



Cooper Bridges

A publication for nurses and healthcare professionals

SPRING/SUMMER 2018 ■ VOLUME 12, ISSUE 1



How to Stop the Bleed:

*What Every Person
Should Know*

Table of Contents:

Nursing Leadership Letter	3
How to Stop the Bleed	4
Care Coordination	6
Patient Advocacy	7
It Takes a Team	10
Interrupted Sleep	12
Reflections	14
Professional News	16

EXECUTIVE EDITORS

Nancy DeBerardinis, MSN, RN, BC
Clinical Educator II, Surgical Services

Jennifer Harbourt, MSN, RN, CEN
Lead Clinical Educator

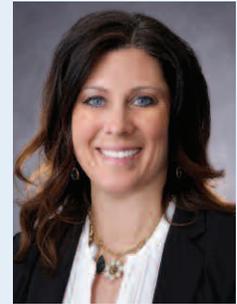
Stacey Staman, RN, MSN, CCRN-K, TCRN
Pediatric Trauma Program Coordinator

Janet Tridente, RN, MSN, CCRN-K
PI Outcomes Manager, Surgical Services Institute



To add someone to this mailing list, or to correct your address please email:
Staman-stacey@cooperhealth.edu

From the Senior Nursing Leadership



Danielle Majuri MSN RN APRN
AVP Regulatory and Population Integration

As healthcare continues to change, healthcare systems are forced to explore different options for how nurses provide care to our patients and the community. How do we keep healthy people healthy? How do healthcare providers prevent progression of chronic diseases in our patients?

First, the core of population health is to segment the population for which you are attempting to serve into five categories:

- Healthy
- At risk
- Acute/episodic
- Chronically ill
- Catastrophic

Next, examine each category and think about how we, as nurses, manage the patients within each of these realms. What tactics can we utilize to keep healthy people healthy? Some measures are as simple as encouraging a proper diet and regular exercise. How do we move patients through an acute health crisis? For example, a patient has a fall and fractures their hip. Our goal is to provide the surgical intervention to repair the fracture, recover the patient postoperatively while preventing complications and coordinate discharge to home or rehab for maximum recovery.

In this edition of *Bridges*, we explore healthcare topics that center on caring for all categories of our patient population. A few topics include training community members to provide basic life saving measures when someone is actively bleeding, preventing avoidable complications in the acute phase of care, advocating for our patients and spanning healthcare delivery across the continuum to assist patients who are at risk or chronically ill.

Enjoy these wonderful articles outlining how Cooper cares for our population.

Danielle

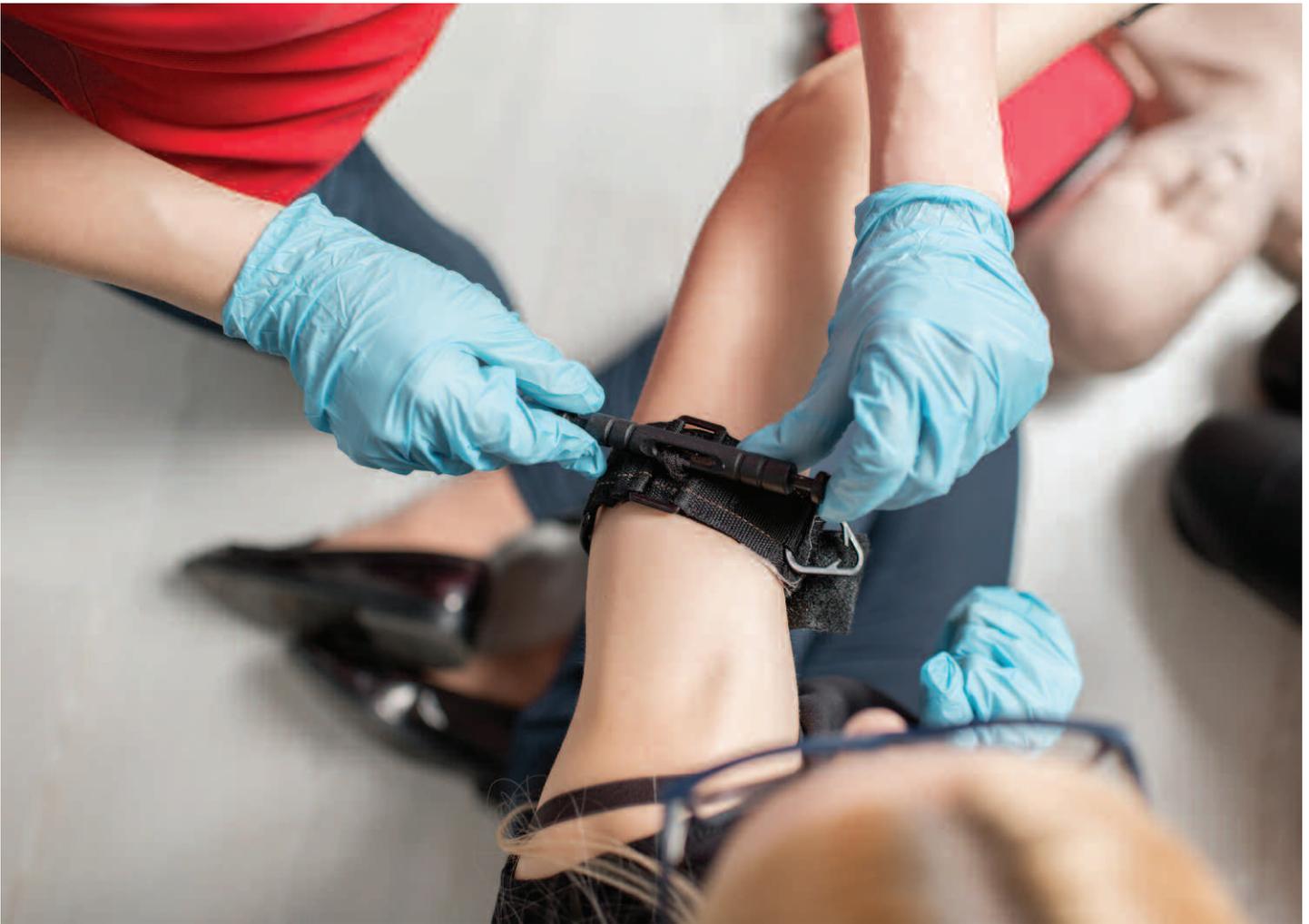
Danielle Majuri, MSN, RN, APRN | AVP Regulatory and Population Integration

Email comments to Majuri-danielle@cooperhealth.edu

Cooper Bridges Mission:

"To communicate and educate nurses and healthcare professionals to foster excellence in the delivery of patient care."

