

Saving Lives with the Implementation of a Rapid Response System

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Topic: Leading & Advancing Improvements in Health, Health Care, & Higher Education

Category: Quality Improvement/Evidence-Based Practice Project

Abstract

Background/Introduction

Healthcare providers at clinical site were failing to recognize clinical signs of patient deterioration, resulting in poor patient outcomes. With implementation of a rapid response system and education on use of the NEWS tool, healthcare providers developed expertise on rapid identification and rescue of patients experiencing clinical deterioration.

Purpose

To improve healthcare providers' ability to identify imminent signs of clinical deterioration and provide prompt interventions.

Methods or Processes/Procedures

The clinical question guiding this quasi-experimental quality improvement project was: Does implementation of a RRS with education on the use of an early warning score tool (NEWS) (I) for healthcare providers at a private mission hospital in West Africa (P) improve early detection and intervention of a patient's deteriorating condition (O) as compared to current practice (C) within the first month of initiation (T)?

Results

There was increase in application of knowledge reflected by increased usage of NEWS tool. A positive correlation existed between the ratio of documented NEWS scores in relation to daily patient census. Regression analysis revealed a positive correlation ($r^2 = 0.17$). Pearson's correlation coefficient (.53) revealed high significance of relationship with two-tailed test of (.004) at the ($p < 0.05$) level. Rate of knowledge application increased significantly as days of training increased. Two weeks pre-implementation, two patients required CPR. Post-implementation, three patients required intervention by the RRT, were stabilized, with no cardiopulmonary arrests. Though not statistically significant, it was clinically significant.

Limitations

Limitations of this project resulted from the fact that this was an international project, limiting the ability to pre-assess and complete follow-up at the site in-person. There was potential for transcription errors due to incorrect data entry.

Conclusions/Implications for Practice

The significance to nursing was with implementation of a RRS and use of NEWS tool, healthcare providers were able to enhance their clinical reasoning skills on rapid identification and intervention of patients who were clinically deteriorating.

Biography

Sharon Willis, DNP, RN, NPD-BC is a Clinical Assistant Professor of Nursing at The University of Tulsa (TU). Her clinical expertise is in critical care and emergency room nursing. She is an experienced nursing educator in both the academic and acute care settings, with extensive experience in simulation. Sharon is board certified by the ANCC in Nursing Professional Development. Her DNP Quality Improvement Project was completed at a hospital in Ghana where she implemented a Rapid Response System. She is passionate about nursing education and grateful to have the opportunity to teach the next generation of registered nurses at TU.

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