[ET-31] Adaptation of the SPA Critical Event Checklists for the Children's Block of the Korle Bu Teaching Hospital in Accra, Ghana

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Background: The Washington University Department of Anesthesiology has recently established a partnership with the Korle Bu Teaching Hospital (KBTH) in Accra, Ghana. Residents and faculty from our Departments discussed approaches to improve the management of life-threatening perioperative events. In a simulated setting, the use of critical event checklists has been associated with a marked improvement in surgical team management of common surgical crises such as air embolism, cardiac arrest, and anaphylaxis [1]. The goal of this study was to determine whether the Society for Pediatric Anesthesia (SPA) pediatric-specific critical event checklists could be adapted for use at the Korle Bu Teaching Hospital [2].

Methods: Following a presentation to anesthesia providers at KBTH outlining each of the SPA critical event checklists, surveys were distributed to anesthesia providers at the KBTH. Each respondent was asked to select the checklists that would be most valuable in the perioperative setting. Based upon the most frequently selected checklists, we collaborated with local experts to adapt each checklist based on the availability of resources such as diagnostic tests, medications, and treatments at the KBTH. Following completion of the adapted checklists, we re-canvassed the anesthesiologists to assure that the checklists would be useful during the management of the respective critical event scenarios.

Results: Following presentation of the SPA critical event checklists (see figure 1), forty surveys were distributed and completed by anesthesia faculty members, residents, medical students, and nurse anesthetists. Only surveys completed by faculty and residents [N=19] were used to establish the perceived importance of each checklist (see figure 2) as well as which checklists they would most like to have available in the operating room. The four most frequently requested checklists included: cardiac arrest, anaphylaxis, hypoxia, and difficult airway. Collaborating with local residents and faculty members, we adapted the critical care event checklists to specifically match the medications and resources available to anesthesia practitioners at KBTH (see figure 3).

Conclusion: In collaboration with our international colleagues at the Korle Bu teaching Hospital in Accra, Ghana, we were able to successfully adapt the SPA critical care event checklists to their local practice and available resources. We have described the novel adaptation of the SPA critical event checklists as a collaborative quality improvement initiative which may be modeled by others for future international outreach efforts.

References: 1. Arriaga, et al. Simulation-based trial of surgical crisis checklists. NEJM 2013:368;3:246-253.
2. SPA Critical Events Checklist available at www.pedsanesthesia.org.