Cooper Nurses interested in authoring an article for a future edition of *Cooper Bridges* may obtain submission guidelines by contacting: Staman-stacey@cooperhealth.edu



HOW TO STOP THE BLEED: What Every Person Should Know

Stacey Staman, MSN, RN, CCRN-K, TCRN

While mass shootings and acts of terrorism receive a lot of media attention, serious bleeding is more likely to result from everyday injuries such as those that may occur at home, work or while traveling. If you or a loved one had uncontrollable bleeding from a wound...would you know what to do?

The leading cause of death for all Americans under the age of 46 years is trauma (Rhee, Joseph, Pandit, et al., 2014) and the leading preventable cause of trauma death is hemorrhage (Jacobs, & Burns, 2014). Even in urban areas with short transit times to emergency care, exsanguination from extremity trauma remains an important preventable cause of death (Dorlac, et al., 2005). Early bleeding control is essential to reduce mortality rates and increasing evidence supports the civilian intervention to “Stop the Bleed.”

In order to address these issues, especially as it relates to public resilience, the Joint Commission to Create a National Policy to Enhance Survivability from International Mass-Casualty and Active Shooter Events was founded by the American College of

The leading cause of death for all Americans under the age of 46 years is Trauma and the leading preventable cause of trauma death is hemorrhage

Surgeons (ACS). Over 35 representatives from a variety of organizations including physician and nursing groups, law enforcement, fire, emergency medical services and other stakeholders participated in development of a national call to action. These recommendations for implementation of effective hemorrhage control have become known as the Hartford Consensus (HC) 2015.

The primary principle of the HC states “no one should die from uncontrolled bleeding.” One goal of this group is to empower the public to act as immediate responders rather than bystanders, as the term bystander implies passive observation. The HC suggests

STOP THE BLEEDSM

SAVE A LIFE



AMERICAN COLLEGE OF SURGEONS
Inspiring Quality:
Highest Standards, Better Outcomes

100+ years



The Committee
on Trauma



that immediate responders can initiate a critical step in eliminating preventable prehospital death by controlling external hemorrhage prior to arrival of first responders. The use of immediate responders is not a new concept. In fact, the public has been used to successfully initiate cardiopulmonary resuscitation (CPR) in the event of cardiac arrest, with over 9 million individuals trained in this skill each year.

The ACS has developed a course called Bleeding Control Basic or “Stop the Bleed.” This program is designed for individuals who have little or no medical training, who may be called upon to provide initial bleeding control to a victim of traumatic injury. In less than two hours, attendees learn about protecting themselves from harm, properly notifying

One goal of this group is to empower the public to act as immediate responders rather than bystanders, as the term bystander implies passive observation. The HC suggests that immediate responders can initiate a critical step in eliminating preventable prehospital death by controlling external hemorrhage prior to arrival of first responders.

the emergency medical system, identifying life threatening bleeding and practicing techniques for bleeding control. Hands on practice of direct pressure, wound packing and tourniquet application are much of the focus of this course. Stop the Bleed training is provided mostly by hospitals and a variety of other health agencies across the United States. Hemorrhage control may be obtained with application of direct pressure or a pressure dressing over the wound (Day, 2016). If these techniques are not adequate to stop the hemorrhage, other approaches such as utilization of tourniquets and/or hemostatic dressings can assist in obtaining bleeding control. Research performed by our military leaders has demonstrated that commercially available tourniquets are effective in controlling hemorrhage when such devices are available and used correctly (Kotwal, et al., 2011).

Another goal of the HC is promoting placement of bleeding control kits within the community. Much like the public availability of Automatic External Defibrillators (AEDs), hemorrhage control kits should be widely available for immediate responder use. Many public gathering places such as malls, schools, arenas and airports have already added these kits to the same locales as their current AEDs and first aid kits.

Without question, the larger the number of individuals, who are trained in the techniques for bleeding control, creates a greater opportunity of a person surviving a life threatening bleeding injury. You can make a difference, and potentially save a life, by knowing what to do.

Email comments to Staman-stacey@cooperhealth.edu

For more information or to register for a course, email stopthebleed@cooperhealth.edu or visit the ACS website at bleedingcontrol.org.

References:

- Day, Michael (2016). Control of Traumatic Extremity Hemorrhage. *Critical Care Nurse*; 36(1) p.40-51.
- Dorlac, WC, DeBaKey ME, Holcomb, JB, Kwong, KL, Dorlac, GR, Schreiber, MA, Persse, DE, Moore, FA, & Mattox, KL (2005) Mortality from isolated civilian penetrating extremity injury. *Journal of Trauma* Jul; 59(1): 217-22.
- Hartford Consensus III: Implementation of bleeding control obtained at <http://bulletin.facs.org/2015/07/the-hartford-consensus-iii-implementation-of-bleeding-control/#.WljsT3mWxR0> on 1/12/2018.
- Jacobs L, & Burns KJ, (2014) The Hartford Consensus to improve survivability in mass casualty events: Process to policy. *American Journal of Disaster Medicine*, 9(1):67-71.
- Kotwal RS, Montgomery HR, Kotwal BM, et al. (2011). Eliminating preventable death on the battlefield. *Arch Surg*. 146(12):1350-1358
- Rhee P, Joseph B, Pandit V, et al. (2014). Increasing trauma deaths in the United States. *Ann Surg* 260(1): 13-21.



Care Coordination Beyond The Hospital

Catherine Curley PhD, RN

The complexity of caring for chronically ill patients through all aspects of life is one of the multifaceted roles accomplished by the Innovative Delivery team. The team consists of registered nurses (RN) Population Care Coordinators (PCC) and Health Coaches. The team works with 26 primary care practices at Cooper University Health Care in conjunction with the ambulatory providers and staff. You may wonder, what exactly does a population care coordinator do? In the population health arena, the focus is the ability of the provider to manage disease. From a comprehensive view, that includes not only the medical diagnosis but the many social barriers to maintaining wellness.

PCCs, as licensed professionals, conduct patient assessments in each practice starting with a social determinants risk evaluation. Social determinants of health are the conditions in which people are born into, live and grow. These factors are socioeconomic status, education, food access, community, neighborhood and social influences. Recognizing the impact of these factors on health outcomes is essential in understanding the barriers for individuals attempting to remain independently healthy.

In comparison to other countries, the United States spends disproportionately less on social services than health care. However, the need to address the many social barriers to improve health outcomes has taken precedence in health systems today. Examples of these factors are listed in the Figure 1 above. This is the guideline for the PCC and health coach's assessment of each patient they encounter.

