Analysis of Task Performance During Pediatric Trauma Resuscitation

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The Trauma Bay
Team Organization

Trauma Team Organization
THE INNER CORE

Surgical Resident/NP
Respiratory Therapist
Anesthesiologist
Medication Nurse
Nurse Left
Nurse Right
Patient

Recording Nurse
Surgical Coordinator
(Team Leader)
ED Attending
PICU Fellow

Attending Surgeon

Radiology Tech
Social Worker
(with pt’s family)
NAL
Goals of Trauma Resuscitation

• Diagnose and treat life threatening injuries quickly

• Examine entire patient to avoid missing an injury

• Advanced Trauma Life Support (ATLS)
  – Exam divided into “Primary” and “Secondary” Survey
  – Primary Survey: “ABCDEs”
  – Secondary Survey
Primary Survey (ABCDE)

Identify and manage life-threatening conditions in a sequential manner.
Secondary Survey

Begins once Primary Survey is complete and patient is stable

Head to Toe Examination
<table>
<thead>
<tr>
<th>Primary Survey Tasks</th>
<th>Secondary Survey Tasks</th>
<th>Nursing Tasks</th>
<th>Vital Signs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tasks</td>
<td>Tasks</td>
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</tbody>
</table>
Timeline

Details of each observation
Select Primary Survey Data

Notice there are two pulse variables
-distal (light green)
-central (dark green)
Two pulse variables are aggregated into one variable

New dataset containing only Primary Survey Data is created
Aligned by beginning of secondary survey
Filtered by subsequence of GCS occurring after start of secondary survey
Sorted by high vs. low GCS score