

1005

Building Sustained PH Expertise In Bedside Nurses

Ruen SA

Sentara Norfolk General Hospital Norfolk, VA

Background: Pulmonary Hypertension patients are members of a uniquely vulnerable population, whose high risk, complicated medication regime requires great attention to detail and significant knowledge and experience to provide safely. Many Inpatient facilities cohort PAH patients on advanced therapies within identified Intensive Care Units (ICU) to ensure their safety. In order to provide a safe environment for PAH patients to step down to an Intermediate Care Unit (IMCU), a comprehensive education and training program focused on PAH patient care is essential.

Methods: ICU Nurses receive comprehensive Critical Care education programs that include advanced Cardiovascular anatomy, physiology and assessment with hemodynamic monitoring. With specific pharmacological and pathophysiology unique to PAH patients, the ICU Nurse is well prepared to care for a patient on advance PAH therapies. A program for IMCU Nurses was developed to compensate for the lack of Critical Care education and practice background. A blended learning approach was chosen to provide a combination of didactic, skills, scenarios and simulation. Pulmonary Hypertension Orientation Class is 8 hours. Four hours lecture with audience response system questions at the end of each section: basic hemodynamic monitoring principles, PH pathophysiology, WHO Group classifications, diagnostic testing, functional class evaluation, PAH-targeted pathways and introduction to PAH-targeted medication management. 1.5 hours skills stations: CADD MS3 pump, Subcutaneous site start and management, CADD Legacy pump and Central Line Prime Volume Measurement. 2 hours simulation: Scenario 1- PAH admission and use of the PAH Admission Navigator for the Subcutaneous patient, Scenario 2- IV Epoprostenol (Veletri) PAH patient transferring in from the Cardiac ICU on the Alaris pump requiring Prime Volume Measurement of now Central Line and moving patient from Alaris pump to CADD Legacy pump. Safety check sheets are completed by observing staff and the instructors with debriefing discussions at the close of each scenario. All RNs attended the Orientation class, and when new staff are hired, they will attend Orientation class within their first 90 days. The second year working on the unit Nurses will attend the 8 hour Level 2 class. Level 2 is structured the same with lecture, skills and simulation. The lecture contains a review quiz using the audience response system, followed by more in depth information that builds on the Orientation class. Skill stations are the same, but with more complicated scenarios. Simulation: Scenario 1- readmission of an Epoprostenol (Veletri) patient with a malfunctioning CVL needing a PICC placement, Prime Volume Measurement and a new cassette placed on the PICC, Scenario 2- Route transition from IV to Subcutaneous Treprostinil. Third year of employment on IMC and thereafter Nurses receive a 4 hour class with interactive quizzes and scenarios, review of protocols and procedures and skills stations.

Results: Distinguishing knowledge and skills bedside Nurses require to provide safe, consistent nursing care for PHH patients is key to determining if a facility is willing to devote the resources to support the care of PAH patients on advanced therapies outside of the ICU.

PH patients prefer to be in the Advanced Heart Failure Unit (AHFU) where visitation is open, progressive mobility gets them moving and the focus can be on readiness for discharge. PH patients have equal confidence in the competence of care they receive in the AHFU compared to the Cardiac ICU. "No one wants to spend their entire hospital stay in an ICU, not when you get the same quality and compassion you receive in the ICU".

Patient and Caregiver satisfaction is closely related to safe, quality care. The Advanced Heart Failure Unit's Patient Satisfaction Scores are consistently above the 80th percentile, often in the 90th percentile for six years. Sentara Heart is designated a Regional Clinical Program. AHFU recently received the Team Daisy Award and the American Association of



Presented at the 2019 Pulmonary Hypertension Association (PHA) Pulmonary Hypertension Professional Network (PHPN) Symposium.

Critical Care Nurse prestigious BEACON Award.

Patients often choose to spend their last days on AHFU, versus the ICU where Hiflow Oxygen is unlimited, BiPAP and Comfort Measures are equally as available and the environment is "less sterile".

Conclusions: It is possible to build sustained PH expertise at the IMCU Nursing level of care when appropriate resources are provided to support and maintain a leveled education program. Experiential learning through a blended approach allows the Nurse to review and renew previous material while adding more detailed knowledge, complex skills and critical thinking to his or her Nursing practice.

Figure 1. Building sustained PH expertise in bedside Nurses



Figure 2. Prostacyclin EMR check

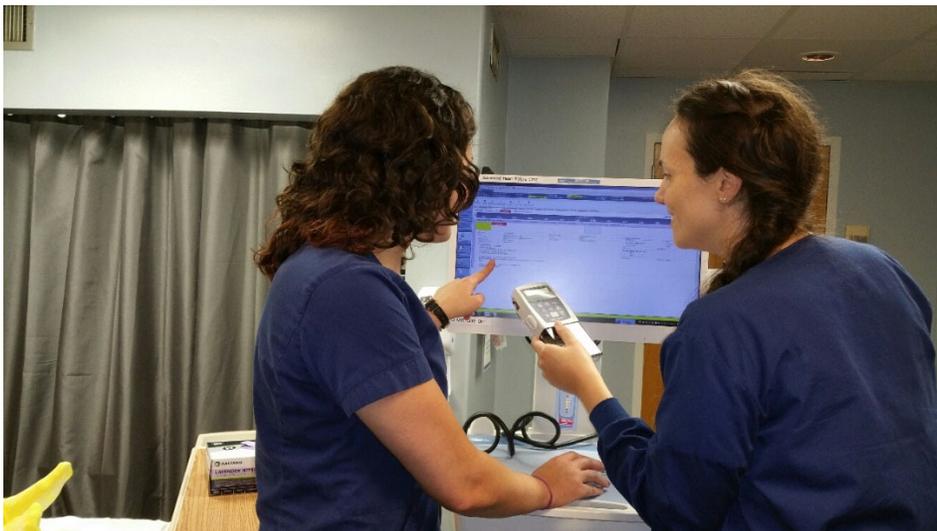


Figure 3. Prime Volume Measurement



Figure 4. 5th Annual PH Awareness Day, Walk for a Breath

