSN, FNP-C**

### **Project Chair**

Gloria Rose, PhD, NP-C, FNP-BC

### **Title**

Effects of Education on HCV Screening and Treatment Updates in a Primary Care Setting

### **Purpose**

According to the World Health Organization (WHO), approximately 71 million people globally have chronic Hepatitis C Virus (HCV) infections. New screening and treatment modalities have increased the likelihood of disease curability and eradication. Despite new guidelines for screening and treatment, HCV remains one of the most common undiagnosed blood borne diseases. National screening rates for HCV are as low as 12.8%. With proper education on current guidelines concerning HCV screening and treatment, primary care providers (PCPs) can play an essential role in eliminating HCV.

This project aimed to improve PCP adherence to the updated 2020 Centers for Disease Control and Prevention (CDC) recommendations and guidelines for HCV screening and treatment rates using an evidence-based webinar and the introduction of an educational tool (algorithm). Current literature indicates that the current barriers to screening by PCPs include insufficient knowledge, comfort level, and time.

### **Methodology**

An educational approach was used for this project. An evidence-based webinar was shown to a PCP to increase awareness regarding current Hepatitis C screening, diagnostic testing, treatment, and management options in the primary care environment. A pre-post design was used for evaluation; the PCP's screening and treatment rates were assessed pre- and post-intervention.

## **Results**

After the evidence-based webinar, the PCP implemented new screening and treatment practices. Furthermore, screening and treatment rates increased significantly with a chi-squared test result of 10.789 ( $p = .001$ ).

## **Implication for Practice**

Further evaluation is needed to develop evidence-based interventions and approaches to increase PCP adherence to the updated 2020 CDC guidelines and recommendations.



**Tyechia Renee Phillips, DNP, MSN, FNP-C**

## **Project Chair**

Vivian Dawkins, PhD

## **Title**

The Impact of an Educational Intervention on Increasing Nurses' Knowledge and Documentation Compliance with Femoral Puncture Post-Assessment: A Quality Improvement Project

## **Purpose**

Post-procedural complications remain a major cause of morbidity and mortality following cardiac catheterization and cerebral angiograms using femoral punctures. Life-threatening complications can be missed due to insufficient knowledge, resulting in a patient's death. Appropriate post-procedure assessment is required and audited by the certification body, Det Norske Veritas (DNV). Failure to perform assessments can affect a hospital's accreditation.

This study aimed to determine whether an educational intervention could increase documentation compliance with post-procedural assessments on a medical-surgical/COVID unit with a documentation compliance rate of zero. Previous research indicates that educational interventions can lead to minor to significant increases in healthcare professionals' knowledge and documentation compliance.

## **Methodology**

This quality improvement project used a pre-post design to assess if there was an increase in nurses' knowledge and documentation compliance for post-procedural assessments. The proportion of charts with documentation compliance was significantly higher following the intervention than before the intervention (Fisher's exact test,  $\alpha = 0.05$ ,  $p = 0.003$ ).



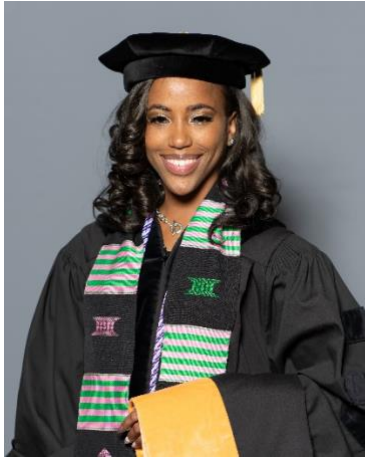
## **Results**

The Wilcoxon signed-rank test was used to determine if there was a significant increase in the nurses' knowledge of post-procedure assessments following the intervention. The median pre-intervention score was 4.50, and the median post-intervention score was 9.00 ( $p < 0.001$ ), suggesting the difference in scores is not due to chance.

## **Implication for Practice**

In early 2022, the DNV conducted their 2022 Annual Survey visit on the medical/surgical/COVID unit, and there were no clinical findings reported. This quality improvement project has demonstrated an increase in the nurses' knowledge with an educational intervention, and increase in documentation compliance.

Continuous leadership support, competent staff, collaboration with the onboarding team, and continuing education using multiple teaching techniques to address the different learning styles are all needed to make a long-term improvement of knowledge. Sustainability plans can be put into place to ensure the change in practice will continue after the intervention. Education is a key portion to initiate a change in practice.



## **Latrecia Nicole Barrett Prince, DNP, MSN, FNP-C**

### **Project Chair**

Gloria Rose, PhD, NP-C, FNP-BC

### **Title**

Wisdom about Papanicolaou: A Campaign to Promote Cervical Cancer Screening in HIV Positive Women

### **Purpose**

HIV-positive women are more likely to die from preventable or treatable cervical cancer than HIV itself (UNAIDS, 2018). HIV-positive women are five times more likely to be affected by cervical cancer compared to HIV-negative women (UNAIDS, 2018). This is attributed to HIV-positive women acquiring Human Papilloma Virus (HPV) sooner, being less likely to immunologically clear it, being exposed to multiple HPV strands, and having an increased likelihood of progressing from HPV and pre-cancerous lesions to invasive cervical cancer. Previous research has shown that widespread use of the Pap test leads to substantial reductions in death from cervical cancer; however, few women remain adherent to cervical cancer screening guidelines. Locally, at a Federally Qualified Health Center (FQHC), cervical cancer screening adherence among HIV-positive women averaged 6.5% for two consecutive years.

The purpose of this quality improvement project was to use an educational brochure to increase cervical cancer knowledge and screening among HIV-positive women in a local FQHC using the Health Belief Model (HBM).

### **Methodology**

This was a quality improvement project in which HIV-positive women's knowledge regarding cervical cancer screening was assessed using a pre- and post-test. Educational material, in the form of a brochure, was developed using the HBM to educate HIV-positive women about cervical cancer risks and screening recommendations and was provided to patients during their routine HIV care. A convenience sample of 18 HIV-positive women receiving care at the FQHC during the project period were recruited. Those consenting completed the pre- test and received the educational brochure during their visit. Review of the

brochure was followed by the post-test. Pre- and post-intervention cervical cancer screening knowledge and cervical cancer screening compliance was assessed. Difference in mean knowledge score were assessed using the correlated t-test. Difference in the proportion of women who received cervical cancer screening between the period before the intervention and after the intervention were assessed by chi square. An alpha level of 0.05 determined statistical significance.

## **Results**

Results of the two-tailed paired samples *t*-test revealed a statistically significant difference between pre-intervention and post-intervention knowledge ( $t(17) = -4.27, p < .001$ ). An alpha value of 0.05 was used to determine significance. A one-sample Chi-Square test was conducted. The hypothesis was that 50% of women would schedule and complete pap testing post-intervention, and 50% would not. Results yielded greater than 50% of participants who scheduled and completed pap screening post-intervention, indicating that the education was directly related to pap screening adherence post-intervention.

## **Implication for Practice**

This quality improvement project has provided positive insight into the use of brochures specifically tailored to HIV positive women to promote adherence to cervical cancer screening. Expanding clinical knowledge on the additional HBM model concepts of perceived barriers, perceived severity, and self-efficacy would further lead to interventions that promote better patient adherence and outcomes. The results of this quality improvement project can be used to guide the implementation of policies, protocols and guidelines which promote healthcare facilities and providers to display and utilize HIV tailored education.