

*RRR Poster Presentations*  
*2021*

# Carolyn Huffman, WHNP, PhD

## Out and About: Nurses Use of COVID-19 Personal Protective Behaviors (PPBs) in the Community



Carolyn Huffman, WHNP, PhD, Nathaniel O'Connell, PhD, Melina Burns, BSN, RNC, Michele Blakely, RN, DNP, William Gilliland, RN, MS

### RESEARCH QUESTION

To what extent do nurses engage in CDC promoted PPBs outside of the work setting and what factors inform engagement in these behaviors during the COVID-19 pandemic?

### BACKGROUND AND SIGNIFICANCE

Nurses are essential to the efficient functioning of the healthcare system and their health is of vital importance to its operation. Professional responsibilities of the nursing include the health promotion and care of themselves as well as their patients and communities (Fowler, 2015). Previous research has demonstrated that nurses and other healthcare workers may struggle with infection control/prevention measures in the hospital setting (Houghton, 2020). There is little in the literature related to factors associated with nurses' engagement with PPBs outside of the work setting.

### METHODS

**Research Design:** Cross-sectional survey

**Sample & Setting:** 958 registered nurses participated (20.7% response rate) employed full or part-time in both in-patient and out-patient settings.

**Method:** Eligible participants were emailed a link to a REDCap survey during the week of September 14<sup>th</sup>, 2020. All responses were anonymous and answers could not be linked to email or IP address. Participants were given an option to participate in a random drawing for one of three \$50 Amazon gift cards. This was a separate link and not connected to the survey.

**Variables/Measures:** Survey contained questions related to engagement in 8 of the CDC PPBs promoted at the time of the survey (CDC, 2020) and an additional 5 behaviors that nurses had reported. Demographics, household makeup, COVID exposure, work area, Perceived Infectability subscale (Duncan et al., 2009), fatigue (Fatigue Assessment Scale), and perception as role model were also assessed.

### Analysis

Descriptive statistics were used for frequency of practice behaviors. Primary analysis addressed two questions related to predictive factors: A) average "frequency" nurses practiced CDC promoted PPBs across their set of applicable PPBs (linear regression), and B) proportion of CDC promoted PPBs practiced "often" or "always" out of all personal protective behaviors applicable, using logistic regression. All analyses were conducted using R.

IRB #00068198 exempt.

### RESULTS

Mean age of respondents was 45 (SD = 12.6) and average experience as an RN was 17.5 years (SD = 12.5). Most respondents self-identified as White (83.6%) and 76.4% had a bachelor's degree or higher, 85.9% provided direct patient care and 55% reported providing direct care to a COVID-19 patient. Only 2.8% and 2.5% of respondents had either tested positive for COVID-19 or lived with someone who had, respectively, at the time of the study.



### REGRESSION RESULTS

**Mean Practice Frequency:** Increasing confidence in masks ( $p < 0.001$ ), increasing concern about COVID ( $p < 0.001$ ), and increasing age ( $p < 0.021$ ) were significantly related to higher mean practice frequency, explaining 45% of the variability adjusted for all predictors. Participants involved in direct patient care had significantly lower mean personal protective behavior practice frequency ( $p = 0.036$ ) and participants with higher fatigue (FAS) scores had significantly lower mean personal protective behavior practice frequency ( $p = 0.01$ ). Viewing self as role model ( $p = .06$ ).

**Proportion Of PPBs Practiced:** Increased confidence in masks ( $p < 0.001$ ) and increasing concern about COVID ( $p < 0.001$ ) were significantly related to higher proportions of PPBs practiced. Decreasing fatigue score ( $p = 0.004$ ) was significantly related to higher proportion of PPBs practiced.

### DISCUSSION AND IMPLICATIONS

- Findings offer partial support for the Protection Motivation Theory (Rogers, 1975), with personal factors driving use of PPBs, more so than professional identity as role-model.
- Fatigue was negatively related to engagement in PPBs outside the working setting, which raises need to explore ways to help nurse workforce manage fatigue.
- Additional research is needed in how leaders may help promote engagement with PPBs at work, at home and in the community. Managing fatigue, consistent messaging of effective prevention measures and exploring professional identity may be additional avenues to explore to ensure the health of our nurses and community.

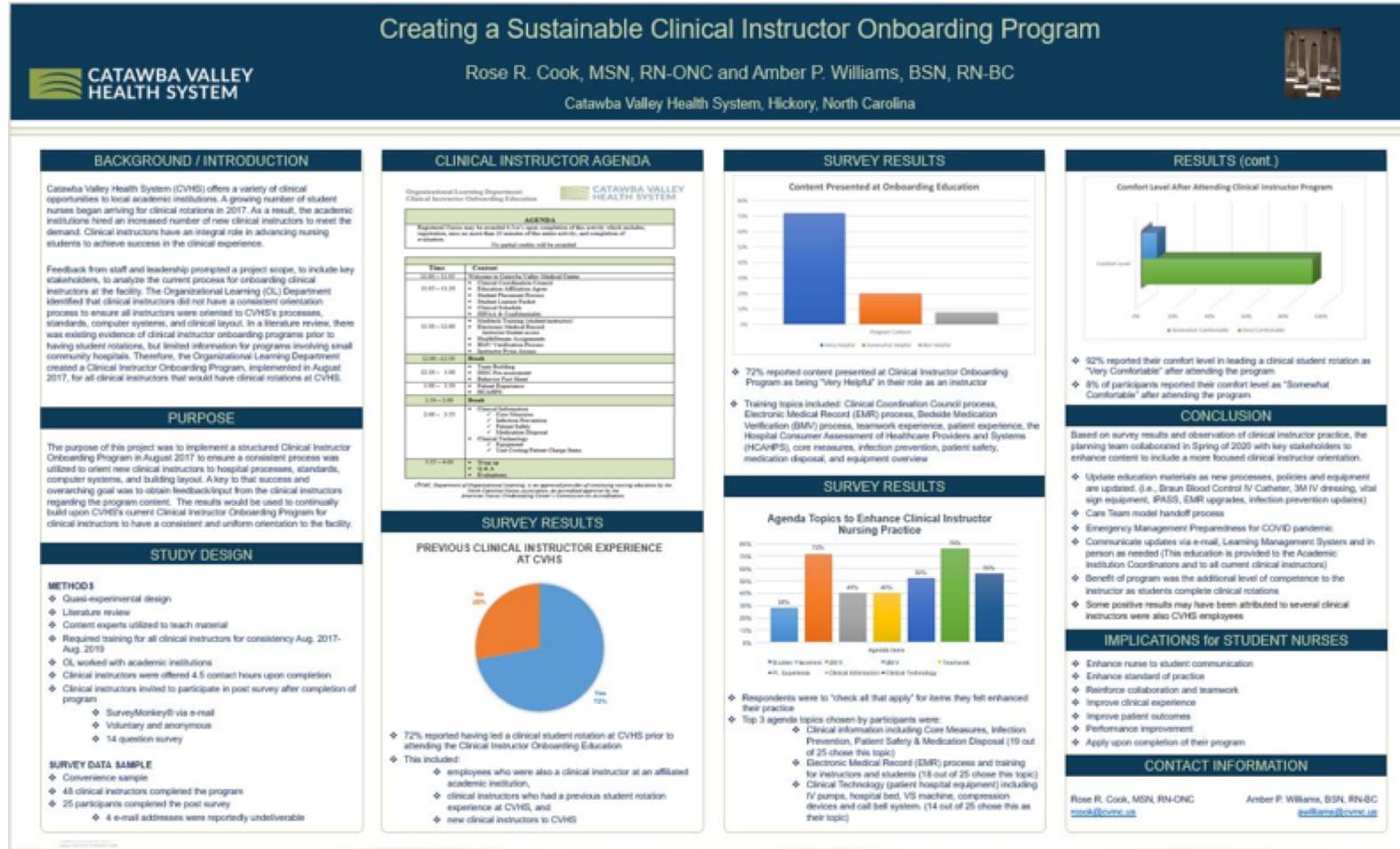
### References

Center for Disease Control and Prevention (2020). How to protect yourself and others. <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html>.  
Duncan, L. A., Scantler, M., and Park, J. H. (2009). Perceived vulnerability to disease: Development and validation of a 15-item self-report instrument. *Personality and Individual Difference*, 47, 541-546. <https://doi.org/10.1016/j.paid.2009.05.001>  
Fowler, D. M. (2015). Guide to the code of ethics for nurses with interpretive statements. American Nurses Association.  
Houghton, C., Meskell, P., Smallie, M., Booth, A., Chan, XHS, Devane, D., Biesly, L. M. (2020). Barriers and facilitators to healthcare workers adherence with infection prevention and control guidelines for respiratory and infectious disease: a rapid qualitative evidence synthesis. *Cochrane Database of Systematic Reviews* 2020, Issue 4. Art. No.: CD013582.  
Rogers, R.W. (1975). A protection motivation theory of fear appeals and attitude change. *Journal of Psychology*, 91, 93-114.  
World Association for Sarcoidosis and Other Granulomatous Disorders. (2021). Fatigue assessment scale. <https://www.wasog.org/educational-material/fatigue-assessment-scale.html>



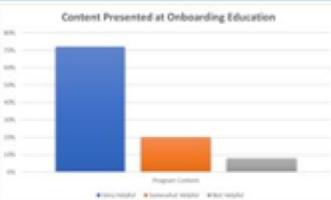
# Poster #3

## Rose R. Cook, MSN, RN-ONC



SURVEY RESULTS

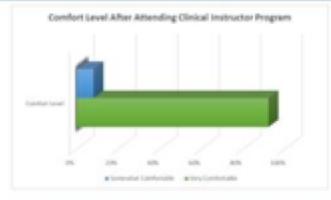
Content Presented at Onboarding Education



- 72% reported content presented at Clinical Instructor Onboarding Program as being "Very Helpful" in their role as an instructor
- Training topics included: Clinical Coordination Council process, Electronic Medical Record (EMR) process, Bedside Medication Verification (BMV) process, teamwork experience, patient experience, the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS), core measures, infection prevention, patient safety, medication disposal, and equipment overview

RESULTS (cont.)

Comfort Level After Attending Clinical Instructor Program



- 92% reported their comfort level in leading a clinical student rotation as "Very Comfortable" after attending the program
- 8% of participants reported their comfort level as "Somewhat Comfortable" after attending the program

PURPOSE

The purpose of this project was to implement a structured Clinical Instructor Onboarding Program in August 2017 to ensure a consistent process was utilized to orient new clinical instructors to hospital processes, standards, computer systems, and building layout. A key to that success and overarching goal was to obtain feedback/output from the clinical instructors regarding the program content. The results would be used to continually build upon CVHS's current Clinical Instructor Onboarding Program for clinical instructors to have a consistent and uniform orientation to the facility.

STUDY DESIGN

**METHODS**

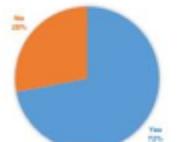
- Quasi-experimental design
- Literature review
- Content experts utilized to teach material
- Required training for all clinical instructors for consistency Aug. 2017-Aug. 2019
- OL worked with academic institutions
- Clinical instructors were offered 4.5 contact hours upon completion of program
- Clinical instructors invited to participate in post survey after completion of program
  - SurveyMonkey® via e-mail
  - Voluntary and anonymous
  - 14 question survey

**SURVEY DATA SAMPLE**

- Convenience sample
- 48 clinical instructors completed the program
- 25 participants completed the post-survey
  - 4 e-mail addresses were reportedly undeliverable

SURVEY RESULTS

PREVIOUS CLINICAL INSTRUCTOR EXPERIENCE AT CVHS



- 72% reported having led a clinical student rotation at CVHS prior to attending the Clinical Instructor Onboarding Education.
- This included:
  - employees who were also a clinical instructor at an affiliated academic institution,
  - clinical instructors who had a previous student rotation experience at CVHS, and
  - new clinical instructors to CVHS

SURVEY RESULTS

Agenda Topics to Enhance Clinical Instructor Nursing Practice



- Respondents were to "check all that apply" for items they felt enhanced their practice
- Top 3 agenda topics chosen by participants were:
  - Clinical information including Core Measures, Infection Prevention, Patient Safety & Medication Disposal (19 out of 25 chose this topic)
  - Electronic Medical Record (EMR) process and training for instructors and students (18 out of 25 chose this topic)
  - Clinical Technology (patient hospital equipment) including IV pumps, hospital bed, VS machine, compression devices and call bell system. (14 out of 25 chose this as their topic)

CONCLUSION

Based on survey results and observation of clinical instructor practice, the planning team collaborated in Spring of 2020 with key stakeholders to enhance content to include a more focused clinical instructor orientation.

- Update education materials as new processes, policies and equipment are updated. (i.e., Braun Blood Control IV Catheter, 3M IV dressing, vital sign equipment, IPASS, EMR upgrades, infection prevention updates)
- Care Team model handoff process
- Emergency Management Preparedness for COVID pandemic
- Communicate updates via e-mail, Learning Management System and in person as needed (This education is provided to the Academic Institution Coordinators and to all current clinical instructors)
- Benefit of program was the additional level of competence to the instructor as students complete clinical rotations
- Some positive results may have been attributed to several clinical instructors were also CVHS employees

IMPLICATIONS for STUDENT NURSES

- Enhance nurse to student communication
- Enhance standard of practice
- Reinforce collaboration and teamwork
- Improve clinical experience
- Improve patient outcomes
- Performance improvement
- Apply upon completion of their program

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# Poster #4

## Marjorie Jenkins, PhD, RN, NEA-BC, FACHE



### BACKGROUND

Unplanned hospital readmissions are frequent, costly, and are disruptive in the lives of patients. Hospital readmission affects 17.1% of Medicare beneficiaries, and 13.9% for all payers (2016), costing \$17.6 billion to the healthcare system annually (Bailey et al., 2019). Cost estimates for unplanned hospital readmission average \$14,400 USD for each all-cause readmission (Bailey et al., 2019). The Medicare Payment Advisory Commission estimates that 12% of hospital readmissions are potentially avoidable.

