Doctor of Nursing Practice Projects   Nursing

2023

Mock Drills to Improve Inpatient STEMI Performance and Self-Confidence

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College of Health Sciences

School of Nursing

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Doctor of Nursing Practice Program

DNP Project Final Report

Mock Drills to Improve Inpatient STEMI Performance
and Self-Confidence

DNP Student: Samantha J. Miniard, MSN, RN
Date: April 25, 2023
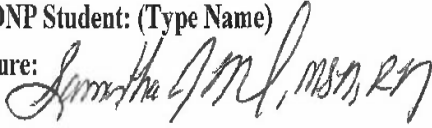
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Student Acknowledgement

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Date:

Samantha J. Miniard, MSN, RN   4/18/2023

Review & Approval of DNP Project Final Report

The DNP Project Final Report has been reviewed and approved by the DNP Project Team, which includes the DNP Project Chair and the DNP Project Team Member(s). The DNP Project meets the satisfactory requirements for the DNP Project Final Report outlined in the EKU DNP Project Guidelines. The EKU DNP Project Guidelines are based on best practices outlined by the American Association of Colleges of Nursing (AACN) and external evidence-based sources. The DNP Committee develops, maintains, and monitors these standards on behalf of the Department of School of Nursing at Eastern Kentucky University.

List of DNP Team Members for this Project:

(Include the name of the Chair and DNP Team Member(s); signatures are not required)
DNP Chair, Dr. Fontaine Sands, DrPH, MSN, RN, CIC
DNP Faculty Team Member, Dr. Molly Bradshaw, DNP, APRN, FNP-BC, WHNP-BC, CP-C
DNP Team Members: Dr. Mendy Blair, DNP, RN-BC, NEA-BC, CENP, Dr. Judy Ponder, DNP, RN, NPD-BC, NE-BC, CSSGB & Lawana Leonhart, MSN, RN, CCRN-K, NEA-BC

Title of DNP Project: Mock Drills to Improve In-Patient STEMI Performance and Self-Confidence
Samantha J. Miniard, MSN, RN

Abstract

STEMI care can be challenging for med-surg telemetry nurses to recognize among inpatients because it is a high-risk low volume population. Frequently these patients' present with atypical acute coronary syndrome (ACS), and not the classic chest pain seen when someone calls 911. However, the same treatment and care out-of-the hospital patients receive when calling 911 should be the same gold standard for in-hospital patients. More studies have been conducted to perfect the out-of-hospital STEMI care versus the in-hospital STEMI care. Mock drills can help improve knowledge, self-confidence, and performance with inpatient STEMI care. This DNP project was an evidenced-based quality improvement using quantitative and qualitative methods. The DNP project implemented an educational program for ACS and simulated mock STEMI drills among a convenience sample (N=11) of med-surg telemetry unit nurses in a small 105 bed community hospital. The implementation framework used was the Institute for Healthcare (IHI) Model for Improvement, known as the PDSA model. The same cohort of nurses participated in both the education and simulated mock STEMI drills. The ACS education was created from the American College of Cardiology (ACC) Chest Pain guidelines for accreditation. A pre-post assessment was done prior to and after the education for ACS. During the Mock STEMI drill a performance checklist was utilized to measure if nurses recognized ACS symptoms, obtained an EKG within 10 minutes, and read by physician, and initiated Cath Lab activation. After the drill, a post survey Quantitative-Likert scale was used from the National League of Nursing to measure satisfaction and self-confidence in learning, as well as a debriefing in which qualitative themes were identified.

Keywords: Mock Drills, ST Elevation Myocardial Infarction (STEMI), Simulation, Institute for Healthcare (IHI) Model for Improvement, Plan, Do, Study, & Act (PDSA) model, Acute Coronary Syndrome (ACS)