In comparison to other countries, the United States spends disproportionately less on social services than health care. However, the need to address the many social barriers to improve health outcomes has taken precedence in health systems today.

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment	Housing	Literacy	Hunger	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider availability
Expenses	Safety	Early childhood education		Community engagement	Provider linguistic and cultural competency
Debt	Parks	Vocational training	Stress	Discrimination	Quality of care
Medical bills	Playgrounds	Higher education			
Support	Walkability				
	Zip code / geography				

Health Outcomes
Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations

Figure 1. Social Determinants of Health (Heiman & Artiga, 2015)

PCCs are assigned patients through a risk segmentation tool that is based on predictive analytics of the individual which includes type of diagnoses, number of hospital readmissions, emergency department visits, age, insurance payor and multiple health systems usage. Patients are identified as high risk, rising risk, low risk and healthy populations. The risk factor correlates with the risk for admission/readmission,

decline of disease and most often ability to manage their illness.

The PCC contacts the patients within 48 hours of discharge from the hospital, prior to an outpatient appointment and frequently arranges to meet them during an office visit. The significance of an individual care coordinator has been noted in the outcomes for these patients with improved adherence to medication, reduction in readmission and enhanced knowledge of their disease process. For the PCC, the close interaction with these patients and the multiple social challenges can be arduous but rewarding when resources are connected to the patient to assure an improved health status.

Since the development of the PCC role, we have been able to interact with hundreds of our high risk patients to ease their transition to home from the hospital, identify gaps in understanding of chronic disease, formulate mutual goals and lead them to an improved quality of life that does not include frequent visits to the Emergency Department and hospital.

Email comments to Curley-catherine@cooperhealth.edu

References

Heiman, H. and Artiga, A. (2015). Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity. *Disparities Policy*. The Henry J. Kaiser family foundation.





The Importance of Patient Advocacy

Jennifer Harbourt, MSN, RN, CEN

There is more to being a patient advocate than just answering questions or getting answers. “Advocacy is a fundamental aspect of nursing practice” (American Nurses Association, 2010, p. 20). In the 1960s and 1970s, the women’s and civil rights movements led to a greater focus on individual rights. Clarification regarding these new rights created a need for patient advocacy (Water, Ford, Spence & Rasmussen, 2016). By the early 1980s, nursing was beginning to be defined by its philosophical approaches to health, guiding patient advocacy to become a core component of nursing (Water, et al., 2016). The vision of being an advocate in nursing practice is different across the profession and is “not adequately defined” (Grace, 2001). The role of advocacy in nursing is still being developed, even today. I would like to share how my personal journey shaped my views on patient advocacy.

I was always aware that nurses were a huge part of patient advocacy. After all, nurses are the ones most often at the bedside, updating patients and families regarding status and monitoring the patient’s condition. But what exactly does being a patient advocate mean? My understanding was that a good patient advocate keeps

the patient informed about care options and can answer or obtain answers to the patient/families’ questions to assist them with decision-making. Recently, my expectations for a patient advocate have drastically changed.

My story starts on January 2, 2017. I have been an Emergency Department (ED)/Trauma Nurse for many years and a Clinical Educator at Cooper University Hospital for one and a half years. I was not shy in telling the staff at a local hospital we visited that I was an ED Nurse Educator. My husband and I had been completing In Vitro Fertilization (IVF) over the past four years. We were in the middle of our eighth IVF cycle when the pain started. Now, with a history of endometriosis, I was used to pain. I knew that I had an ovarian cyst and assumed it was the cause of my pain. At the recommendation of my fertility doctor, my husband took me to the local ED where I received a prescription for narcotics. In the past, this provided relief; but at this time it did not. I was informed that I needed to have surgery to drain the cyst and alleviate the pain.

I was prepared for the admission, but not for what followed. The fertility doctor consulted my Obstetrician/Gynecologist

(continued on page 8)

“...a good patient advocate keeps the patient informed about care options and can answer or obtain answers to the patient/families’ questions to assist them with decision-making.”

The Importance of Patient Advocacy

(continued from page 7)

(OB/GYN) group to do the surgery, but because we were waiting to find out if I was pregnant, he was reluctant to immediately operate. Four pregnancy tests and two days later, it was determined that my Beta HCG levels were negative and surgery was scheduled for the next day. The OB/GYN surgeon returned to speak to my husband with unexpected news: the cyst could not be visualized due to a massive infection. The team had no idea where it came from, as there were no signs or symptoms of an infection prior to the surgery. General Surgery was consulted during the operation, and they were able to irrigate the area. The original surgery would be rescheduled once the infection was treated.

Due to the high hospital census, I remained on the Observation Unit as an inpatient admission. Post-operatively, I was started on antibiotics, but my pain remained uncontrolled. I would awaken from a sound sleep, crying and unable to gain any relief with repositioning. This continued for 48 hours. During this time my vital signs changed significantly. I also started with a fever, but was not given an antipyretic. My nurse was new to practice and I voiced my concern about sepsis. I asked for IV fluid to help with my hypotension (systolic in the 80s), I asked for Tylenol, I told her that my vital signs indicated I was getting worse, not better. Her



response: "Is that what they do at Cooper? I was now scared. If my nurse did not understand I was in danger, that my condition was worsening, then who was going to help me?"

The night shift nurse came in after report and I told her my concerns. She was able to obtain a Tylenol order, but it was a small dose and my fever was now 102.5°F. She called for an additional 325mg, and then a miscommunication led to a 1000mg IV dose of Tylenol within the hour. I was still hypotensive, tachycardic and tachypneic. A Rapid Response Team (RRT) was called in the





middle of the night, I begged for my husband to be called. I became hysterical thinking I would never leave the hospital or see my soon-to-be 2 year old son again. I had a feeling of impending doom. I was moved to a post-operative unit where a second RRT was called. My doctors came in the next morning and told me if the pain and fevers continued, they would have no choice but to do an emergent open abdominal surgery that would land me in the ICU, intubated with an IV bag closure (leaving my incision open to allow for swelling). Luckily, a change in the antibiotics led to eventual improvement. Eight weeks later I had another surgery and was able to return to work on April 24th, 2017. It has been a year since all of this has taken place, and I feel I am finally back to normal.