Healthcare organizations have prioritized the development of risk prediction models to identify high risk patients for hospital readmission. Better targeting of the delivery of enhanced care processes and transitional care interventions to patients at greatest risk may improve care quality and outcomes and reduce readmissions.

Risk prediction models often include demographic data and measures for comorbidity (the coexistence of two or more diagnoses), however, prediction accuracy of the models vary, and a gold standard has not been endorsed. Including frailty in the models may improve performance. The high prevalence of frailty, a syndrome characterized by multisystem dysregulation and poor resilience, and comorbidity in adults and their adverse effects on outcomes requires a better understanding of how each contribute to readmission risk.

### OBJECTIVES

- To investigate the predictive properties of 5 definitions of a Frailty Risk Score (FRS) and 3 comorbidity indices using data from electronic health records (EHR) of hospitalized adults >50 years of age for 3-day, 7-day, and 30-day readmission.
- To identify an optimal model for a FRS/comorbidity combination for prediction of readmission.

### METHODS

- Retrospective analysis of an EHR dataset. The FRS consists of up to 26 biopsychosocial risk factors and blood biomarkers associated with frailty constructed using ICD-10 codes and/or laboratory tests.
- Comorbidity was measured using Charlson Comorbidity Index (CCI)-12, CCI-17 and Elixhauser Comorbidity Index (ECI).
- Spearman correlations between FRS and comorbidity index combinations were examined.
- Adjusted-odds ratios (AORs) were estimated to quantify effects of independent variables.
- Multivariable logistic regressions were run for each combination of FRS and comorbidity index, adjusting for sociodemographic and clinical characteristics to examine associations with 3-day, 7-day, and 30-day readmission. Predictive accuracy was assessed using area under the receiver operating curve (AUC).

Table 1. The 5 FRS Frailty Definitions

Frailty Risk Factors	Frailty Risk Score (FRS)				
	FRS 14 items (1-14/26)	FRS 15 items (1-15/26)	FRS 16 items (1-16/26)	FRS 17 items (1-17/26)	FRS 26 items (1-26/26)
1 Malnutrition	X	X	X	X	X
2 Abnormal weight	X	X	X	X	X
3 Weakness	X	X	X	X	X
4 Fatigue	X	X	X	X	X
5 Dyspnea	X	X	X	X	X
6 Depression	X	X	X	X	X
7 Smoking	X	X	X	X	X
8 Vision problems	X	X	X	X	X
9 Urine incontinence	X	X	X	X	X
10 Falls	X	X	X	X	X
11 Delirium	X	X	X	X	X
12 Depression	X	X	X	X	X
13 Demencia	X	X	X	X	X
14 Social support	X	X	X	X	X
15 Material resources	X	X	X	X	X
Additional risk factors					
16 Dysphagia	X	X	X	X	X
17 Difficulty walking	X	X	X	X	X
18 Total incontinence	X	X	X	X	X
19 Delusional ideas	X	X	X	X	X
Blood Biomarkers					
20 Albumin, low	X	X	X	X	X
21 Creatinine, high	X	X	X	X	X
22 Glucose, abnormal	X	X	X	X	X
23 Hemoglobin, low	X	X	X	X	X
24 Sodium, high or low	X	X	X	X	X
25 WBC, high or low	X	X	X	X	X
26 CRP, high	X	X	X	X	X

### RESULTS

- The sample (n=55,778) was mostly female (53%), non-Hispanic White (73%), on Medicare (55%), admitted from home (89%), were emergent admission (59%), mean LOS was 4.3 days (SD=3.8).
- Patients readmitted within 30d were different according to emergent admission, reason for admission, prior residence, insurance (Medicaid, Medicare, dual), LOS, polypharmacy, dV/d of rehab hospital, comorbidity (CCI-12, CCI-17, or ECI), and frailty compared to patients not readmitted.
- Mean FRSs ranged from 3.3 (SD, 1.5) to 4.3 (SD, 2.1).
- FRS and comorbidity were independently associated with readmission.
- Although FRS and comorbidity indices were positively correlated, their  $r$  value was <.6 indicating that frailty and comorbidity were distinct constructs.

Figure 1. Prevalence of the Frailty Risk Factors (n=10,000)

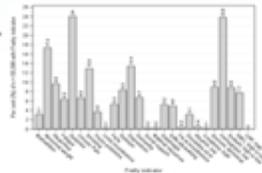
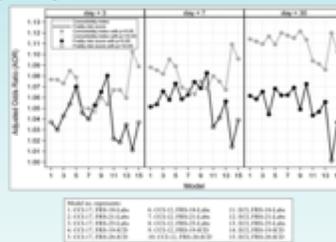
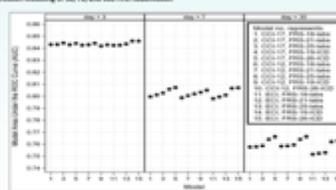


Figure 2. Adjusted Odds Ratios for FRS and Comorbidity Combination from Multivariable Logistic Regression Modeling of 3d, 7d, and 30d Readmission



Note: Adjusted for age, gender, race/ethnicity, social status, time since 1,000+ hospital admission, last patient care provider (PCP), use of Pharmacy, schizophrenia, any cognitive problems, discharge disposition, length of stay, insurance payer, pre-admission comorbidity, and comorbidity index and FRS combination.

Figure 3. Adjusted Odds Ratios for FRS and Comorbidity Combination from Multivariable Logistic Regression Modeling of 3d, 7d, and 30d Readmission



Differences in model discrimination were small for the 15 FRS/comorbidity combinations; results demonstrate that models that include the FRS and comorbidity (CCI-17, CCI-12, or ECI) reasonably predict hospital readmissions at 3-day, 7-day, and 30 days.

- The FRS and comorbidity models performed similarly well for all readmission outcomes; predictive accuracy ranged from AUC of 0.75-0.77 (30-day readmission) to 0.84-0.85 (3-day readmission).
- The best models based on AUC were FRS-26-CCI/ECI combination for 3-day and 7-day readmission, and FRS-16-CCI/CCI-12 combination for 30-day readmission.
- While comorbidity was always independently associated with readmission, FRS measures were relatively more associated with 30-day readmission relative to 7-day and 3-day readmission.

### DISCUSSION

- Better model performance for the FRS and comorbidity combination in our analyses may be explained by the representation of both disease burden (comorbidity) and syndrome/symptom burden (FRS). Comorbidity indices are not calibrated for disease severity; thus, the count of medical conditions has limited capacity to accurately characterize the combined impact of comorbidities on health status and vulnerability. Further, the syndromes in the FRS reflect the impact of disease as well as aging processes, lifestyle behaviors, and psychosocial factors.
- Poor to moderate performance of comorbidity indices in risk prediction models in acutely ill, medically complex patients suggests that all relevant factors that contribute to readmission risk are not represented, and the models that included the FRS, comorbidity, and covariates used in our analyses may more accurately represent patient health status and risk.

### NURSING IMPLICATIONS

- This study adds to knowledge about the secondary use of EHR data to identify high risk patients.
- Factors associated with earlier (3-day and 7-day) vs later 30-day readmission may differ and require different interventions.
- Although there are limitations to using ICD-10 codes, using existing EHR data to characterize frailty helps to capture the heterogeneity of aging and the impact of aging processes, comorbidity, functional impairments, symptoms, and other factors on risk for adverse outcomes.
- The biopsychosocial-framed FRS may also facilitate clinical decision-making and patient care planning to prevent readmission. Future research will use nursing flowchart documentation to map the FRS risk factors and apply the FRS in risk prediction models.

### REFERENCES

Bailey, M. A. (2019). *Unplanned hospital readmissions: 2019-2020*. *NCSP Update of Brief Report*. February 2019. Agency for Healthcare Research and Quality, Rockville, MD. <https://www.ahrq.gov/handbook/unplanned-hospital-readmissions-2019-2020/>

Charlson, M. J., Pompei, P., Ales, K. L., & MacKenzie, T. R. (1987). A new method of classifying prognostic comorbidity in longitudinal studies: Development and validation. *Journal of Chronic Diseases*, 40, 373-380.

Corley, A. J., Brennan, T., & White, D. (2015). Frailty as a predictor of adverse outcomes in hospitalized older adults: A systematic review and meta-analysis. *Ageing Research Reviews*, 16, 1000-1010. <https://doi.org/10.1016/j.arr.2015.05.001>

Mohanty, S., Sanyal, C., Sanyal, D., & Sanyal, M. (2018). Comorbidity measures for use with administrative data. *Medical Care*, 56, 9-17.

Wong, A. L., Wilson, E. H., Hwang, M. H., Davis, A. R., & MacIntyre, M. M. (2015). Differences between early and late readmissions among medical inpatients: A cohort study. *Annals of Internal Medicine*, 162, 745-750. <https://doi.org/10.7554/aim.2014.026000>

Wong, A. L., Wilson, E. H., Hwang, M. M., & MacIntyre, M. M. (2015). Comparison of early and late readmission rates for hospital readmissions using electronic health record data. *Research in Gerontology*, 60, 1-10. <https://doi.org/10.1080/08982643.2015.1055507>

Lekan, D. A., Wilkins, D. L., McCoy, T. P., Liu, L., & Wilkins, D. L. (2017). Frailty assessment of hospitalized older adults using the electronic health record. *Ageing Research Reviews*, 17, 113-119. <https://doi.org/10.1016/j.arr.2017.05.001>

Mohanty, S., Sanyal, D., Sanyal, C., Sanyal, M., & Sanyal, M. (2018). A systematic review of comorbidity and comorbidity index scores from administrative health data. *Journal of Hospital Medicine*, 13, 1-14. <https://doi.org/10.1016/j.jhm.2018.03.001>

Wong, A. L., Wilson, E. H., Hwang, M. H., Davis, A. R., & MacIntyre, M. M. (2015). Differences between early and late readmissions among medical inpatients. *Annals of Internal Medicine*, 162, 745-750. <https://doi.org/10.7554/aim.2014.026000>

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# Poster #5

## Charlene Turnage, MSN, QNS



### Rolling Walkers for Safe Mobility and Fall Prevention

Charlene Turnage, MSN, RN, LSSGB; Carolyn Erwin, PT, DPT; Kathryn Jarvis, MSN, RN, NPD-BC;  
Dr. Tracy Eskra, VP Medical Affairs & Clinical Efficiency  
Vidant Medical Center, Greenville N.C.



#### Introduction

Falls are considered hospital acquired conditions that are preventable and have negative implications for reimbursement, length of stay, and overall patient outcomes. A fall with harm costs approximately \$15,355 per case and Vidant Medical Center (VMC) had a cost savings opportunities of approximately \$384,000 in 2019. Patients who experienced a fall with harm at VMC had an average length of stay three times longer than a patient who had not experience a fall. In addition, VMC had an 86% increase in falls with harm from the previous year and suffered a \$3000 loss in rolling walkers over a 6 month period. The VMC Falls Safety team explored barriers to prevent patient falls and discovered mobility equipment was not readily available. Through creative innovations, the VMC Falls Safety Team piloted rolling walkers on nursing units to increase patient mobility, increase walker availability, and decrease fall events across the medical center.

#### Purpose

The primary aim of this quality improvement project was to reduce falls with harm by 25%, increase availability of walkers, and reduce financial loss from lost walkers at VMC.

#### Methods

##### Falls Safety Team

- Identified high risk units
- Explored barriers to fall reduction and safe mobility

##### Identified Barriers

- Delayed delivery of walkers from Central Supply Department due to loss
- Mobility equipment not readily available on the units

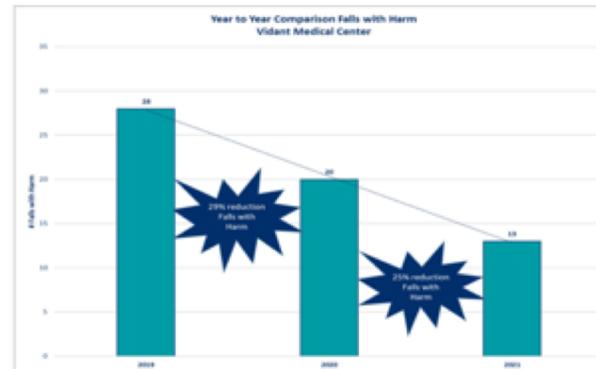
##### Collaboration

- Collaborated with Central Supply to set par level, order, paint, and deliver walkers to units
- Weekly check-ins to account for walkers

##### Actionable Goals

- Units set monthly fall goals, completed internal audits, and conducted post-fall huddles after fall events
- Increased reporting of safety catch fall events

#### Results



- VMC had a 29% reduction in falls with harm from 2019-2020. Sustained improvement efforts continue to show reduction in falls with harm with a 25% reduction from 2020 - 2021.
- VMC had an additional 7% reduction in total fall events from 2019-2020.

