10-4-2019

Impact of an Advanced Cardiac Life Support Process Improvement Initiative on Leadership Role Comfort

Madison Fletcher
Annaleigh Boggess
Danielle Albright
Kim Bolton
Jessica Fontanez

See next page for additional authors

Follow this and additional works at: https://digitalrepository.unm.edu/hsc_ed_day

Recommended Citation

This Poster is brought to you for free and open access by the Health Sciences Center Events at UNM Digital Repository. It has been accepted for inclusion in HSC Education Day by an authorized administrator of UNM Digital Repository. For more information, please contact amywinter@unm.edu.
Authors
Madison Fletcher, Annaleigh Boggess, Danielle Albright, Kim Bolton, Jessica Fontanez, and Tatsuya Norii

This poster is available at UNM Digital Repository: https://digitalrepository.unm.edu/hsc_ed_day/65
**INTRODUCTION**

The implementation of an extracorporeal cardiopulmonary resuscitation (ECPR) practice requires optimized ACLS. During implementation, the UNM ED Resuscitation Unit (EDRU) introduced an ECPR initiative, including new roles and training for personnel. The ACLS leader role, previously held by physicians, was assigned to experienced nurses. There is limited knowledge about the comfort level of nurses in performing the ACLS leader role. 6,7,8

**STUDY OBJECTIVE**

The purpose of this research is to assess whether the ECPR initiative impacts nurse comfort with the ACLS leader role and assignments.

**Primary hypothesis:** an ECPR initiative in the ED improves personnel comfort with the ACLS leader role.

**Secondary hypothesis:** an ECPR initiative in the ED improves personnel satisfaction with the organization of ACLS care delivery.

**METHODS**

**Intervention:** The initiative consisted of a reorganization of roles and didactic and simulation training for EDRU nurses and physicians (see timeline in Figure 1). Role cards, detailing each team member’s responsibilities, were placed in resuscitation rooms (Figure 2).

**Data Collection:** A stakeholder survey of all personnel in the ED was used to assess personnel knowledge, attitudes, and practices. Baseline data were retrieved May 2017 with a response rate of 33% while initial follow up was in March 2018 with a response rate of 53%. The project was approved by the Human Research Protections Office at the University of New Mexico.

**Sample:** Respondents included nurses (N = 47/43) and resident and attending physicians (N = 39/55). Five cases did not have responses for outcome variables and were excluded.

**Data Analysis:** Mann-Whitney U tests were performed for ordinal measures and t-tests for continuous scores. Principal Components Analysis was used to assess factors for the cumulative comfort and satisfaction scores. T-tests were used to compare continuous scores. Linear regression was used to examine predictors for comfort and satisfaction.

**RESULTS**

- Nurses acting as ACLS leader at least once in the past 12 months had significantly higher ACLS leader comfort scores.
- Secondary hypothesis results: Satisfaction with assigned roles and responsibilities improved among attending physicians in the post-initiative period (results not shown).

**DISCUSSION**

- While most report comfort acting in the role of ACLS leader, no significant improvements were present post-initiative.
- Experience was the most predictive factor for comfort in role of ACLS leader.
- Continued experimental and simulation learning would be beneficial for learning and comfort in new roles.
- Limitations: we used an indirect measure of initiative training exposure (self reported), we also had a short term period for first follow up. Since resuscitation is a critical part of ED training, we expected and observed limited variance in the comfort outcome.

**ACKNOWLEDGEMENTS**

We would like to thank the Emergency Medicine faculty and staff and the Emergency Department personnel who design the initiatives and participate in the evaluation workgroup.

This project used REDCap for data collection and was supported in part by the National Center for Research Resources and the National Center for Advancing Translational Sciences of the National Institutes of Health through grant number UL1TR001449, the University of New Mexico Clinical & Translational Science Center (CTSC).

**REFERENCES**


