Background

- Pediatric resuscitations are high-impact, low-frequency events requiring quality improvement review and team feedback to improve.
- Prior studies have demonstrated improved resuscitation quality metrics when real-time videography of actual patient encounters is used.
- No validated clinical team-based performance tool currently exists for video assessment of real resuscitations in the pediatric emergency department (PED).

Objective

Use consensus methodology to adapt a validated, simulation-based, resuscitation team performance tool for use in video review of team performance during real resuscitations in the PED.

Methods

- The Simulation Team Assessment Tool (STAT) is a validated tool to evaluate team performance in simulated pediatric resuscitations.
- We adapted the STAT for video review of real resuscitations using a consensus process.
- We divided the STAT into 3 subtools for management of 1) emergency airway, 2) cardiac arrest, and 3) team leadership.
- 12 geographically diverse pediatric resuscitation experts ranked elements as essential, important but not essential, and not necessary.
- We used critical values derived from Lawshe’s Content Validity Index to retain or dismiss elements based on the proportion of experts deeming elements essential – this allowed for a 1-round survey model.

Results

- 65/101 (64%) total elements were deemed essential and were retained in the TRAP tool.
- 27/47 (57%) elements were retained in the cardiac arrest sub-tool.
- 34/49 (69%) elements were retained in the airway assessment sub-tool.
- 4/25 (16%) elements were retained in the team leadership sub-tool.
- Overall, experts utilized the survey options as follows:
  - Essential: 77% of the time
  - Important, but not essential: 21% of the time
  - Not necessary: 1.5% of the time.
- There was significant variation from expert to expert in their responses. One reviewer marked 93% of elements as essential, while another marked only 53% of elements as essential.

Conclusions

Modification of a pediatric resuscitation clinical performance tool from simulation-based to real-world-based is possible using consensus methodology.

Further Study

Future studies will assess reliability of the TRAP tool in the evaluation of team performance through video review of actual resuscitations in the PED.

Disclosures

- This project has received no extramural funding.
- The author reports no financial conflicts of interest.