#### Safety Intelligence (SI) Drilldown Tool VMC Falls



#### Conclusion/Implications for Practice

- Nursing units need mobility resources readily available to promote safe mobility and decrease length of stay for patients.
- Establishing PAR levels for rolling walkers on every inpatient unit in conjunction with the utilization of the VH Falls Best Practice Toolkit led to a 29% reduction in falls with harm and a 7% reduction in overall fall events in 2020. In addition, FY21TD, VMC has had a 25% reduction in falls with harm from FY 20.
- Phase 1 and 2 of the rolling walker project proved successful:
  - All walkers remained accounted for by inpatient units.
  - Favorable team member feedback from survey results.
  - No safety events attributed to equipment delays were reported in the safety event system.
  - Delivery time for walkers to units decreased tremendously.
  - Walker retention resulted in increased cost savings for the Central Supply Department.
  - Two nursing units achieved a 100% reduction in Falls with Harm and 15% reductions in overall falls events.
- VMC's Hospital Operations Team endorsed the expansion of par levels for rolling walkers to all inpatient units. The project was completed in June 2021.
- Next steps include expanding rolling walkers to Outpatient/Ambulatory areas of need.



#### Acknowledgements

- VMC's Falls Safety Team and Central Supply Team.
- The nursing units who participated in the initial pilot project: 2 South Medicine, 2 North Medicine, 2 North Progressive Care, 3 North Neurosciences, 4 North Surgery, Cardiac Medicine, Medical Oncology, and 2 East Medicine.

# Poster #6

## Charlene Turnage, MSN, QNS

**Falls Toolkit for Fall Prevention**

Charlene Turnage, MSN, RN, LSSGB; Dana Byrum, DNP, RN-BC; Stacy Simmons, MSN, RN; Mary Ellen Foreman, MBA, RN, BSN  
Vidant Health in Eastern North Carolina



### Introduction

Falls with harm are an area of great opportunity for improvement with both financial and clinical impacts such as: reimbursement, length of stay, and patient outcomes. In 2019, Vidant Health (VH) had 35 falls with harm (10 serious safety events) (SSE). Similar trends occurred in 2020 with 32 falls with harm (9 SSE). SSE signal deviations in care and highlight the need for improvement efforts. The VH Falls Taskforce developed a charter and journeyed through various lean strategies to standardize practices and eliminate waste across the VH system. These strategies included: gap analysis, collaboration with multidisciplinary teams, POSA cycles, and review of best practice literature and internal falls data opportunities. In discovery, the team revealed variations in opportunities such as: post fall huddles, visual alerts and how they are managed, communication of falls work and opportunities, data reporting and sharing, and equipment availability.

### Purpose

The primary aim of this quality improvement project was to reduce VH falls with harm SSE by 10% in 2021.

### Acknowledgements

We sincerely appreciate and want to thank the VH Falls Taskforce for their time, dedication, project testing, and sharing ideas and successes throughout the planning, implementation, and sustainability of the project.

### Methodology



### Results

The Implementation of the Vidant Health Falls Best Practice Toolkit exceeded the goal of 10% reduction with an astounding 44% reduction in falls with harm SSE across the Vidant Health System from 2020-2021.



### Next Steps...

- Place the VH Falls toolkit in central location for easy access.
- Explore outpatient area processes, assessment tools, and interventions for standardization.
- Utilize electronic health record technology to communicate fall risk across continuums of care.

### Conclusion/Practice Implications

- To create a high reliability culture across health systems, the development and utilization of toolkit resources are effective in reducing variance in care and improve patient outcomes.
- The implementation of the fall best practice toolkit was endorsed by organizational leadership and rolled out across VH in November 2020.
- The Falls Toolkit set groundwork for building additional quality toolkits.
- The Falls Toolkit provided team members with 3 best practice guidelines (BPG) to advance the culture of safety and reduce clinical variation.
  - (BPG1) Implement a strong visual management system to identify fall risk.
  - (BPG2) Communicate fall risk, utilize post fall huddles, and share lessons learn from fall events.
  - (BPG3) Implement fall risk level appropriate interventions.
- The Falls Toolkit includes additional resource information such as: tip sheets, references to policies, falls bundle tools, and equipment.
- The below Falls Toolkit deliverables were branded by VH and made readily available for ordering through a streamlined process.

### Falls Toolkit Deliverables:

**BPG 2: Communicate Fall Risk: Post Fall Huddle and lessons learned**

**BPG 1: Visual management**

**BPG 3: Standardized Fall Risk Interventions**

# Poster #7

## Heather Sullivan, RN, MSN, CNL

**Escaping the Monotony of Nursing Revalidation to Improve Patient Outcomes & Staff Engagement**




Heather Sullivan MSN, RN, CNL; Bonnie deCourt BSN, RN-BC; Elizabeth Callis BSN, RN; Kevin W. Jones BA, BSN, RN; Melissa Wilson MSN, RN, CEN, NPD-BC; Tracy Toner MSN, RN, NPD-BC ; ZaNeta Heartwell MSN, RN, OCN, NDP-BC

### ABSTRACT

**Triggers for the Project:**  
Nursing competency has been an educational topic for debate for many years. The frequency, topics and the methodology for delivery creates the lasting impression for information retention. Revalidation is a moment in time in which prior education can be validated and practice drift can be addressed. Although areas of improvement were identified and addressed with nursing staff during yearly sessions; there was no significant change in errors on the units as validated by the safety reporting system (SRS). The previous venue for competency revalidation was crowded, difficult to hear, and lacked engagement.

**Problem/Goal Statement:**  
The goal was to create a modality and environment that engages the staff and allows validation of knowledge and knowledge sharing. By incorporating the cognitive, affective, and psychomotor domains of simulation, each participant should have a decreased amount of errors the following year.

**Actions Taken:**  
Revalidation topics were determined by a survey sent to leadership identifying areas of opportunity utilizing safety metrics from the unit, examples include: medication administration errors, or falls with injury on the unit. Education Support services developed an "escape room" that provides challenges from the identified opportunities. Within the escape room there was a puzzle or scenario created for each deficit. To "escape" the room, the teams had to "unlock" or solve each puzzle to obtain the next clue and puzzle. The "escape room" was a mocked up patient room, including a patient care mannequin with all of the equipment that the nurses and nursing assistants used each day. Each team consisted of three to five nurses for registered nurses or licensed practical nurses for "RN Revalidation".

**Measurable Outcomes:**  
The outcomes measured were staff response through anonymous surveys and SRS. The surveys indicated that the modality was more engaging, and the environment more conducive to learning while the SRS indicated a decrease in errors in the identified topics for revalidation.

**Conclusions and Recommendations for Practice:**

- Continue to offer revalidation in small group settings
- Utilize engaging hands-on activities for continued improvement in patient care outcomes
- Use small group simulation-based education to encourage engagement.

### BACKGROUND

Nursing competency has been an educational topic for debate for many years. The frequency, topics and the methodology for delivery creates the lasting impression for information retention. Revalidation is a moment in time in which prior education can be validated and practice drift can be addressed. Although areas of improvement were identified and addressed with nursing staff during yearly sessions; there was no significant change in errors on the units as validated by the safety reporting system (SRS). The previous venue for competency revalidation was crowded, difficult to hear, and lacked engagement.

### INTERVENTIONS

- ❖ Revalidation topics were determined by a survey sent to leadership identifying areas of opportunity utilizing safety metrics from the unit. Examples included: Medication administration errors, falls with injury on the unit.
- ❖ Education Support services developed and "escape room" or scenario created for each deficit. To "escape" the room, teams had to "unlock" or solve each puzzle to obtain the next clue and puzzle. The "escape room" was a mocked-up patient room, including a patient care mannequin with all of the equipment that the nurses and nursing assistants use each day. Each team consisted of 3-5 nurses or LPNs for RN Revalidation.



### GOALS

The goal was to create a modality and environment that engages the staff and allows validation of knowledge and knowledge sharing. By incorporating the cognitive, affective, and psychomotor domains of simulation, each participant should see a decreased number of errors in the following year.

### OUTCOMES

The outcomes measures were staff responses through anonymous surveys and SRS. The surveys indicated that the modality was more engaging and the environment more conducive to learning while the SRS indicated a decrease in errors in the identified topics for revalidation

### SUMMARY & LESSONS LEARNED

- ❖ Continue to offer revalidation in small group settings
- ❖ Utilize engaging hands-on activities for continued improvement in patient care outcomes
- ❖ Use small group simulation-based education to encourage engagement



### REFERENCES

O'Neil, J., & Ford, J. L. (2021). Strategies to Implement a Competency Assessment Verification Program. *ADON Journal*, 11(25), 405-402. <https://doi.org/10.46377/20210201>

Dirks, J. L. (2019). Effective Strategies for Teaching Teamwork. *Critical Care Nurse*, 39(4), 40-47. <https://doi.org/10.46377/20190404>

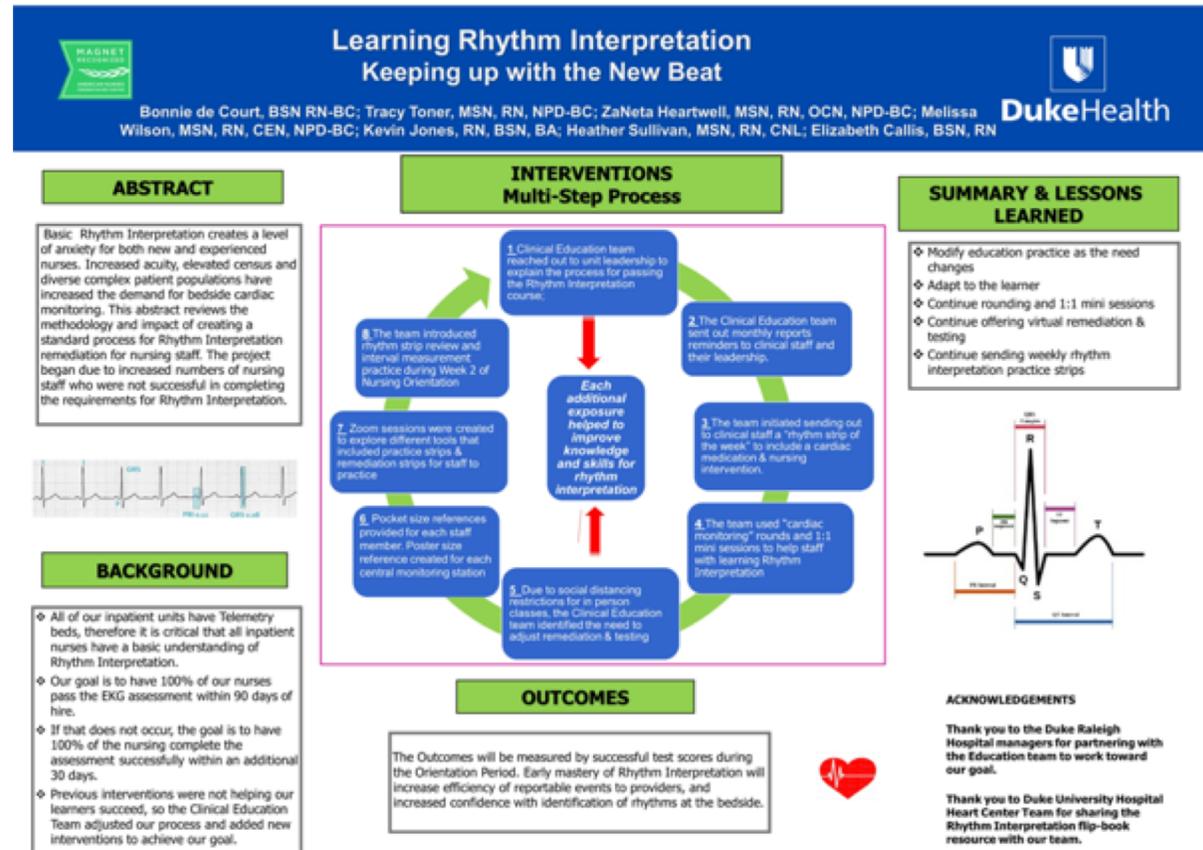
Stiefel, M., Durong, J., Monteleone, A., Held, H., Chirinos, L., & Babic, K. (2020). Don't panic! Escape an emergency with teamwork: Using an escape room game format for simulation training. *Nursing Management*, 51(10), 44-47.

