Abstract

Project Title: Empowering bedside nurses to drive system change for the care of cardiogenic shock patients

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Project Background: Despite advancements in treatment options for patients in Cardiogenic Shock (CS), the national mortality remains high at 40-50% according to Baran et al. (2019). Bedside nurses play an influential role by identifying early stages of progressive shock because as shock states advance, mortality increases. The need for early recognition and clear communication is essential to improve patient outcomes.

Project Purpose: This project aims to show how implementing nurse-driven and evidenced-based care strategies for early identification and management of CS resulted in improved patient outcomes compared to no process previously.

Methods: A committee comprised of leaders and bedside nurses from a 30-bed Cardiovascular Care Unit (CVCU) developed an educational program based upon cardiogenic shock patient conditions. Approximately 90 Registered Nurses received evidence-based education focused on early recognition and progressive shock states, including monitoring and treatment recommendations. Course leaders then focused on multidisciplinary communication which inspired nurses to advocate for the patient. By adopting the Society of Cardiology Angiography and Interventions (SCAI) cardiogenic shock staging schema and utilizing of "Shock Boards," nurses improved their ability to quickly recognize subtle changes in the patient's physical exam and hemo-metabolic status.

Results: These interventions led to more effective multidisciplinary communication which positively influenced outcomes. Since adopting these approaches, the CVCU reduced in-hospital mortality from 55% (in 2022) to 44% (in 2023). In 2023, 383 patients were cared for on the CVCU with the primary diagnosis of CS. Additionally, the average length of stay decreased from 11 to 10 days over this twelve-month period.

Discussion/Conclusions and Implications for Practice: Since implementation, CVCU successfully reduced CS mortality, and continues to do so. A limitation for this project was usage of shock boards with all CS patients, this took consistent oversight to engrain usage into unit culture. Having simultaneous provider education would have helped integrate SCAI and shock boards more effectively. The committee has since educated the Rapid Response Team and other departments on early identification of CS and SCAI staging with the goal of improving the nurse's quality of care and advocacy. Since CS patients are admitted throughout the organization continuing to expand education strategies should decrease hospital-wide CS mortality rate.

References:

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