I stated earlier that being an advocate is more than keeping a patient informed about care options and answering questions. Being a patient advocate is about acting on behalf of the patient, safeguarding the patient from harm and being a champion for the patient in this healthcare system (Agom, Joy, Ominyi & Simon, 2015). I learned from this entire process that I had to be my own advocate. My nurse was not able to be my advocate, she was not able to find the answers I needed, and I could not tell you if she even knew what she was seeing. The problem with being your own advocate is you need to have a background in healthcare and understand what is happening. I could do this because I was alert and aware of the changes occurring and I had a healthcare background. What if the night nurse had the same actions as the day nurse? What happens to your patients who are not alert, not aware, not educated? "If the need for effective patient advocacy is not recognized and applied, the effective healthcare would not be

Being a patient advocate is about keeping the patient safe by staying current with evidence-based nursing practices, keeping your education relevant to your practice, and having a good foundation of basic nursing care.

achieved (Agom et al., 2015).

As a Clinical Educator, I have the ability to mentor nurses in all stages of their careers. My goal is to provide nurses with the skills, knowledge and resources to be great. I never knew how important the role of patient advocate was until I was a patient in need of an advocate. An advocate's role includes keeping the patient informed about care options, answering or getting answers to questions, and being alert to the patient's progression and trends to intervene when necessary. Being a patient advocate is about keeping the patient safe by staying current with evidence-based nursing practices, keeping your education relevant to your practice, and having a good foundation of basic nursing care. Advocacy is about anticipating your patient's needs and acting in their best interest. Your patients, most likely, will not be an experienced healthcare provider from a University Hospital; they will be people of any background who need a nurse to be their advocate.

If not you, then who?

Email comments to Harbourt-jennifer@cooperhealth.edu

References

- Agom, D. A., Joy, C. A., Ominyi, J. N. and Simon, N. O. (2015). Concept analysis of patients' advocacy: The nursing perspective. *International Journal of Nursing Didactics*, 5(3), 1-4. doi:10.15520/ijnd.2015.vol5.iss03.67.01-04
- American Nurses Association. (2010). *Scope and standards of practice* (p. 20). Silver Spring, MD: Nursebooks.
- Water, T., Ford, K., Spence, D. and Rasmussen, S. (2016). Patient advocacy by nurses – past, present and future. *Contemporary Nurse*, 52(6), 696-709. doi:10.1080/10376178.2016.1235981
- Grace, P. (2001). Professional advocacy: Widening the scope of accountability. *Nursing Philosophy*, 2(2), 151-162. doi.org/10.1046/j.1466-769X.2001.00048.x

It Takes a Team to Fight Catheter-Associated Urinary Tract Infections (CAUTIs)

Megan Sweeney, MSN, RN-BC

Yearly in the United States (US) an estimated 1.7 million patients endure healthcare-acquired infections (HAIs) (McNeill, 2017). Approximately 99,000 patients die annually due to HAIs (McNeill, 2017). In the US, catheter-associated urinary tract infections (CAUTIs) are the most frequent HAIs (Durant, 2017). Infections like CAUTIs can increase a patient's length of stay, raise healthcare cost, and render higher morbidity (Durant, 2017). Since 2008, the Centers for Medicare & Medicaid Services stopped reimbursements for care due to preventable infections like CAUTIs (Durant, 2017).

The Affordable Care Act requires hospitals to focus on decreasing hospital-acquired conditions (HACs) like CAUTIs because these infections are not present on admission (Scanlon et al., 2017). According to Scanlon et al., "...hospitals scoring in the lowest-performing quartile nationally will face a 1% reduction in overall Medicare reimbursement the following year" (2017, pg. 134). When a HAC develops, an organization is at risk for a loss of Medicare reimbursement.

The Centers for Disease Control and Prevention (CDC) (2017) report that 75% of urinary tract infections are related to indwelling urinary catheters. About 15-27% of patients who are hospitalized have an indwelling urinary catheter placed while in the hospital (CDC, 2017). According to the CDC, the highest risk factor for developing a CAUTI is extended usage of an indwelling urinary catheter (2017). "There are approximately 13,000 CAUTI-related deaths each year with related costs upward of \$500 million annually" (Scanlon et al., 2017, pg. 134). It is in every organization's best interest to follow evidence-based practices to decrease CAUTIs.

Prevention of CAUTIs is important to decrease HAIs and improve patient care. According to the Institute for Healthcare Improvement (IHI) (2011), there are four care practices used to decrease CAUTIs which include: refrain from nonessential placement of an indwelling urinary catheter, the use of aseptic technique during insertion of indwelling urinary catheters, follow recommended guidelines for urinary catheters, assess the medical need daily for the indwelling urinary catheter, and early catheter removal when appropriate (IHI, 2011).

Another way organizations can decrease CAUTIs is to utilize nurse-driven protocols (Durant, 2017). Nurse-driven protocols can assist professional nurses to determine the appropriateness of the urinary catheter (Durant, 2017). The nurse-driven protocol allows nurses to follow certain criteria for early removal, without interventions from the advanced provider (Durant, 2017). The nurse-driven protocols are usually in the form of a check list or

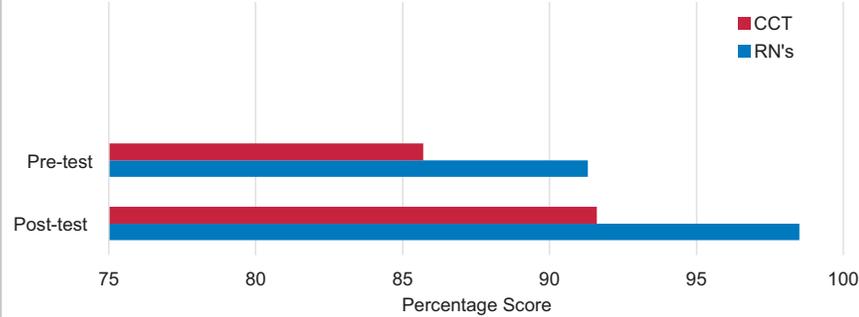
Evidence-based practices to decrease CAUTI list:

- Perform proper hand hygiene
- Use personal protective equipment (PPE)
- Follow proper insertion technique
- Provide care and maintenance
- Position below the bladder without kinks/loops in tubing
- Maintain sterile closed drainage system
- Maintain unobstructed urine flow
- Use of a securement device use
- Assess for early removal
- Follow nurse driven protocols for removal of urinary catheter protocols
- Educate patient/family/caregiver

Figure 1. Urethral Catheter 04/29/18 Foley

Drain Properties
Urine Color
Urine Appearance
Urine Output
CBI Intake (mL)
CBI Output (mL)
(CARE) Hand hygiene prior to Catheter
(CARE) Use fecal containment device
(CARE) Securement Device
(CARE) Drainage bag below bladder, not
(CARE) Catheter & Peri Care Performed
Placed by Urology
Hospice or Palliative Care
Chronic indwelling urinary catheter on
Neurogenic bladder
Surgery involving urinary tract
Surgery not involving urinary tract
Chronic urinary retention
Acute urinary retention (Removed within
Acute urinary retention (Provider advised
Crit care patient & requiring Q1 hr I&O
Stage III or IV Sacral pressure injury with
Total Foley Score
Action Taken – Foley Score

Figure 2. Catheter-Associated Urinary Tract infection Prevention Test



flow sheet. At Cooper University Hospital the nurse-driven protocol is a part of the patient's order set in the electronic health record; known as EPIC. In EPIC, the urinary catheter is located in the lines, drains, airway flowsheet. There is a nursing bundle documentation checklist that must be completed by the nurse each shift to determine if the urinary catheter is medically appropriate (see Figure 1).