Clark, R., & Collins-Yoder, A. (2020). Simulating Rescue Strategies From Procedural Sedation: One Aspect of Competency Validation. *Journal of Emergency Nursing*, 39(2), 82-85. <https://doi.org/10.1016/j.jen.2020.02.001>

**Acknowledgements:**  
Thank you to the Duke Raleigh Clinical Team leads for helping to make this a success!

# Poster #8

## Bonnie DeCourt, BSN, RN, BC



# Poster #9

## Cheryl Jordan, BSN, CMSRN



**Microsystems QI Approach: Quality Improvement Initiative to Increase Critical Lab Result (CLR) Provider Notification Documentation**

**Cheryl Jordan, BSN, CMSRN**

MTSU Team



### IDENTIFICATION OF PROBLEM

**Project Site:**

- Nash UNC Health Care, Rocky Mount, NC
- 40-55 bed Medical Telemetry Surgical Unit (MTSU)
- Inpatient clinical area servicing adult patients

**Problem:**

- The organization's CLR provider notification compliance data declined drastically after the implementation of a new electronic health record (EHR) in 2019

**Focus Area:**

- Increasing CLR provider notification documentation by the nurse (RN) in the EHR

### PURPOSE

**Aim:** Increase RN documentation of CLR provider notification in the EHR to 70% by April 1, 2021, then increase to 80% by December 1, 2021

**Purpose:** To adhere to the Joint Commission National Safety Goal 2 standards associated with effective communication of CLR's

### METHODOLOGY

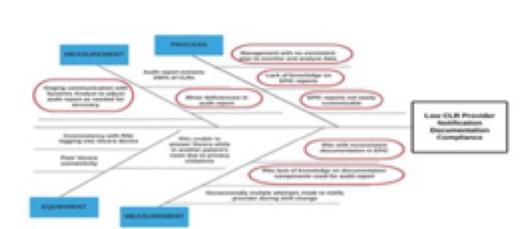
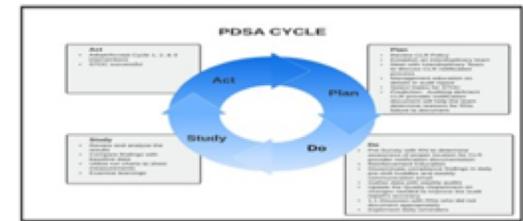
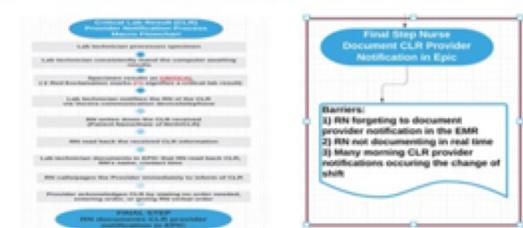
**Dartmouth Microsystem QI Framework**

- 5 P's Framework, Flowchart, Process Mapping, Cause and Effect Diagram, Brainstorming for Change Ideas, PDSA Cycle, Run Charts for Measurement

**Multidisciplinary Team Approach**

- Lab, RN, Provider, Mid-level Management, Quality Department, Information Systems

### QUALITY IMPROVEMENT TOOLS



### CURRENT FINDINGS



### DISCUSSION

**Lessons Learned:**

- Creating awareness is essential for maintaining adequate performance scores
- Utilizing an interdisciplinary team is beneficial to identifying opportunities with a process
- Consistent monitoring and reporting of data is vital to ensure the documentation step occurs
- Clear communication promotes accountability

**Recommendations:**

- Implement the interventions on other inpatient units in the organization
- Sustainability requires commitment, accountability, and ongoing partnership with the multidisciplinary team

**References**

Jacobson, W., Al-Hadidy, A., Karam, G., Al-Jabri, M., Gattuso, S. A., Stegeman, T. J., Bannister, M. T., Smith, A., & Abdallah, E. (2018). Impact on improved critical lab results documentation on patient safety in ICU: a prospective study. *International Journal of Health Services & Research Quality*, 1(2), 87-111. <https://doi.org/10.1089/ijhs.2017.0002>

Shaw, M. R., Groggins, A., Westbrook, J. J., Greenfield, D., Horvath, A. R., Westbrook, D., Li, L., Johnson, K., Balfanz, P., Brown, A., Jones, G., Harkins, R., Lindeman, R., Legg, M., Bannister, M., Shuman, G., Bannister, G., Campbell, C., Jang, H., & ... Wilson, R. (2018). Improving acute care provider time critical communication. *Medical Care*, 56(12), e12-12. <https://doi.org/10.1097/MLR.0000000000000517>

Jackson, C., MacDonald, M., Anderson, M., Stevens, P., Gordon, P., & Lauer, R. (2008). Improving timeliness of critical lab results in a pediatric oncology setting: A retrospective and engineering practice solution. *Healthcare Quarterly*, 13(2), 116-122. <https://doi.org/10.12927/hcq.2008.20078>

# Poster #10

## Rachel Phelps, DNP, MSN, RN, CNEcI



Keeping Heart Failure Patients in the "Loop": Creating a Sustainable Program  
 Rachel E Phelps DNP, MSN, RN, CNEcI

### Purpose

The purpose of this project is to increase engagement of the GetWell Loop (GWL) allowing heart failure (HF) patients to have confidence that their decision making is correct for their overall health. Through increasing engagement in the GWL, patients learn and practice self-care measures which play a vital role in controlling their health.

### Background

- 26 million people have HF worldwide (Savares & Lund, 2017)
- Forsyth County, NC has between 16.9 and 18.9 HF hospitalizations per 1,000 persons from 2015 to 2017 (CDC, 2017)
- Using GWL to empower HF patients to take ownership of their care was first trialed on 7 Reynolds (cardiac unit) in September 2020
- GWL is a technological system (either utilized via a computer or a smart device) that allows care teams to engage with "patients across their care journey through automated virtual check-ins" (getwell network, n.d.).

### Theoretical Framework

- Using Orem's theory to increase self-care in HF patients was the chosen theory
- GWL is one of many technological resources
- Orem's model depicts how all steps work together to obtain the overall goal of self-care, how empowered patients use their knowledge, and embrace new skills for ownership of care



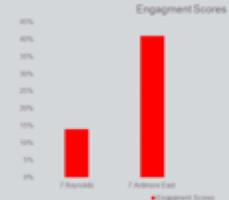
### Methodology

- Quality improvement project on 7 Ardmore East (7AE)
- Target population: newly diagnosed HF patients returning home at discharge meeting inclusion criteria
- In order to increase engagement a navigator was used to manually enroll qualified patients, provide in person GWL education, and pamphlet, set up and asked patients to watch GetWell Network (GWN) HF videos
- Once patient was activated in GWL the navigator met with patient face to face daily until discharge to answer questions and receive feedback
- Patients followed for a total of 30 days after activation and observed for engagement within GWL
- The navigator was able to check GWL daily to see which patients were engaging
- Patients were sent daily reminders
- Patients were asked about their experiences with GWL



### Results/Conclusions

- Of the 8 participants invited to join GWL, 5 chose to activate with a 41% engagement rate
- The above results were compared to a similar pilot on 7 Reynolds in September 2020, of the 15 participants invited to join GWL, 5 chose to activate with a 14% engagement rate



### Implications for Practice

- Vital to continue use of the navigator
- Continue to send daily reminders to increase engagement
- Encourage other staff to become educated and empowered to become navigators
- In order to increase self-care, engaging with patients is necessary
- Consider using GWL in the outpatient clinic not just with hospitalized patients
- Continue to brainstorm ways to engage patients to use GWL, remaining 59% not engaging

### Acknowledgements

Team Leader: Dr. Ellen Buckner  
 Team Member: Dr. Michele Blakely  
 Nursing Informaticist: Ms. Bethany Howell  
 Wake Forest Baptist Health

# Poster #11

## Jamie B. Gautier, MSN, BSN, RN-BC, NE-BC



### Collaborative Approach to Improving Patient Care Communication and Decreasing Length of Stay

Jamie B. Gautier, MSN, BSN, RN-BC, NE-BC  
Vidant Medical Center, Greenville N.C.



#### Triggers For Project

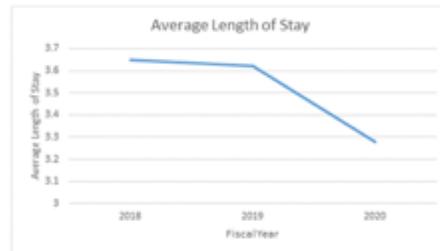
- Patient discharges can be a multiplex process resulting in delays due to resource restrictions (6).
- Properly implemented discharges help to avoid complications such as medication errors, readmissions and emergency room visits which can expand healthcare cost (7).
- Numerous proposals have been tested in improving the discharge process (6).
- 3N Neurosciences has a high demand for patient beds and was the third inpatient unit with the longest length of stay in Fiscal Year 2019.

#### Problem/Goal Statement

- The average length of stay (ALOS) for a patient on 3N Neurosciences for fiscal year (FY) 2018 was 3.65.
- FY 2019 showed a similar pattern at 3.62.
- Leadership recognized a need for improvement in the discharge process to decrease length of stay therefore improving throughput and care communication among the team.

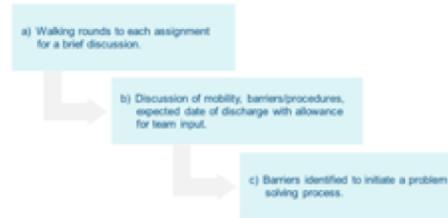
#### Measurable Outcomes

- Average Length of Stay (ALOS) data pre Progression of Care Rounds (POCR) for Fiscal Year (FY) 2018 was 3.65, FY 2019 3.62 and after implementing POCR, FY 2020 ALOS was 3.29.
- Even with COVID census spiking and Nursing Homes closing doors during FY 2020 and 2021, FY 2021 year to date ALOS is 3.33.

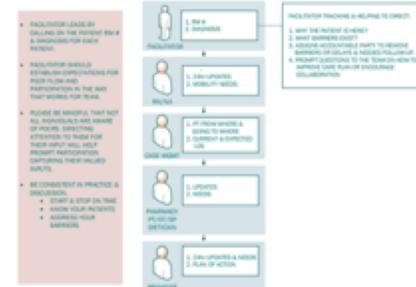


#### Action Taken

- Implemented Progression of Care Rounds (POCR) September 2019 that included a multidisciplinary team approach lead by the charge nurse to discuss each patient's disposition in a 3 step process.
- The team includes case management, pharmacy, allied health, Stroke Nurse Navigator, Rehab Admissions Nurse, primary nurse and nursing assistant, and physicians.



#### POCR EXAMPLE STRUCTURE & FLOW



#### Conclusions & Recommendations for Practice

- Implementing Progression of Care Rounds allowed 3N Neurosciences to improve care team communication, decrease length of stay, and build relationships through collaborative patient care efforts.
- Our recommendations would be to build a collaborative multidisciplinary team where discharge planning and care coordination occurs daily with all parties involved in patient care.

#### PROGRESSION OF CARE ROUNDS

MISSION	APPROACH	GUIDELINES
<p>Ensure patients receive the right care, at the right time, in the right location for their optimal length of stay</p> <p><b>VISION</b></p> <p>A system-wide standard of effective, comprehensive communication-delivering high quality, patient centered care through improved coordination and collaboration of a collaborative interdisciplinary team</p> <p><b>VALUES</b></p> <p>PATIENTS FIRST TEAM-LEAD CARE RESPECT</p>	<p>Establish your Rounding Team &amp; Rounding Time</p> <p>Lead/Co-Lead: Charge RN, Nurse Mgr., Case Mgr., Provider Members: RN, PA, APRN, Nursing Case Mgr., Social Worker, Pharmacist, Rehab Therapist, Respiratory Therapist, Health, etc.</p> <p>Address the Rounding Imperatives for each patient</p> <p>Keep the interdisciplinary Communication tool current</p> <p>Address the barriers and resolve them appropriately</p> <p><b>ROUNDING IMPERATIVES</b></p> <p><b>Disposition</b> Where did they come from and where are they going?</p> <p><b>Mobility</b> Are they moving? Who can move them?</p> <p><b>Discharge Barriers/Pending Procedures</b> What are they and how are they being addressed?</p> <p><b>Rounding Team Essential Inputs</b> Are we ready to discharge on the team provided team details?</p> <p><b>On Track for Target Discharge</b> Are we meeting minimum criteria for the patient?</p>	<p>POCR is not a goal, it's a tool and the method that works best for your unit.</p> <p>Rounding team members expected to be present for rounds.</p> <p>Rounds should last less than 45 minutes and must start and end on time.</p> <p>The POCR is about the patient's best and discharge for the next day, not the day off.</p> <p>Call the questions, to the patient at the right level of care, do they need a nurse change or be moved down.</p> <p>Single barriers are addressed and other solutions are practiced to avoid unnecessary delays and work help as needed.</p> <p>Use this time to address non-emergent issues in place of paging providers later and any side bar discussions should be taken off-line.</p>

#### Acknowledgements

1. Michael Zimmer, Systems and Procedures
2. Amy Woodard, Assistant Nurse Manager
3. Dwayne Godwin, Assistant Nurse Manager
4. 3N Neurosciences Charge Nurses and Case Management Team
5. Dr. Ryan Taylor
6. Chaboyer et al. (2011). Redesigning the ICU Nursing Discharge Process: A Quality Improvement Study. *Workflows on Evidence-Based Nursing*, 9(1), 40-48. <https://doi.org/10.1111/1741-6787.2011.00234.x>
7. Jeffs et al. (2017). Identifying Effective Nurse-Led Care Transition Interventions for Older Adults With Complex Needs Using a Structured Expert Panel. *Workflows on Evidence-Based Nursing*, 14(2), 136-144. <https://doi.org/10.1111/ewm.12199>

# Poster #12

## Kristen Hansen, RN, PCCN



### Twice Daily Touchpoints (TDT): A Multidisciplinary Initiative to Improve Percentage of Discharges Before Noon

Kristen Hansen, RN, PCCN and Pauline Stillman MSN, RN, NE-BC, RN-BC  
WakeMed Health and Hospitals, Raleigh, NC



#### Background

Late day discharges create patient flow issues, including:

- ED bottlenecking
- Increased ED and inpatient LOS
- Delayed admissions from procedural/surgical areas,
- Decreased ability to accept transfers from ICUs

#### Aim/Objective

Increase percentage of discharges before noon (DBN)

#### Methods/Execution Strategies

Beginning 10/28/2020, a multidisciplinary team met twice daily (0915 & 1415 hrs) to review discharge needs/ barriers to identify at least 2 discharges for the current and next days.

**AM** 5A 0915 Raleigh Hospitalist  
Dial-in: 202-460-2110  
Access code: 172 210 239799

Scan QR code below with mobile phone

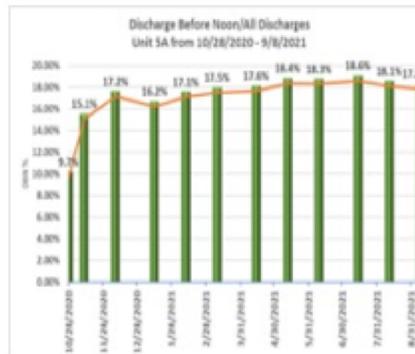
Meets on 5A  
by email  
through a  
station



To install these app  
visit App Store or  
Google Play Store (not  
required to attend)

#### Results/Findings

The monthly percentage of DBN on the pilot unit improved from 9.7% to ~17-19%. These percentages have been sustained for 8 months.



