Introduction
• The transfer and handover of critically ill pediatric patients from the pediatric emergency department (PED) to the pediatric intensive care unit (PICU) is a period of vulnerability associated with adverse events.
• The Institute of Medicine (IOM) has emphasized that multiple threats to patient safety exist during the transfer of patients due to the potential for delayed, incorrect, interrupted, or incomplete communications.
• Furthermore, delays in transfer and handover impact the time for the patient to receive definitive treatment.

Aims
1) Examine staff members’ satisfaction with the current handover and transport process.
2) Develop a new protocol and process for handover.
3) Evaluate staff satisfaction with the standardized interdisciplinary, handover and transport process.

Methods
• Ethical approval was obtained by an IRB.
• Focus groups were conducted to determine barriers, facilitators and satisfaction with the current handover and transport process.
• Multi-disciplinary chart audit was conducted to determine the criteria for a specialized transport.
• Seven high-risk criteria were identified for patient decompensation to serve as criteria to warrant initiation of the new transport process known as Pediatric Expedited Transport (PET). (Figure 1)
• The seven criteria were:
  1.) Out of hospital witnessed arrest with return of spontaneous circulation,
  2.) Status epilepticus,
  3.) Complex cardiac patients with unstable vital signs,
  4.) Intubation or ventilation requirements in the form of new BiPAP or C-PAP,
  5.) Shock physiology with vasopressor requirement,
  6.) New Glasgow Coma Scale less than 10,
  7.) High risk for acute compensation at the discretion of the attending physician.
• Staff satisfaction regarding the new process was examined pre and post-intervention using a survey.

Intervention
• Implementation of the new multi-disciplinary, transfer process utilizing the established PET criteria and PET standardized tool (See Table 1).
• Nurses and physicians from the ED and PICU participated in trainings including lecture and a simulated patient transfer.

Data Analysis
• Two researchers independently analyzed qualitative data using thematic analysis and established consensus.
• Quantitative data were imported into SPSS version 24.

Results
Focus groups revealed five themes:
• Need for improved communication,
• Need for standardization, and
• Ambiguity between providers regarding acuity.

Discussion
• Our project suggested that staff satisfaction was improved based on this collaborative lending credence to the process of using data and teams to develop health care solutions.
• This unique tool allowed for team handoff ensuring team understanding.
• We also found the established PET criteria helpful to create unity amongst the different unit team members.
• The utilization of a specialized transport team for the high-risk pediatric patient demonstrated improvement in communication, patient safety and role understanding.
• This project ultimately led to a policy change in the handover and transport process for pediatric patients transferred from the PED to the PICU.

Summary
• Research suggests that the handover and transport of critically ill children is a process that is associated with a high risk for complications.
• Our study indicated that the use of an interdisciplinary, standardized handover process using a tool is effective to improve staff satisfaction related to patient safety.
• Improvement was noted in satisfaction, safety, communication, role understanding, and a perceived reduction in errors.
• We emphasize the importance of using data and teams to develop health care solutions.

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