In an effort to improve patient care and enhance nursing staff knowledge regarding CAUTI prevention and practice, the author created a unit project. The aim of the project is to identify any knowledge deficit of the nursing staff regarding CAUTI prevention practices, proper care and maintenance of indwelling urinary catheters. A 10 question pre-test and post-test was distributed to registered nurses (RNs) and critical care technicians (CCTs). The quiz tested knowledge regarding proper hand hygiene, appropriate indications for indwelling urinary catheters and prevention practices for CAUTIs. After the pre-test was completed, education was provided to the nursing staff. The education reviewed essential hand hygiene practices, appropriate indications for indwelling urinary catheters and prevention practices for CAUTIs. The information was provided via a YouTube video presentation and face-to-face education. A post-

test was administered upon completion of this activity. The mean scores for the pre-test for RNs were 91.3% and 85.7% for the CCTs. The mean scores for the post-test were 98.5% for the RNs and 91.6% for the CCTs. Comparing the test scores from the pre-test and post-test, the post-test scores improved (see figure 2).

As healthcare providers we want to provide excellent quality care. The literature shows that HAIs are a healthcare challenge. HAIs raise healthcare costs, increase length of stay, and compromise patient care. The author's project demonstrates the importance of continuing education regarding CAUTI prevention practices, proper care and maintenance of

indwelling urinary catheters. To ensure quality patient care, it is in every organizations best interest to follow the evidence based practices for CAUTI prevention.

Email comments to Sweeney-megan@cooperhealth.edu

References

- Center for Disease Control and Prevention (CDC). (2017). Catheter-associated Urinary Tract Infections (CAUTI). Retrieved from https://www.cdc.gov/hai/ca_uti/uti.html
- Durant, D. J. (2017). Nurse-driven protocols and the prevention of catheter-associated urinary tract infections: A systematic review. *American journal of infection control, 45*(12), 1331-1341. <http://dx.doi.org/10.1016/j.ajic.2017.07.020>
- Institute for Healthcare Improvement (IHI). (2011). How-to guide: prevent catheter-associated urinary tract infections. Retrieved from <http://www.ihl.org/resources/Pages/Tools/HowtoGuidePreventCatheterAssociatedUrinaryTractInfection.aspx>
- McNeill, L. (2017). Back to basics: how evidence-based nursing practice can prevent catheter-associated urinary tract infections. *Urologic Nursing, 37*(4), 204-207. <http://dx.doi.org/10.7257/1053-816X.2017.37.4.204>
- Scanlon, K. A., Wells, C. M., Woolforde, L., Khameraj, A., & Baumgarten, J. (2017). Saving lives and reducing harm: a CAUTI reduction program. *Nursing Economics, 35*(3), 134.



CATCHING SOME ZZZs: Promoting Sleep in Critical Care

Nikisha Patel, RN; Samantha Offenback, RN; April Basat, RN; Jacquelyn Persson, RN

Is there a Relationship between Uninterrupted vs. Interrupted Sleep Practice and Delirium during the hospital stay?

Sleep deprivation is common among critical care patients. Environmental noise, light and patient care activities contribute to fragmented and poor quality sleep. In addition, lack of sleep during the hospital stay may contribute to higher incidences of delirium, slower healing, diminished immune response and decreased cognitive function (Lawson et al., 2010). Our goal was to examine the relationship between non-pharmaceutical interventions to promote sleep and minimize delirium. In order to achieve this goal, we focused on studies that minimized noise and light, and implemented 'cluster care' in Medical Surgical Intensive Care Units (ICU). Overall, one hundred and sixty-seven patients were screened for delirium pre and post-interventions. Patient criteria included greater than 18 years of age and the patient had to spend one or more nights in the ICU (Lawson et al., 2010). Patients with pre-

"...lack of sleep during the hospital stay may contribute to higher incidences of delirium, slower healing, diminished immune response and decreased cognitive function."

existing cognitive dysfunction or delirium were not studied. Neurosurgical patients were excluded due to their hourly neurological assessment requirements. Initially, baseline data was gathered regarding sleep, and the incidence of delirium in the ICU (Patel et al., 2014). Over a 21-day period, a bundle of non-pharmaceutical sleep interventions were implemented in the ICU. Interventions included decreasing noise and light, and clustering patient care to allow for longer periods of rest. Hospital staff were encouraged to speak quietly in patient care areas, set appropriate alarm levels, dim the lights, close doors, and provide eye masks and earplugs to patients. Light and sound levels were measured using two CEM DT-8820 environmental meters placed in the center of the unit. Delirium and sleep quality assessments were completed using the Confusion Assessment Method and Richmond Agitation



sleep hygiene to critically ill patients. Through data analysis, it was found that the use of earplugs had a relative risk of delirium of 0.59, and that patients were compliant with the use of earplugs during their stay in a critical care environment (Litton et al., 2016). In conclusion, it was determined that the use of earplugs in an ICU environment, whether included in a sleep-bundle or in isolation, significantly reduced the risk of delirium (DiSabatino, 2017). Medical staff play a vital role in reducing the incidence and duration of delirium in critical care patients. Non-pharmacological interventions that reduce noise, light and waking of the patient can be implemented on any unit to help patients rest and decrease their chance of developing delirium.