#### Discussion

- Standard touchpoint times were key to success.
- Process was limited to the geographical hospitalist for the pilot.
- Communication around the identified DBNs was challenging. Creation of an EMR order helped inform all disciplines involved in the care.

#### Conclusions

The TDT multidisciplinary intervention improved system-wide patient flow by facilitating earlier discharges.

The TDT has now been adopted by six additional units, all of which have shown improvement in percentage of DBN.

Unit name	Baseline Unit % DBN	Current Unit % DBN (8/7/21)	Geographic hospitalist % DBN (8/7/21)	Non-geo hospitalist % DBN (8/7/21)
5A	9.74	17.84	25.35 / 22.98 *	16.60
3B	10.15	14.48	14.29	14.52
5C	12.68	15.15	13.74	16.29
3A	10.58	13.72	17.31	12.90
5B	10.81	14.83	19.07	13.40
3E	8.56	10.93	13.62 / 12.87 *	9.62
6B	12.45	14.52	13.43	14.82

\*Units 5A and 3E have 2 hospitalists rounding

#### References

- Discharge Before Noon: An Achievable Hospital Goal. J. Hosp. Med. 2014, 9(4):210-214.

#### Acknowledgements

Bill Bass- Kaizen Sensei  
Dr. Seth Bernstein MD- Hospitalist

# Poster #13

## Lesa Smith, DNP, RN-BC, CCRN-K



### Nurse Driven Glucose Management in Critical Care

Lesa Smith, DNP, RN-BC, CCRN-K

Center for Professional Practice and Development – Critical Care

#### Background

- In the critical care setting, glycemic data revealed hyperglycemia and hypoglycemic events were occurring more often than desired and placing patients at risk for complications.
- Approximately 60% of patients had blood glucoses over 180mg/dL, and around 15% had blood glucoses over 250mg/dL.
- Maintaining a blood glucose between 150 mg/dL and 180mg/dL reduces mortality and post-operative morbidity according to the Society of Critical Care Medicine.

#### Description of Innovation

- An interdisciplinary team developed a nurse driven protocol to ensure early initiation of IV insulin or SQ insulin based on patient assessment and blood glucose values.
- Parameters were determined to define patients that would benefit from IV insulin as well as those stable enough to transition to or be initiated on SQ therapy.
- Nurses assessed the effectiveness of insulin therapy frequently to ensure optimal glycemic control with the ability to change the insulin delivery route if needed.

#### Results



#### Implications for Practice

- Data were reviewed from four timeframes of three months each.
- Two 3-month timeframes before implementation and two 3-month time frames after revealed a decrease in blood glucose of >250mg/dL from 15.4% to 11.3%, a decrease in blood glucoses of <40mg/dL from .15% to .07%, and improvement in overall blood glucoses ranging from 70mg/dL to 180mg/dL from 58.8% to 66.8%.
- A nurse driven protocol is effective in managing glycemic needs in critically ill patients.
- This approach ensures quick and appropriate response to the changing needs of the patient.
- Using a nurse driven protocol can establish glycemic control reducing complications in critically ill patients.



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# Poster #14

## Cynthia Klaess, MSN, APRN, ACNS-BC, CCM

**Leveraging the Clinical Nurse Specialist (CNS) Team-Based Approach in Ambulatory Care**

Cynthia Klaess, MSN, APRN, ACNS-BC, CCM; Michael Urton, DNP, APRN, AGCNS-BC;  
Samantha Rimmer, MSN, R, AGCNS-BC; Marci Leifson, MSN, APRN, AGCNS-BC




**Situation**

- ↑ ambulatory visit volume (>200,000 visits last year)
- New procedures, care migration (inpatient to ambulatory), ↑ patient complexity
- Need clinical leaders with advanced clinical, nursing, and systems expertise

**Ambulatory Initiatives**

**COVID-19 Activities**

- Monoclonal Antibody Clinic (Infusion & SubQ)
- COVID-19 Vaccine Clinic
- COVID-19 Testing Site

**Safety**

- Safety reporting data to target clinic specific initiatives
- Partnerships (providers and IT) to develop Epic order sets

**Policy/Standing Orders**

- Ambulatory Policy Sub-group
- New processes for review, approval, and implementation

**Discussion**

- CNSs are the only APRNs with advanced preparation in systems' level change
- CNS team approach supports collaboration and flexibility
- CNS skill set translates well to ambulatory setting

**Clinical Nurse Specialist (CNS)**

APRNs with specialized education in patient populations, complex health systems, and evidence-based nursing practice.

**CNS Team Results**

**COVID -19 Activities**

- > 85,000 vaccines
- > 42,600 tests
- > 900 mAB infusions
- →Prevented 90+ inpatient admits

**Safety**

- 4 CNS-led initiatives identified from safety reporting analysis
- Staff Education
- Just Culture
- 3 Epic Order Sets created

**Policy/Standing Orders**

- Doubled # of published policies
- →Goal: PolicyTech as source of truth
- 4 nursing competencies developed

**Future CNS Opportunities**

- Develop/support mentoring programs for clinical leaders
- Lead patient transitional care programs linking hospital, clinic and community
- New opportunities for ambulatory nurse development

**Actions**

- ACNO established CNS team using a combination of full-time and part-time ambulatory CNSs
- Emphasis on quality, safety and staff development in the ambulatory setting
- CNS Team conducted gap analysis of 23 hospital clinics (medicine, surgical, procedural)

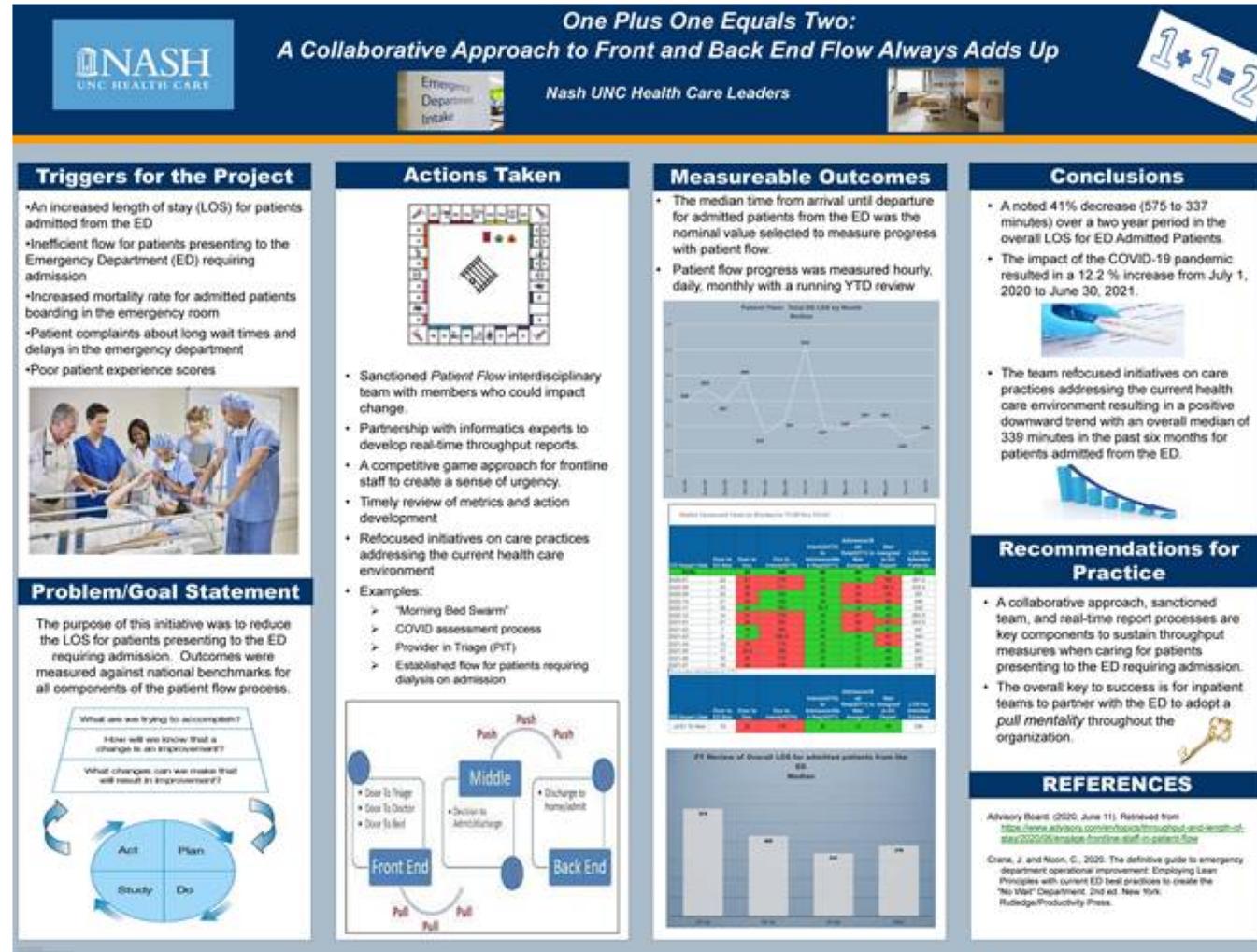
**Acknowledgments**

Chantal Howard, MSN, RN, CEN, NEA  
Duke University Hospital-Based Clinics Nursing & Clinical Teams

Response to the Institute of Medicine's Future of Nursing Report. National Association of Clinical Nurse Specialists.  
Sanchez, K., Winnie, K., & de Haas-Rowland, N., (2019). Establishing the Clinical Nurse Specialist Identity by Transforming Structures, Processes, and Outcomes. Clinical Nurse Specialist Journal, 33(3) 117-122.

# Poster #15

Mary E. Strickland, DNP, MSN, RN-C, NE-BC





# Poster #17

## Marcy van Schagen, MSN, RN, CNML



### Leveraging Interprofessional Expertise to Manage Capacity During the COVID-19 Pandemic

Marcy van Schagen, MSN, RN, CNML & Jennifer Elliott, MSN, APRN, ACNS-BC, PCCN



#### Background

- Mar 10, 2020, NC Governor Cooper declared a public health state of emergency due to the COVID-19 pandemic (NCDHHS, 2020).
- A 946-bed community-based health system used emerging evidence and policy enacted by agencies to guide practice and support the community.

#### Objective/Aim

Increase hospital capacity by 30% within 45 days to support the projected surge of patients.

#### Methods/Strategies

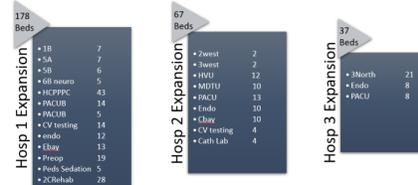
To augment volumes, levels of care, and staffing capacity, system leaders:

- Assembled an interprofessional team of nursing, providers, IS, facility services, pharmacy, clinical engineering, staffing resources, HR, legal, ethics, education, RT, finance, and executives.
- Met regularly: daily x 1 wk, then QOD x 3 wk.
- Regularly retrieved and evaluated best available evidence.
- Employed staffing strategies: reallocation, competency, cross-training, team nursing.
- Identified subgroups (eg, staffing, ICU team) for defined tasks.
- Developed COVID-19 capacity management dashboard.
- Evaluated admission and projections daily.

#### Results/Findings

Within the 45-day timeframe across the health system:

- ↑ 282 beds (30%), including increasing ICU beds from 98 to 212 beds.
- Stood up a team model and reallocation process for nursing support staffing.



#### Discussion

- 30% bed expansion achieved.
- Key members for cohort expansion identified: Facility Services, IS and Clinical Engineering.
- Staffing plan crisis model employed.

#### Conclusions

Keys to success included:

- Utilization of resources from an established capacity management program.
- An interprofessional team able to maximize existing patient flow and care processes.
- Subgroups that supported a structured and goal-oriented approach.
- Thoughtful and planned meeting cadence.
- Daily use of capacity actual vs. forecasting dashboards.

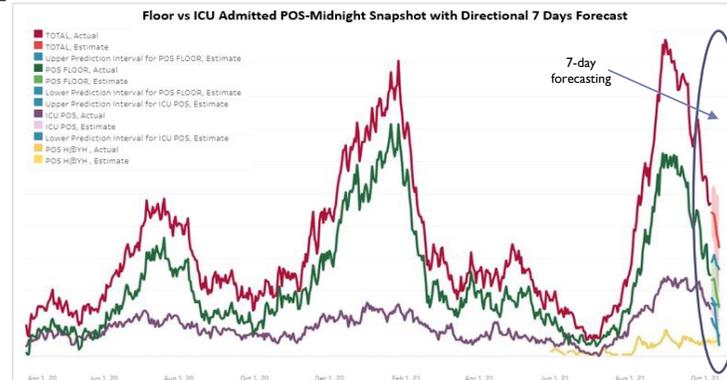
#### References

- Nursing surge capacity - ncbn.com. (n.d.). Retrieved September 21, 2021, from [https://www.ncbn.com/myfiles/downloads/coronavirus/nursing\\_surge\\_capacity\\_resource\\_2021.pdf](https://www.ncbn.com/myfiles/downloads/coronavirus/nursing_surge_capacity_resource_2021.pdf).
- NCDHHS. (n.d.). <https://www.ncdhhs.gov/news/press-releases/2020/03/10/governor-cooper-declares-state-emergency-respond-coronavirus-covid-19>.

