Descriptive Assessment of the Pediatric Emergency Team System: The Memorial Health University Medical Center Experience

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Disclosures

• None
**Background**

- At Memorial Health University Medical Center (MHUMC), the rapid response team is known as the Pediatric Emergency Team (PET)
- Composed of multidisciplinary health professionals
- PET purpose: bring critical care expertise to bedside and help before clinical deterioration
- Study aim: Assess the current PET process at MHUMC and identify potential areas of performance and process improvement
- Hypothesis: Improvement needed in communication, leadership, and documentation
Study Design/Methods

- Prospective observational study, single-center children's hospital
- Inclusion criteria: children (age 0-18 years) admitted to MHUMC during the pre- and post- intervention phase (i.e. 2/1-5/1/22 & 9/1/22-12/1/22 respectively) who experienced a PET call
- Exclusion criteria: patients >18 years of age, non-admitted children, code blue, or staff assist cases
- Physicians completed observation sheets regarding team dynamics, communication, documentation, and patient care
- Developed multiple educational interventions based on findings
- Post-intervention analysis
Study Interventions

- Formed multidisciplinary PET process committee
- Created PET call template for standardized documentation
- Clearly defined PET team member roles and duty responsibilities
- Provided education refresher
- Conducted multidisciplinary PET simulation session
### Results: Pre-Intervention/Post-Intervention

<table>
<thead>
<tr>
<th><strong>PRE-INTERVENTION</strong></th>
<th><strong>POST-INTERVENTION</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>14 total PET calls</td>
<td>19 total PET calls</td>
</tr>
<tr>
<td>7% standardized documentation</td>
<td>64% standardized documentation</td>
</tr>
<tr>
<td>50% no clear leader</td>
<td>64% no clear leader</td>
</tr>
<tr>
<td>64% initial SBAR</td>
<td>32% initial SBAR</td>
</tr>
<tr>
<td>64% occurred at night</td>
<td>58% occurred at night</td>
</tr>
<tr>
<td>50% respiratory complaints</td>
<td>79% respiratory complaints</td>
</tr>
</tbody>
</table>
Results: Pre-Intervention/Post-Intervention

SBAR USE PRE-INTERVENTION

<table>
<thead>
<tr>
<th>SBAR</th>
<th>Yes</th>
<th>No</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>64.3%</td>
<td>14.3%</td>
<td>21.4%</td>
</tr>
</tbody>
</table>

SBAR USE POST-INTERVENTION

<table>
<thead>
<tr>
<th>SBAR</th>
<th>Yes</th>
<th>No</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>52.6%</td>
<td>15.8%</td>
<td>31.6%</td>
</tr>
</tbody>
</table>
Results: Pre-Intervention/Post-Intervention

Pre-Intervention: PET Call Leader

- PET RN: 50%
- Bedside RN
- Charge RN
- Peds Resident
- None/Unclear
- Other

Post-Intervention: PET Call Leader

- PET RN: 64%
- Bedside RN
- Charge RN
- Peds Resident
- None/Unclear
- Other

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Results: Pre-Intervention/Post-Intervention

Occurrence of Standardized Documentation

- Pre-Intervention: 7%
- Post-Intervention: 64%
Conclusions

- Inconsistent documentation, team dynamics, and communication practices exist with current PET call process
- Standardization of documentation improved recorded information
- PET leader identification and SBAR communication use remained low despite educational intervention
- Team dynamics and communication continue to be ongoing QI growth opportunities
Limitations

- Single-center study
- Reporter bias
- Lack of third-party observer data collection
- Missing data (inconsistent data reporting)
Next Steps

▪ Continued leadership reinforcement of standardized template use, assumption of team member roles and duties, and SBAR communication

▪ Repeat post-intervention phase with use of third-party observer

▪ Continued and more frequent multidisciplinary PET simulations (biannual or quarterly basis)
Acknowledgements

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▪ Special thanks to Drs. Lee, Hebert, and Keshwah for their support

▪ Final thanks to our patients – the little ones who keep us searching for process improvement