Email comments to Patel-nikisha@cooperhealth.edu

Sedation Scale score. Patients were also asked to complete the Richards-Campbell Sleep Questionnaire each morning. The questionnaire assessed sleep depth, latency, number of awakenings, time spent awake and overall sleep quality. The mean score from this questionnaire was used to estimate the sleep efficacy index (Lawson et al., 2010). Implementation of the sleep bundle led to a reduction in nighttime noise and light, and the number of times patients were woken due to staff interventions. There was an increase in sleep efficacy, sleep quality, reduction in daytime sleepiness, increase in time spent sleeping during the night and a decrease in the incidence of delirium. Patients reporting high sleep efficacy scores on the questionnaires demonstrated a reduced risk of delirium (Lawson et al., 2010). In a systematic and meta-analysis review, earplugs were utilized as a strategy for decreasing ICU delirium. In total, nine studies were selected to assess the efficacy of earplugs as

References

- DiSabatino Smith, C. (2017). *Feasibility and effectiveness of a delirium prevention bundle in critically ill patients*. *American Journal of Critical Care*, 26(1), 19-27. doi:10.4037/ajcc2017374
- Patel, J., J. Baldwin, P. Bunting, and S. Laha. *The Effect of a multicomponent multidisciplinary bundle of interventions on sleep and delirium in medical and surgical intensive care patients*. (2014): 540-49. CINAHL [EBSCO]. Web. 21 Apr. 2017.
- Lawson, N., Thompson, K., Saunders, G., Saiz, J., Richardson, J., Brown, D., Ince, N., Caldwell, M., Pope, D. (2010). *Sound intensity and noise evaluation in a critical care unit*. *American Journal of Critical Care*, 19(6). doi:10.4037/ajcc2010180
- Litton, E., Carnegie, V., Elliot, R., & Webb, S. A.R (2016). *The Efficacy of earplugs as a sleep hygiene strategy for reducing delirium in the ICU: A systematic review and meta-analysis*. *Critical Care Medicine*, 44(5), 1022-1023, DOI: 10.1097/CCM.0000000000001557



REFLECTIONS

Population Health: The Care Coordination Bridge to Improving Patient and Community Wellness

Toni Primas, BSN, RN, CARN | Angela Spinelli, MSN, RN, CAPA

Through the leadership of Catherine Curley PhD, RN, AVP, Innovative Delivery, Cooper University Health Care's (CUHC) Population Health team, actively collaborate with primary care practices, patients, families and providers to educate and manage patients with chronic disease. The team consists of health coaches (HCs) and Registered Nurses (RNs) who act as Population Care Coordinators (PCCs). The RNs collectively share years of nursing experience and possess specialty certifications in oncology, case management, addictions and perioperative nursing.

The team is credited with many successes such as the one involving patient JC. JC is a 53-year-old male who underwent Coronary Artery Bypass Grafting (CABG) and vein harvesting from both lower extremities. During JC's admission, the patient developed Atrial Fibrillation which ultimately converted to a normal rhythm. JC's health history included chest pain and newly diagnosed uncontrolled type II diabetes. Before his admission, JC lived alone in a boarding home in New Jersey (NJ). While admitted, JC and his family decided he would return to their home in Philadelphia. As a result, JC was not eligible to receive standard post CABG discharge nursing services from NJ Medicaid Insurance. This would leave JC and his family to oversee his recovery. In view of JC's history, type of surgery and discharge status, JC was considered at high risk for complications and readmissions. Given this, the PCC and PCP aligned their efforts and created a care plan specific to JC's circumstances. The plan included an increase in the standard amount of phone and in-person encounters. The efforts of working closely with JC paid off, as their continuous outreach encounters, allowed them to identify complications and quickly intervene. Con-



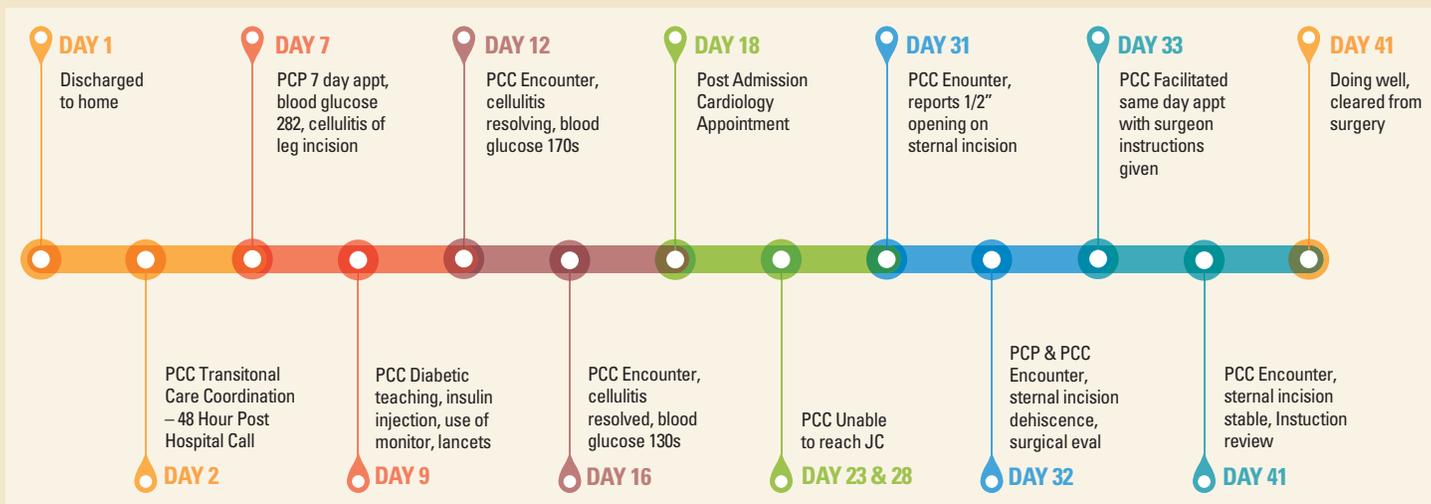
sequently, JC avoided serious complications and has not required emergency department (ED) encounters or hospital readmissions.