#### Acknowledgements

We acknowledge and appreciate the hard work and dedication of the WM Capacity Management Taskforce.

#### COVID-19 Dashboard



# Poster #18

## Vanessa C. Cotton, MSN, RN

### Pre-Admission Patient Education for Prostatectomy Enhanced Recovery After Surgery Pathway

Vanessa C. Cotton MSN, RN, Christina M. Hernandez PhD, RN

Ila Faye Miller School of Nursing and Health Professions

Christie White DNP, RNC, CENP, Charlie Colbert BSN, RN, CCRN - Novant Health



#### Background

- In the United States, prostate cancer is the most common cancer diagnosed in men and a common treatment choice is a radical prostatectomy.
- The Enhanced Recovery After Surgery® (ERAS) Society developed evidence-based guidelines to optimize treatment and improve outcomes in prostatectomy patients.
- A decreased rate of complications has been shown to reduce the average length of hospital stay, as well as decrease the cost of hospitalization [Lu et al., 2020].
- Pre-admission patient education is imperative so that patients can be involved in their care before and after surgery [Burch & Balfout, 2020; Lv et al., 2020].

#### Problem

The surgical services department at a large metropolitan health system located in North Carolina is responsible for providing preoperative surgical education to patients. The microsystem assessment showed a gap in the patient education for the prostatectomy Enhanced Recovery After Surgery pathway.

The prostatectomy ERAS pathway was implemented in 2019, although the patient education component was not created at that time. Also, the pre-admission nurses had not received standard instruction for teaching patients preparing to undergo a prostatectomy following the ERAS pathway. This gap led to inconsistent teaching among the pre-admission nurses.

#### Aim

The purpose of this quality improvement project was to:

- create a pre-admission education component for patients preparing to undergo a prostatectomy following the ERAS pathway, and
- develop a method for pre-admission nurses to consistently teach the material.

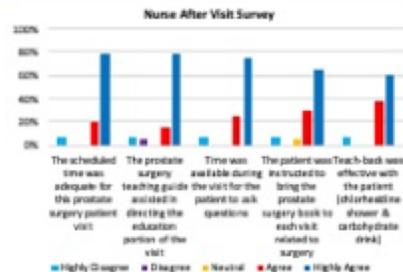
#### Human Rights/IRB

This project was deemed not research by the UIW and Novant Health IRB and no personal or identifiable data were collected.

#### Interventions

- Developed a 40-page prostate surgery book for individuals undergoing prostatectomy ERAS surgery including:
  - Print copy of prostate surgery book
  - Prostate surgery digital book
- Created a prostate surgery ERAS checklist for the patient with a concise list ordering the preoperative activities.
- Developed a scripted nurse teaching tool with a 5<sup>th</sup> to 8<sup>th</sup> grade reading-level for the pre-admission nurses to deliver prostate ERAS patient education.
- Presented an in-service to the pre-admission nurses covering the created education component of prostate ERAS, followed by a survey evaluating the in-service material.
- Evaluated pre-admission nurses use of the education tools created for the teaching visit with the patients.
- Tracked the number of prostatectomy ERAS patients participating in pre-admission teaching visits, and the number of patients receiving the book including tracking of format (print vs digital).
- Assessed perceived patient satisfaction with the ERAS teaching visit through a patient survey.

#### Results



#### Results



#### Sustainability

- The 30-minute in-person patient visit was standard practice before the project and will be maintained.
- The pre-admission nurses were enthusiastic about the development of the prostate education material and their input was requested on the education content for the book and the checklist.
- The ordering process for patient education material was augmented by the creation of a dynamic ordering form.

#### Implication for Practice

- The role of the DNP nurse leader promoted excellence in practice by incorporating a patient education delivery process that works with the current organizational structure.
- The essential role of the DNP leader was realized as several microsystems were brought together to incorporate evidence-based patient education.
- The prostate ERAS education element transitioned from a pamphlet to a comprehensive education program.

References available upon request

# Poster #19

## Nancy M. Steffan, PhD, RN, CRNP, CCRN

N

### Barriers and facilitators in the implementation of a nurse-driven mobility protocol in the critical care unit

Transforming leadership development in healthcare

**Background and Significance:**

The "E" Element of the ICU Liberation Bundle (A-F) involves early mobility and exercise and is a key component of an implementation strategy developed by The Society of Critical Care Medicine's to improve patient outcomes and reshape culture.

Early mobilization of critically ill patients:

- Decreases mortality and morbidity.
- Decreases length of stay in the ICU and hospital
- Decreases costs by reducing readmissions
- Decreases discharges to nursing homes and rehabilitation centers

**Progressive Mobility Protocol:**

- Health care provider places an order in the electronic health care record.
- Nurse follows an algorithm to initiate patient mobility; progressing activity according to protocol.
- MOVE Screening evaluates: the patient's myocardial, oxygen, and vascular stability and pain intensity.

**Chart Audit:**

- 48% had a Progressive Mobility Protocol order
- 30% of those with a protocol in place had a completed MOVE screen.
- 19% had documented mobility on the complex care flowsheet
- 16% were not mobilized

**Methods:**

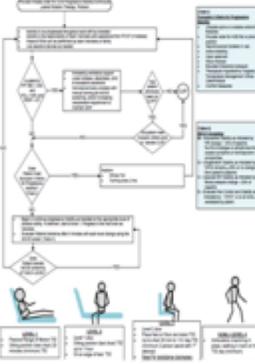
Design: Descriptive, cross sectional

Sample: Critical Care Nurses

Setting: Intensive care units in the Winston-Salem and Charlotte area

Instrument: Nurse's knowledge, behavior, and attitude will be evaluated using an Adaptation of the Johns Hopkins Patient Mobilization: Attitudes and Beliefs Survey based on the Cabana Conceptual Framework. A 26-item validated instrument using a 5-point Likert Scale







**Purpose:**

- To assess nurse's knowledge level regarding early mobilization
- To identify barriers and facilitators in the implementation of the Mobility Protocol
- To understand knowledge, attitude, and behaviors regarding nurse's adherence to practice guidelines.

**Relevance to Nursing Practice:**

- Understanding barriers may assist in identifying specific interventions to increase patient mobility
- Understanding knowledge, attitude, and behaviors may guide the development of structured quality improvement processes
- Foster organizational changes to optimize patient outcomes

**Authors:** Ashcraft, Susan, DNP, APRN, ACNS-BC, CCRN-K, SCR, FAHA, Busbee, Vanesia, MSN, RN, PCRN-K, Caudill, Tiffany, BSN, RN, CMSRN, Church, Holly, BSN, RN, CCRN, Hogan, Lindsey, BSN, RN, CCRN-K, Holoman, Kate, BSN, RN, Smith, Lessa, DNP, RN, CCRN, Steffan, Nancy, PhD, RN, CCRN, CRNP, Taylor, Sarah, BSN, RN, CCRN, and Trummel, Mitzie, MS, RN, CCRN-K

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# Poster #20

## Heather Sullivan, MSN, RN, CNL

### Charging Ahead, Increasing Leadership at the Bedside!



Heather Sullivan MSN, RN, CNL; Bonnie deCourt BSN, RN-BC; Elizabeth Callis BSN, RN; Kelsey Seidl, MSN, RN, NE-BC  
Kevin W. Jones BA, BSN, RN; Melissa Wilson MSN, RN, CEN, NPJ-BC; Tracy Toner MSN, NPJ-BC; ZaNeta Heartwell MSN, RN, OCN, NDP-BC



DukeHealth

#### ABSTRACT

##### Triggers for the Project:

Retention is a common theme in the last two years. Experienced nurses have taken less stressful careers, opted to retire early and have decreased the hours worked in patient care areas. In addition to these challenges, this entity opened an additional patient care tower requiring the staff to split, decreasing the number of staff, including charge nurses for each unit. These challenges combined with the hesitancy of staff to assume this role has left a void for new or experienced nurses to take on the role as charge nurse.

##### Goal Statement:

The goal of this project is to decrease the resistance of the nursing staff to tackle the role as a charge nurse, increasing the number of available charge nurses on the units within the next six months.

##### Actions Taken:

Education partnered with leadership, surveyed the nurses to determine what the barriers for assuming the charge nurse role were and created an education plan to facilitate developing new charge nurses. New and inexperienced nurses identified aspects of the charge nurse role in which they were uncomfortable, including: making assignments, speaking with the operations administrator, the ability to multi-task effectively. The plan included a three day orientation to the role after the nurse attended a charge nurse "table talk" that consisted of: simulation of assignment planning, scenarios emphasizing communication and conflict management and other tools that gave the less experienced nurses a formalized guideline to assume the role of charge nurse confidently.

##### Measurable Outcomes:

Within six months the new charge nurses would tackle their role of charge nurse with increased confidence in their ability. Anonymous survey results from the pilot group indicate that of the twelve participants: seven did not feel prepared to take on the charge nurse roll prior to the "Table Talk", this metric decreased to one, while all found value in the education.

##### Conclusions and Recommendations for Practice:

These preliminary results indicate the "table talks" added to the orientation increased the nurses' confidence with assuming the role of charge nurse and should continue as part of the standard work for orientation of charge nurses.

#### INTERVENTIONS

- ❖ Clinical Education partnered with leadership to survey nurses to determine what barriers for assuming the charge nurse role were and created an education plan to facilitate developing new charge nurses.
- ❖ New and experienced nurses identified aspects of the charge nurse role that was felt to be uncomfortable, to include: making assignments, speaking with the operations administrator, ability to multi-task effectively.
- ❖ The plan included three days of unit orientation upon completion of a charge nurse "table talk" session. This education included: simulation of assignment planning, scenarios emphasizing communication and conflict management and other tools that gave less experienced nurses a formalized guideline to assume the role of charge nurse confidently.

##### THEMES

- New role/skills
- Help others
- Understanding what a Charge Nurse does

##### THEMES

- Duties
- Stepdowns / acuity
- Assignments / appropriate patients
- How to have a good day ☺

#### GOAL

The goal is to decrease the resistance of nursing staff in tackling the role of charge nurse while increasing the number of available charge nurses on the unit within the next six months

#### OUTCOMES

- ❖ Within six months the new charge nurses would tackle their role of charge nurse with increased confidence in their ability
- ❖ Anonymous survey results from the pilot group indicate that of the twelve participants; seven did not feel prepared to take on the charge nurse roll prior to the "Table Talk", this metric education, decreased to one, while all found value in the education

#### SUMMARY & LESSONS LEARNED

- ❖ These preliminary results indicate the "table talks" added to the orientation increased the nurse's confidence with assuming the role of charge nurse and should Continue as part of the standard work for the orientation of charge nurses.

#### BACKGROUND

Retention is a common theme in the last two years. Experienced nurses have taken less stressful careers, opted to retire early and have decreased the hours worked in patient care areas. In addition to these challenges, this entity opened an additional patient care tower requiring the staff to split, decreasing the number of staff, including charge nurses for each unit. These challenges combined with the hesitancy of staff to assume this role has left a void for new or experience

#### REFERENCES

Barrow, J. M. (2019). Impostorism: An evolutionary concept analysis. *Nursing Forum (Hillsdale)*, 54(2), 127-136. <https://doi.org/10.1111/nuf.12305>

Quinn, B. (2020). Using benner's model of clinical competency to promote nursing leadership. *Nursing Management (Harrow, London, England)*, 27(2), 33-41. <https://doi.org/10.7748/nm.2020.e1911>

#### ACKNOWLEDGEMENTS

Thank you to the 5200 & 4700 Nursing Units for agreeing to be our pilot unit!

# Poster #21

## Cheryl A. Smith-Miller, PhD, RN-BC

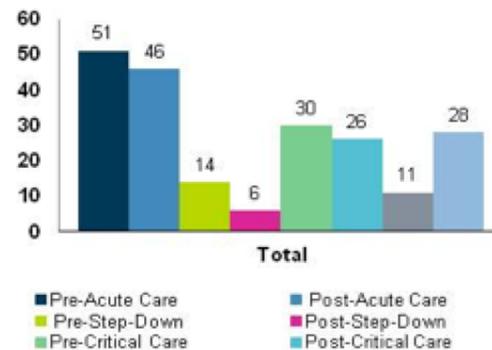
### Experienced Nurses' On-boarding and Transitions in Clinical Practice

Cheryl A. Smith-Miller, PhD, RN-BC UNC-Medical Center

**Background:** Nurse turnover is costly, de-stabilizes nursing teams, and negatively impacts patient care and safety.

**Methods:** Survey methods were used. Likert-scale type items and open text. Descriptive statistics and narrative analysis procedures.

**Results:** 106 survey responses, 64 narrative responses. Respondents reported high self-efficacy in clinical skills and professional behaviors but their knowledge and skill within the context of new work settings should not be assumed. Gaps were noted in: orientation plans; nurse manager (NM) involvement in orientation; lack of regular feedback and progress assessments; and, inconsistent regulatory, policy, and procedure information



#### Recommendations:

- Make NM involvement (feedback) in newcomers clinical orientation a priority
- Increase the provision of consistent, accurate regulatory, policy, and procedure information
- Provide preceptors with periodic updates on documentation, policy, and standards
- Provide specialty education in a timely manner based on individual education needs

Nurses pre- (previous experience) to current clinical area (post).

