

## CALM OR CRISIS?

### IMPLEMENTATION OF CRISIS CHECKLISTS FOR EMERGENCIES IN THE CARE OF POST CARDIAC SURGERY PATIENTS IN A PACU SETTING

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**Identification of the problem – Overview:** Complications in the immediate post-operative period following cardiac surgery require quick, effective, evidence based interventions to ensure successful treatment. During these emergencies, it is important for nurses to identify and provide care under stressful conditions that can challenge their thinking and recall ability very differently than during usual circumstances.

**EP Question/Purpose:** Does the use of an evidence based crisis checklist enhance knowledge, confidence, and performance of PACU nurses compared to not using a reference tool during complications in the post cardiac surgery patient? A comparison is made before and after implementation of evidence based crisis checklists to evaluate their effect on nurses' perceived knowledge and confidence levels as well as their performance in assessing and providing interventions for complications.

**Methods/Evidence:** A literature review was conducted on the use of crisis checklists in the healthcare setting as well as on complications in the recovery of the post cardiac surgery patient. A checklist template was created for each crisis with sections that included clinical picture, "to do" (interventions), drugs, and possible causes. Case scenarios for use in the simulation lab were developed for 2 of the crises (bleeding and hypertension with low cardiac output.) Each PACU nurse completed a pre-implementation knowledge survey to measure their confidence level in caring for a patient with these complications. During participation in naïve case scenarios (without checklists), the nurse was evaluated on key points of assessment and intervention. After a break, the nurse returned to the simulation lab and was introduced to the crisis checklists. Then the nurse participated in the same 2 case scenarios, this time with crisis checklists as a reference tool. Again, the nurse was evaluated on the same key points of assessment and intervention, and then completed the same knowledge survey as well as a survey about their opinion on helpfulness of the crisis checklists as a tool. Results showed a marked increase in confidence level and improved accuracy of assessment and interventions after introduction of the crisis checklists.

**Significance of Findings/Outcomes:** The PACU nurses' perceived knowledge and confidence level as well as their performance were improved after implementation of the crisis checklists. Overall, PACU nurses stated they "strongly agreed" with statements that the checklists helped them feel better prepared during the emergency scenarios, were easy to use, and they would use them if presented with these emergency scenarios in real life.

**Implications for perianesthesia nurses and future research:** Further research is recommended to explore whether the use of crisis checklists for other post-operative emergent complications may improve performance of PACU nurses and ultimately improve safety and outcomes for our patients.