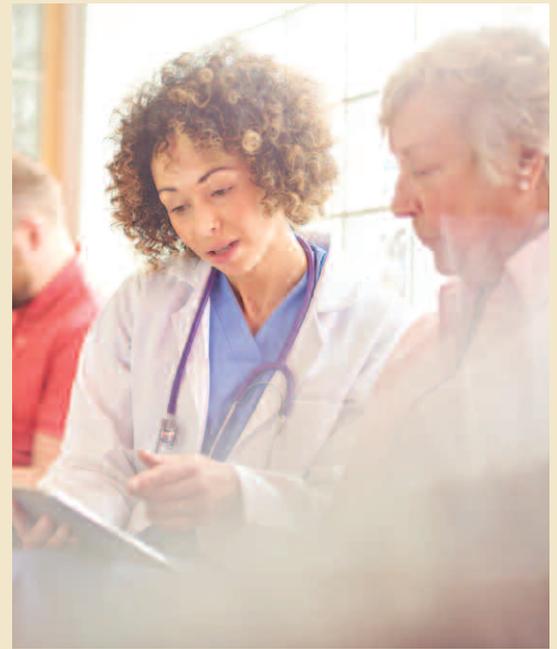
The timeline below represents JC's post-discharge phone, in-person, and clinical encounters. In addition to providing care coordination for discharged patients, PCCs utilize a data list known as the IHI list. The Institute for Healthcare Improvement (IHI) data includes the names of Complex Care patients attributed to the PCCs assigned primary practices. The data provides specific patient information such as the number of admissions, number of ED visits, chronic conditions, number of medications, etc. The PCC filters the data accordingly to identify patients who would most benefit from outreach efforts. As with discharged patients, the PCCs first encounter with

Complex Care patients typically occurs over the phone. The patients on the Complex Care list have an increased risk for preventable hospital admissions. Thus, the PCC works with patients for ninety days and focuses on assisting the patient to achieve optimal wellness.

Two of the Population Care Coordinators from Cooper's Population Health team provided insight on the nurses role through reflection.

"Being able to give the gift of independence is a powerful thing. From a personal perspective, one of the most rewarding aspects of Population Care Coordination is the patient engagement and education which guides patients toward the goal of a healthier lifestyle. Discussion and endorsement of patient-centered care assists patients to view their health care in a whole new light and empower them toward more informed decisions concerning their care. Having a thirty year nursing





background in maternal-child health, public health, and addictions has been an asset for the PCC position. Being a “seasoned” nurse has its advantages in this role, as it requires many skills that are acquired over time, such as life experiences, patience and tolerance. All of the above help us to guide, encourage and educate the patient in moving toward a healthier lifestyle.” — *Toni Primas, PCC, BSN CARN.*

“Some nurses describe nursing as “their calling” and I am one who identifies with this statement. My grandmother was a nurse and I vividly remember visiting her work and being intrigued by the sights and sounds of the hospital. I had an overwhelming sense “of belonging” and knew I would follow in her footsteps. My first experience as a nurse took place in a Post Intensive Care Unit and it was in this setting; I gained tremendous clinical knowledge, and the realization as to the enormous impact nurses have on patients and their families. After a few years, I left this role to work in Cooper’s Telemetry Unit, and from there, I transferred to Cooper’s Surgery Center, where I worked as a perioperative nurse. As the professional nursing organizations pressed for higher education, I found myself wanting to join their efforts and returned to the classroom. Attending the BSN and MSN programs broadened my knowledge on health care reform and compelled me to expand my professional horizons. For the last several years, I’ve worked in Cooper’s Operational Excellence Department, first as a Quality Improvement Outcomes Manager and currently as a Patient Care Coordinator (PCC). For the last twenty years, my work as a nurse has centered on caring for patients in acute care settings. Now as a PCC, my colleagues and I work to implement evidence based initiatives shown to improve patient outcomes in chronically ill patients who live in the community. Through my work, I’ve gained first-hand knowledge as to the barriers patients face in managing their health from home. The role has helped me understand that many patients deemed “non-compliant” in fact face legitimate barriers to achieving “compliance.” For example, some patients do not take their medications as prescribed as they cannot afford the out-of-pocket costs. Some patient’s do not fully understand their diagnosis or the medical dialogue used by their healthcare team which prevents them from properly following their treatment plan. Oth-

er patients engage in activities such as cancelling appointments as they do not have a means for transportation. The biggest eye opener, in this role, has been my mistaken idea that most people live with or have support systems at home. In reality, I’ve found that many patients do not have supports systems and in fact live alone. Though there are many personal rewards to the PCC role, it’s working with these patients that bring the most meaning to my role.” — *Angela Spinelli, PCC, MSN, RN, CAPA.*

The PCC’s role centers on improving individual and community wellness, and to accomplish this, they participate in activities such as knowledge sharing and guidance. The PCC adopts communication techniques that implore patient engagement. Most importantly, the PCC views patient engagement as essential to enhanced patient experiences and improved patient outcomes (McCormick, Dewing & McCance, 2011). From the PCC prospective patient engagement includes endorsing patient-centered care in the context of care coordination, patient education, physical and emotional support, and transitions of care (Sofaer & Schumann, 2013).

PCCs adopt and disseminate evidence-based practices to patients and other clinicians. They analyze data to identify patients who benefit from outreach efforts, collaborate with community and facility clinicians and support patient-centered care and patient engagement. Additionally, the PCCs engage in activities that promote wellness and disease prevention in the community and support departmental and organizational quality goals. Through these efforts and personal connection with patients, the Population Health team makes a significant impact on the way patients view their outlook on health and wellness.

Email comments to: Primas-toni@cooperhealth.edu

References

- McCormack, B., Dewing, J., & McCance, T. (2011). Developing person-centered care: Addressing contextual challenges through practice development. *Online Journal of Issues in Nursing*, 16(2), 3.
- Sofaer, S., & Schumann, M. J. (2013). *Fostering successful patient and family engagement Nursing’s critical role*. Retrieved from <http://www.naqc.org/WhitePaper-Patientengagement>

Professional News

DEGREES:

Anthony Angelow, PhD, MSN, APN, ACNP-BC, ACNPC, received his PhD from University of Northern Colorado in May 2018.

Stephen Teitelman, BSN, RN, received his BSN with High Honors from University of Phoenix.

Grace Mansilla, MSN, RN, received her MSN from Villanova University in December 2017.

Angela Spinelli, MSN, RN, CAPA, received her MSN from Rowan University in December 2017.

Megan Sweeney, MSN, RN, BC, received her MSN from Rowan University in December 2017.

Natalene Kramer, PhD, MSN, APN-BC, received her PhD from Duquesne University in December 2017.

Jeffrey R. Salvatore, MSN, RN, PCCN, received his MSN from West Governors University in March 2018.

Victoria D'Amico, MSN, RN, received her MSN in Family Nursing Practice from Wilmington University in March 2018.

Diane Dierkes, BSN, RN, received her BSN from Rowan University in May 2018.

MaryAnne Figueroa, BSN, RN, received her BSN from Rowan University in May 2018.

Norma Rowello, MSN, RN, received her MSN from Rowan University in May 2018.

Amanda Murdock, MSN, RN, received her MSN from Rowan University in May 2018.

Dominic Parone, MSN, RN, CNL, CFRN, received his MSN from Rowan University in May 2018.

Crystal Hyman, MSN, RN, received her MSN from Grand Canyon University in April 2018.