# Poster #22

## Melissa Wilson, MSN, RN, CEN, NPD-BC



### Orientation? No Sweat, Simulation to the Rescue!

Melissa Wilson MSN, RN, CEN, NPD-BC, ZaNeta Heartwell MSN, RN, OCN, NPD – BC, Tracy Toner, MSN, RN, NPD-BC, Bonnie deCourt, BSN RN-BC, Kevin W. Jones BSN, RN, BA, Elizabeth Callis BSN, RN, and Heather Sullivan MSN, RN, CNL



#### ABSTRACT

- ❖ New levels of stress and responsibilities have been handed to nursing staff in the past eighteen months
- ❖ Experienced nurses have chosen to retire or transfer from bedside nursing jobs
- ❖ Decreased clinical time for new RN graduates
- ❖ Increased numbers of new graduates being hired
- ❖ New and inexperienced preceptors are feeling overwhelmed
- ❖ Transition to virtual Nursing Orientation provides its own set of challenges such as lack of engagement with each other, decreased ability to ask questions and no personal interaction with educators or leaders

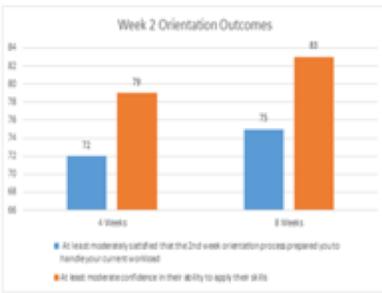
#### BACKGROUND

- ❖ The Human Resources (HR) department in conjunction with Nursing Leadership identified, through exit interviews, that new staff and preceptors were feeling overwhelmed
- ❖ Further interviews conducted with preceptors and new staff on the unit's identified preceptor and staff needs related to the onboarding process
- ❖ Preceptors identified that new staff were arriving on the units without many practical skills and knowledge of processes and equipment at our hospital
- ❖ New staff identified a lack of engagement as a result of the entirely virtual orientation and a lack of knowledge of Duke Raleigh specific equipment and processes

#### INTERVENTIONS

- ❖ Clinical Education team and Nursing Leadership reviewed the data gathered by HR
- ❖ An additional week of in person Nursing Orientation in which staff could learn about Duke Raleigh Hospital specific processes, policies and equipment was proposed on a trial basis
- ❖ Inpatient and Emergency Department RNs only
- ❖ in person orientation program was designed to include hands on practice with simulation scenarios in combination with rich didactic review.
- ❖ Including layout of the campus and their units, commonly used equipment, process standards of the hospital and who their clinical expert resources are

#### OUTCOMES



#### SUMMARY AND LESSONS LEARNED

- ❖ Unit Leadership and Preceptors are finding new staff more prepared to function on the unit
- ❖ New staff feel more engaged with each other and the hospital after participating in Week 2
- ❖ Hands on stations with and without simulation were deemed most valuable by attendees
- ❖ Practice documenting in the Virtual Electronic Medical Record was reported to be very helpful by new staff and preceptors
- ❖ Program has now expanded to include all nursing staff on Day 1. This includes all main campus RNs, CNAs, Paramedics, and Transporters
- ❖ This one day gives them a tour of the campus and the hospital. Information about safety, regulatory responsibilities, Time and Attendance policies and introduces our Zero Harm initiative



#### REFERENCES

Olejniczak, E. A., Schmidt, N. A., & Brown, J. M. (2010). Simulation as an orientation strategy for new nurse graduates: An integrative review of the evidence. *Simulation in Healthcare, 5*(1), 52-57.

Lamers, K., Janisse, L., Brown, G., Butler, C., & Watson, B. (2013). Collaborative hospital orientation: simulation as a teaching strategy. *Nursing Leadership, 26*, 61-9.

#### ACKNOWLEDGEMENTS

PRISCILLA RAMSEUR, DNP, RN, CNOR, NEA-BC, Ronda Decker MSN, RN, CNML, Human Resources Department of Duke Raleigh Hospital

# Poster #23

## Elizabeth Callis, BSN, RN, CAPA



### Onboarding New PACU Nurses More Efficiently With Simulation-based Training



DukeHealth

Elizabeth Callis BSN, RN; Heather Sullivan MSN, RN, CNL; Bonnie deCourt BSN, RN-BC; Kevin W. Jones BA, BSN, RN;  
Melissa Wilson MSN, RN, CEN, NPD-BC; Tracy Toner MSN, RN, NPD-BC; ZaNeta Heartwell MSN, OCN, NPD-BC

#### ABSTRACT

It is challenging to provide consistent, quality educational opportunities and protected time for nurses during Post Anesthesia Care Unit (PACU) Orientation. This abstract will review the methodology and impact of formalizing a standard format for creating effective PACU Simulation. Triggers for this project came during the current COVID-19 Pandemic. Duke Raleigh's PACU has had a higher than normal turnover of staff combined with a planned hospital renovation. Staff reported concerns about the rushed orientation and decreased confidence in nurse competencies. The above factors required Clinical Education to assess and rethink how best to orient new staff moving forward.

#### BACKGROUND

The PACU team was not confident in providing safe patient care after moving into a new and larger work space. The Clinical Education Team's goal was to develop a PACU focused orientation plan that would equip new hires with the skills and ability to start out in the PACU feeling more confident.

#### INTERVENTIONS

The Clinical Education team met with PACU leadership to suggest a change in the current orientation plan. This resulted in a new plan which schedules didactic lessons and modules paired with case based scenarios. This would be hands-on training in a simulation setting. For example, an airway emergency lesson followed by actively participating in several airway scenarios within the simulation suite. The initial classroom training is then followed by shadowing/training with a preceptor. This would include; daily check-ins and weekly evaluations. New staff will be required to review safe practices & basic skills prior to arrival on the unit.

#### OUTCOMES

- ❖ Feeling comfortable with a new orientation plan as well a new space has overall been a positive experience to the Clinical Education team. There have been a number of near misses and sentinel events related to high risk medication and procedures performed.
- ❖ Feedback shows that staff feel better equipped to care for their patients.
- ❖ More studies need to be done to compare pre and post results.



#### SUMMARY & LESSONS LEARNED

- ❖ Simulation activities replicate clinical practice that supports staff in learning in a safe learning environment
- ❖ The PACU staff completed the designated simulation scenarios with the preliminary feedback being positive

#### REFERENCES

INACSL Standards Committee (2021). Healthcare Simulation Standards of Best Practice (TM) *Simulation Design. Clinical Simulation in Nursing: Vol 58, P14- 21.*  
<http://dpi.org/10.1016/j.ecns.2021.08.09>

Schlick, L. & Windle (2004). PeriAnesthesia Nursing Core Curriculum: Procedure, Phase I, and Phase II. *PACU Nursing, Second Edition*

#### ACKNOWLEDGEMENTS

I would like to recognize: Priscilla Ramseur, DNP, RN, CNOR, NEA-BC  
And Molly McLean MSN, RN, CPAN

PACU  
SIMULATION

# Poster #24

## Carol Mayernik, MHA, BSN, RNC-OB, C-EFM



### Labor Diet and the Effects on Energy and the Birthing Experience

Authors: Carol A. Mayernik MHA, BSN, RNC-OB, Karen Cumbo BSN-BC, Alexcia C. Jones, BSN

#### Problem

The practice of limiting PO intake to clear liquids during labor is based on outdated information and not supported by current literature, yet is current practice in many hospital labor units. Induction of labor and/or early labor can be lengthy, resulting in low energy and hunger, which may negatively affect the birthing experience.

#### Background

- Labor is a physical and emotional process
- At many birthing centers, only a clear liquid diet is offered to laboring patients, regardless of risk
- Risk of aspiration is low (5% general anesthesia rate)
- Patients often complain of hunger during labor
- Patients often have low energy during second stage
- Patients birthing at home or with CNM support, often are offered food in early labor without complications

#### Research Question

Do patients in labor that are at least 37 weeks gestation and meet inclusion criteria and offered a "labor diet", perceive more energy and/or satisfaction at delivery while having no increased rate of gastric aspiration, compared to those that are offered only clear liquids?

#### Intervention

- Consented patients meeting inclusion criteria for low-risk labor were offered a "labor diet."
- Patients were permitted to follow the "labor diet" until active phase of labor-defined as regular contractions, moderate or severe in intensity, and/or at least 6 cm dilated, or inclusion criteria no longer met.



#### Labor Diet:

- ❖ fruit, juice
- ❖ Toast, cereal, soup
- ❖ Sandwiches-PB&J, grilled cheese
- ❖ Snacks-crackers, pretzels, pudding, yogurt, cheese, granola

Inclusion Criteria	Exclusion Criteria
<ul style="list-style-type: none"> <li>• ≥ 37 weeks gestation</li> <li>• Early labor &lt;6cm</li> <li>• Predominately Category I EFM tracing</li> <li>• BMI ≤ 40</li> <li>• GDM ( Diet controlled or oral anti-glycemic managed)</li> <li>• GHTN/CHTN (not requiring IV anti-hypertensives)</li> </ul>	<ul style="list-style-type: none"> <li>• TOLAC/VBAC</li> <li>• Obstetric complications, ex. Pre-eclampsia, HELLP, IUDM</li> <li>• History of ulcers or esophageal disease</li> <li>• Macrosomia</li> <li>• Determined a difficult intubation by anesthesia</li> <li>• Grand multip</li> <li>• Epidural anesthesia</li> </ul>

For more information contact: Carol Mayernik MHA, BSN • 980-621-6711 • [cmayernik@novanthealth.org](mailto:cmayernik@novanthealth.org)

#### Method

Pre/Post intervention surveys:

#### Quantitative

1. Compare energy level prior to delivery- Likert scale
2. Compare incidence of aspiration

#### Qualitative

Discover thoughts from patients about being permitted to eat in labor and its effects on the birthing experience

#### Results

#### Quantitative-

1. Energy Level  
Control N=108 mean 3.009 SD 1.0873  
Test-N=131 mean 3.336 SD 1.1920  
2 tailed T- test p=0.025
2. Zero incidence of aspiration

#### Qualitative-

96% positivity rate of patients permitted to eat in labor stated it enhanced their birthing experience.

#### Recommendations for Practice

Low-risk laboring patients should be offered a select regular diet during early labor to optimize the birthing experience and to increase energy levels during birth with no incidence of aspiration.



# Poster #25

## Mary Ellen Foreman, MBA, BSN, RN

### Silencing the MEWS (Modified Early Warning System) to hear the Nurse's Voice.

Mary Ellen Foreman, MBA, RN, BSN; Juli Forbes, MSN, RN, CCRN; Amy Campbell, PhD, RN, CPHQ, LSBB; Jo Taylor, RN; Wendy Sutton, CSSBB  
Vidant Beaufort Hospital



#### Introduction

In 2017, MEWS (Modified Early Warning System) Best Practice Alert (BPA) was implemented throughout Vidant Health. The purpose of this BPA was to trigger interventions to support patients who may be in the early stages of deterioration. Early intervention improves outcomes and decreases morbidity and mortality. Scores of 3 or above trigger a BPA and the appropriate response to this BPA triggers additional actions from the nurse. The BPA was designed to support the early identification and intervention for patients who may be experiencing deterioration. In the spring of 2019 Vidant Beaufort reached out to the Sepsis Steering committee on guidance on how to educate and address areas of opportunity/ barriers related to alarm fatigue and inappropriate use of resources.



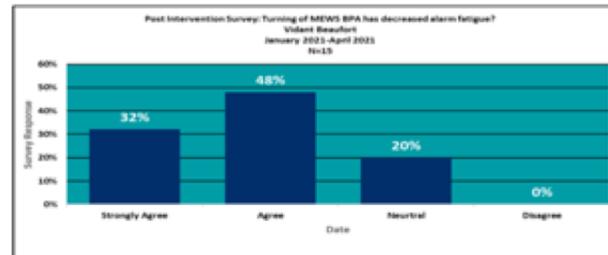
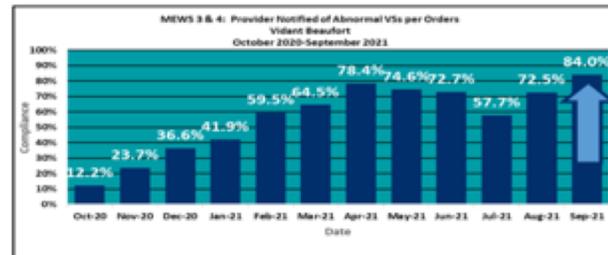
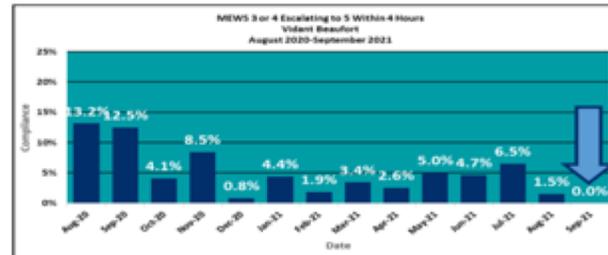
#### Purpose

The primary aim of this quality improvement project was to 1) reduce alarm fatigue by changing the Modified Early Warning System BPA, 2) develop an alternative pathway for reporting changes in acuity and 3) to have zero adverse events related to new pathway by June 2021.

#### Methodology

The team used a Six Sigma Lean framework Define, Measure, Analyze, Improve, and Control (DMAIC) to develop a new pathway to determine need to contact provide and change level of care. The team used the electronic medical record to report out daily results to compliance with new pathway and metrics.

#### Results



#### What did we accomplish?

- Decreased our MEWS 3 or 4 escalating to 5 within 4 hours from 13% to 0%.
- Achieved 84% compliance with Provider being notified of abnormal vital signs. A 68% increase from October 2020.
- Decreased alarm fatigue by 60%.
- Prevented codes outside the ICU. Only 3 in a year, unrelated to MEWS.