Jeanine Wilson, BSN, RN, received her BSN from Wilmington University in May 2018.

Kristin Donofry, MSN, RN, received her MSN from Rowan University in December 2017.

Rosemarie Maitland, MSN, RN, CCRN, received her MSN from Rowan University in December 2017.

David Carter, BSN, RN, MICN, PHRN, CCRN, received his BSN from Wilmington University in January 2018.

Larissa Schoudt, MSN, RN, CCRN, received her MSN from Grand Canyon University in January 2018.

Victoria Sonpon, MSN, RN, received her MSN from Rowan University in May 2018.

Rosetta Oliver, MSN, RN, BC, received her MSN from Rowan University in December 2017.

CERTIFICATIONS:

Laura McMaster, MSN, ACNP-BC, CCRN, TCRN, obtained Trauma Certified Registered Nurse designation.

Kimberly Twadell, MSN, ACNP-BC, CCRN, obtained her certification in Critical Care Nursing.

Helen Polimeni, BSN, RN, CNOR, obtained her certification in Operating Room Nursing.

Jennifer Travis, MSN, RN, obtained her post master's certificate in mid-wifery in May 2018.

Candace Britton, RN, CNOR, obtained her certification in Operating Room Nursing.

Dana Cinelli, BSN, RN, BC, obtained her certification in Medical Surgical Nursing in May 2018.

Lisa Durso, BSN, RN, VA-BC, obtained her certification in Vascular Access in December 2017.

Christine Marts, BSN, RN, TCRN, obtained Trauma Certified Registered Nurse designation.

PRESENTATIONS:

Ray Bennett, BSN, RN, CEN, CFRN, CTRN, SCRn, TCRN, NRP, presented "Stroke Assessment: Digging through the Alphabet Soup of Stroke Scales" and "Drip & Ship: Indications for Advanced Care at Comprehensive Stroke Centers" at the 26th annual Critical Care Transport Medicine Conference in April 2018; San Antonio, TX.

Hilary Barnes, PhD, APN, co-presented "Rural and non-rural primary care physician practices increasingly rely on nurse practitioners" at the 30th Annual Eastern Nursing Research Society Scientific Sessions, April 13, 2018.

AWARDS:

Marc Angud, MSN, APN-C, AGACNP-BC, PCCN-CMC - Advanced Practice Nurse, Cardiology/Electrophysiology, is the recipient of The Cooper Heart Institute & The Heart House Award for Excellence in Cardiovascular Nursing.

Taylor Barger, BSN, RN - Staff Nurse, Pediatrics, is the recipient of The Dr. Ronald Bernardin Memorial Award for Excellence in Pediatric Nursing.

Ashley Celeste, BSN, RN - Staff Nurse, Pavilion 6, is the recipient of The Selma and Martin Hirsch Award for Excellence in Medical Surgical Nursing.

MaryKate Coyne, BSN, RN - Staff Nurse, Emergency Department, is the recipient of The Lynn Nelson Award for Excellence in Emergency Nursing.

Patricia Crosby, BSN, RN - Staff Nurse, Maternal Fetal Care Unit, is the recipient of The Charlotte Tobiason Memorial Award for Excellence in Obstetrical Nursing.

Nora Damian, BSN, RN - Staff Nurse, Pavilion 5, is the recipient of The Rose Smith & Sue Zamitis Memorial Award for Excellence in Oncology Nursing.

Maria Eastlack, BSN, RN, CAPA - Staff Nurse, Surgical Care Unit/Short Procedure Unit, is the recipient of The Women's Board of Cooper University Health Care Award for Excellence in Ambulatory Nursing.

Jackie Ficerai Tedeschi, BSN, RN, CPN - Associate Clinical Director, Pediatrics/Pediatric ICU, is the recipient of The Barbara and Jack Tarditi Award for Excellence in Nursing Mentorship.

John Hall, RN - Staff Nurse, Intensive Care Unit, is the recipient of The Ruth Parry/Moorestown Auxiliary Award for Excellence in Geriatric Nursing.

Michelle Mento, BSN, RN, CCRN, SRNA - Staff Nurse, Intensive Care Unit, is the recipient of The William and Eileen Archer Award for Excellence in Critical Care Nursing.

Mary Mesisca, RN, CCRN - Staff Nurse, Trauma Surgical Intensive Care Unit, is the recipient of the Award for Excellence in Trauma Nursing.

Vincent Pannone, BSN, RN - Staff Nurse, Operating Room, is the recipient of The Philip and Carole Norcross Award for Excellence in Perioperative Nursing.

Jena Quinn, Pharm D, BCPS, BCPPS - Pediatric Patient Care Pharmacist, Pharmacy, is the recipient of The Women's Board of Cooper Hospital Allied Health Professional Excellence Award (Non-Nursing).

Shantā Rembert, EMT - ED Technician, Emergency Department, is the recipient of The Barbara and Jack Tarditi Award for Excellence in Service (Non-Nursing).

Nicole Scully - Critical Care Technician, Pavilion 6, is the recipient of The Carol G. Tracey Compassion Award.

Rachel Sensenig, MD, FACS - Medical Director Trauma Surgical Care Unit and Associate Trauma Director, Department of Surgery/Trauma, is the recipient of The Nursing Alumni Excellence Award for Nursing-Physician Partnership.

Maria Sevitski, RN, CNRN - Clinical Practice Manager, Neurosurgery, is the recipient of The Shaina Horton Memorial Award for Excellence in Service.

Renee Smith, RNC-NCC, BSN, CBC - Staff Nurse, Neonatal Intensive Care Unit, is the recipient of The John Henry Kronenberger Memorial Award for Excellence in Neonatal Nursing.

Dawn Stepnowski, DNP, APN-C, CBN, NEA-BC - Director, Bariatric Surgical Services & Research, Department of Surgery/Bariatric, is the recipient of The Moorestown Auxiliary Award for Excellence in Advanced Practice Nursing.

Chris Stonis, BSN, RN - Associate Clinical Director, Emergency Department, is the recipient of The Philip and Carole Norcross Award for Nurse Leadership.

Linda Valenti, RN, MSN/MBA/HCA - Black Belt Process Improvement Specialist, Operational Excellence, is the recipient of The Barbara and Jack Tarditi Award for Excellence in Nursing Research.

Post Anesthesia Care Unit Team is the recipient of The Outstanding Team Award.

PUBLICATIONS:

Hilary Barnes, PhD, APN, co-authored "Advanced Practice Provider Employment in Physician Specialty Practices" in *JAMA Internal Medicine: April 30, 2018*.