#### Conclusion/Practice Implications

- Alarm fatigue should be addressed and creative solutions explored..
- All alerts should be reviewed quarterly to determine if they are preventing harm and nursing is responding appropriately.

#### Acknowledgements

2 East and 3 East Medical and Surgical Team Members.

# Poster #26

## Telicia Keys, BSN, RN-BC, PCCN



### Rational

- Throughout history, healthcare workers continue to be the first line of defense to help offer aid in an epidemic or pandemic threatening worldwide safety.
- Novel coronavirus (COVID-19) has challenged the phrase "Business as usual" in the healthcare setting affecting more than 640,000 people in 202 countries.
- Healthcare professionals bare multiple stressors working through pandemic. It is essential for an organization to have requisite staffing for continuity of care.
- Leadership should have intervention strategies in place to promote health, wellbeing, and retention of staff.
- Nevertheless, being in a crisis makes it increasingly important to have team unity; which can foster resiliency.

### Problem/Goal Statement

- 3 West Surgery specializes in bariatric surgeries, along with gastrointestinal procedures requiring high-acuity nursing expertise. In the midst of an international pandemic, the hospital halted all elective procedures in alliance with state recommendations.
- Part of this preparation was the closing of 3 West Surgery and relocating the staff for divisional needs.
- During their eight month closure, 3 West Surgery experienced a 47% staffing loss due to daily transference to other departments
- Administration and medical directors formulated a plan to re-open this unit; due to the need of specialized care in preparation of restarting elective surgical procedures.
- In addition to decreased further outgoing of staff movement.

### Actions Taken

Due to staff turnover and dissatisfaction with perceived uncertainty around unit re-opening; a 4-part strategy was developed:



### 3 West Surgery



### Resiliency and Determination

### Measurable Outcomes

3 West re-opened in November with only 51% of initial staff and 2% re-joining the first month of opening. February showed improvement with a 6% increase of new recruitment overall. Recruitments continue to rise with 28% of new recruitment in the onboarding process while retrieving 4% of original staff back, who resigned during unit closure.



### Conclusions and Recommendations for Practice

Proving affective leadership and unit cohesion can engage, promote and retain team members.

### Acknowledgements

- (1) Jun, J. (2020). Clinician Mental Health and Well-Being During Global Healthcare Crises: Evidence Learned from Prior Epidemics for COVID-19 Pandemic. World Division of Evidence-Based Nursing, 12(3), 182-184.
- (2) Peter-O'Grady, T., & Malloch, K. (2016). Change and Innovation. In Porter-O'Grady, & K. Malloch, Leadership in Nursing Practice Changing the Landscape of Health Care (pp. 28-29). Burlington: Jones & Bartlett Learning.
- (3) Swamy, L., Morh, D., Block, A., Anderson, E., Chams, M., Wiener, R., & Rinne, S. (2020, September). Impact of Workplace Climate on Burnout Among Critical Care Nurses in the Veterans Health Administration. American Journal of Critical Care, 29(5), 380-389.
- (4) April W. Meeks, BSN, RN, PCCN.

# Poster #27

## Cynthia Klaess, MSN, APRN, ACNS-BC, CCM



**Ambulatory Clinical Nurse Specialist (CNS) and Clinical Nurse Educator (CNE): Partnership for Improved Practice**  
 Cynthia Klaess, MSN, APRN, ACNS-BC, CCM, Marci Leifson, MSN, APRN, AGCNS-BC,  
 Samantha Rimmer, MSN, APRN, AGCNS-BC, Katherine Overbey, RN, NP-BC



**Introduction**

Ambulatory hospital-based clinics with >200,000 yearly volume

Rapid clinic growth across multiple clinics

Large volume of new staff, including new graduate RNs

**Outcomes**

Improved quality and timing for policy implementation, skills improvement, and new initiative rollout.

Targeted Staff Education/Competency	Multi-Clinic BP Protocol	Ambulatory New Graduate Nursing Orientation
CNS Gap Assessment	CNE and CNS Partnership	CNE and CNS targeted approach
CNE developed education or competency as needed	Developed training video, reference tools and competency training	→Orientation in up to 6 clinics →Engagement Sessions →Skills tracking for 12 months
Development of 2 competencies in a 6-month period.	→21 Champions trained →238 staff competency validated	↑ new grad retention ↑ clinical confidence
Intramuscular injection for UAP		
Unna Boot wrap for wound clinic clinical staff		

**Clinical Nurse Educator (CNE):** A partner for practice transitions providing support in knowledge, skills and competency of staff.

**Actions**

Ambulatory CNS team partnered with an ambulatory focused CNE on policy review, competency development, new graduate orientation program, and targeted education.

Weekly CNE/CNS collaborative Zoom meetings for new and ongoing projects and weekly policy revision workgroup

**Conclusions**

Ambulatory focused CNE and CNS leverage each discipline's skills

Ensure optimal project implementation, competency and education of evidence-based practices

Key aspects of best practice and competency were considered from outset of projects

→Reduced staff confusion  
→Minimized policy revision  
→Improved implementation of projects

Utilization of this partnership has proven to be essential for effective and timely rollout of new and ongoing ambulatory initiatives

**Clinical Nurse Specialist (CNS)**

APRNs with specialized education in patient populations, complex health systems, and evidence-based nursing practice.

**Literature cited**

Lovlien, C., (2018). Core Role Dimensions of an Ambulatory Care Nursing Staff Educator. *Ambulatory Care Nursing Orientation and Competency Guide*. Third Edition, 106-112

Sanchez, K., Winnie, K., & de Haas-Rowland, N., (2019). Establishing the Clinical Nurse Specialist Identity by Transforming Structures, Processes, and Outcomes. *Clinical Nurse Specialist Journal*, 33(3) 117-122

**Future CNS-CNE Opportunities**

- Develop/support mentoring programs for clinical leaders
- New opportunities for ambulatory nurse development

**Acknowledgments**

Chantal Howard, MSN, RN, CEN, NEA  
 Duke University Hospital-Based Clinics Nursing & Clinical Teams  
 Katina Green,

# Poster #28

## Kamilah Williams, PhD, RN, MHA, NPD-BC, NEC-BC



**Rebuilding and Reimagining the Nursing Workforce: Implementation of an International Nurse Fellowship Program**  
 Grayson Moore, MSN, MBA, RN, NPD-BC and Kamilah Williams, PhD, RN, NPD-BC, NEC-BC  
 Vidant Medical Center, Greenville N.C.




### Introduction

- Healthcare organizations continue to seek out innovative strategies for recruiting and retaining experienced nurses.
- As the gap in the nursing shortage expands, strategic planning must be implemented.
  - Even with expanded hiring of new graduate nurses, 57% of newly licensed nurses continue to leave their initial job within the first two years.
  - It is estimated that one-third of the nursing workforce will be at retirement age within the next ten years.
- Studies showed that international nurses are contracted for up to two to three years providing a more consistent, long-term staffing plan and continuity of care for patients.
- The richness in cultural diversity these nurses will bring to the workforce is an asset to promote cultural fusion.

### Purpose

The purpose of this fellowship program is to establish an innovative, robust experience for professionally transitioning international nurses into the United States nursing workforce.

### Objectives

- Close practice gaps International Nurses experience during their professional transition.
- Integrate International Nurses into the culture of the organization and community.
- Enhance the International Nurses understanding of the United States Health Care delivery system.

### Methods

- Nurse leaders collaborated to design an International Nurse Fellowship with the goal of expanding the nursing workforce with experienced nurses. The framework of the fellowship consists of five key elements:
  - Pre-arrival
  - Professional transitions
  - Orientation
  - Curriculum development
  - Integration and assimilation into the United States healthcare system.



### Results

- At the 12 month mark there was a 100% retention rate of 25 international nurses and currently remains at 99%.
- Pre and post clinical assessments demonstrated a 93% improvement.
- 37.5% of those with 1 year of experience have advanced into charge nurse and preceptor roles.
- Upon completion of program evaluation, 78% agree at 1 year they have grown professionally.
- Organizational commitment remains steady at 1 year that 89% agree that they would recommend the fellowship to international nurses seeking to pursue their transition into the United States and that they look forward to their future at the organization.



### Conclusion

- Implementation of a professional transition program for international nurses has proven as a successful strategy for the recruitment and retention of experienced nurses.
- Integrating nurses from around the globe has improved the cultural competence of the healthcare team, increased diversity and expanded the horizons of the organization.

### Next Steps....

- Implement and evaluate retention strategies to convert contracted International Nurses into core team members.
- Engage retained International Nurse Fellows to serve as Ambassadors for International Nurses transitioning into practice in the United States.

### References

- Gregory, G. (2017). Effective communication for a global workforce. *Nurse Leader*, 15(6), 392-395. <https://doi.org/10.1016/j.mnl.2017.09.005>
- Harper, M. G., & Maloney, P. (2016). *Nursing professional development: scope and standards of practice*. Chicago, IL: Association for Nursing Professional Development.
- Lurie, L. (2016). Strategic planning for future delivery of care: Onboarding foreign-educated nurses. *Nurse Leader*, 14(6), 427-432. doi: <https://doi.org/10.1016/j.mnl.2016.08.014>
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396. <https://doi.org/10.1037/h0054346>

# Poster #29

## Kevin Dixon, MSN, RN



### Rational

- The American Academy of Orthopedics Surgeons (AAOS) evidence based clinical practice guidelines strongly recommends that post-operative mobilization starts on the day of surgery to reduce pain and improve function.
- A feature of exemplar hip and knee replacement Enhanced Recovery After Surgery (ERAS) pathway is that patients should be mobilized as soon as possible following surgery.
- Transitioning to outpatient surgery where patients are routinely discharged on the first and second post-operative day has established early mobilization as one essential standards.

### Problem/Goal Statement

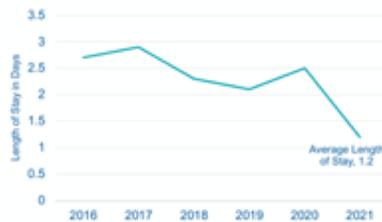
- The Unit based council (UBC) made recommendations on how to implement the process for early mobilization on the unit
  - nursing education needs
  - RN assessments prior to evaluations of mobility
  - pertinent findings that could rule a patient out from Day zero mobilization.
- The UBC along with leadership helped to develop the criteria for post-op day zero implementation that was used on the unit.

### Actions Taken

The project had a three part design to ensure a comprehensive strategy for managing the transitions to post-op day zero mobilization for Total Joint Replacement patients:

- 1 Post-op orders sets were updated and points of specific MD orders were clarified
- 2 Nursing criteria for assessments prior to mobility evaluations were implemented
- 3 Communication between nursing staff and PT were established

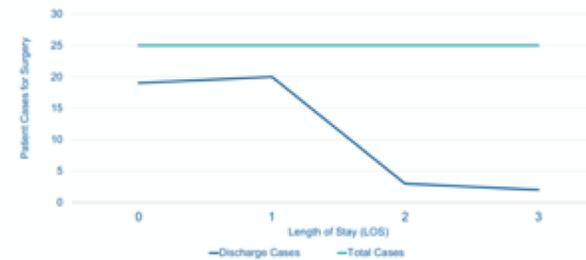
### Average Anchor Length of Stay



### Measurable Outcomes

- Patients are mobilized promptly after surgery reducing the risk of clots and improving wellness mind sets therefore reducing their length of stay by 48% in one year.
- Furthermore 80% of patients have been coded as outpatient with the inpatient population reduction of stay at 12% on day 2 and 8% on day 3 since April 2021.

### Day Zero Mobilization Outcomes



### Conclusions and Recommendations for Practice

Successful transition from 'sickness' to 'wellness' model of care can have a profound effect on the total length of stay.

### Acknowledgements

- (1) McGrory, B., Weber, K., Jevsevar, D., & Sevarino, K. (2016). Surgical Management of Osteoarthritis of the Knee: Evidence-based Guideline. American Academy of Orthopaedic Surgeons, 24(8), 88-93.  
 (2) April W. Meeks, BSN, RN, PCCN.

# Poster #30

## Gladys Campbell, MSN, RN



### Efficacy of self-proning in COVID-19 positive/PUI med/surg patients

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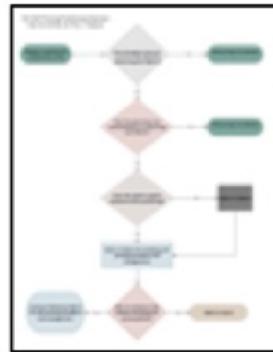
#### Background

- "Prone positioning is a therapeutic maneuver used to improve oxygenation and pulmonary mechanics in patients with acute lung injury or mechanically ventilated patients with acute respiratory distress syndrome (ARDS) who require high concentrations of inspired oxygen".
- Proning is an accepted and proven practice in critical care to reduce complications and improve respiratory status.
- Proning is not a commonly used practice outside of critical care areas, especially in med surg.



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The study was designed to determine the nurse's perception of the efficacy of awake self-proning in the COVID PUI/positive med surg patient using a facility developed algorithm to determine the appropriateness of utilization of this nursing intervention in the care of the patient.



#### Results

- 79% of nurses surveyed stated the patient status improved always or frequently when self-proned.
- 66% of nurses surveyed stated patients frequently or always tolerated the initial self-proning position.
- 66% of nurse's surveyed stated patients who self-proned initially were willing to try proning again.
- 86% nurses surveyed agreed or strongly agreed to using self-proning intervention in the future.



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