Detecting Pediatric Patient Deterioration using PEWS

This practice algorithm has been specifically developed for MD Anderson using a multidisciplinary approach and taking into consideration circumstances particular to MD Anderson, including the following: MD Anderson’s specific patient population; MD Anderson’s services and structure; and MD Anderson’s clinical information. Moreover, this algorithm is not intended to replace the independent medical or professional judgment of physicians or other health care providers.

INITIAL ASSESSMENT

Nurse to determine PEWS by assessing pediatric patient’s:
- Behavior
- Cardiovascular system
- Respiratory system

SCORE

PEWS 0-2
- Reassess and rescore every 4 hours

PEWS 3-4
- Consult with another RN to confirm score
- Notify Charge RN
- Reassess and rescore every 2 hours
- Notify Resident or Primary Team
- Perform intervention as ordered
- Reassess and rescore every 1 hour

PEWS 5
- Immediate consult with Charge RN and PICS Resource RN to confirm score
- Notify:
  - MERIT (x2-7090)
  - In house covering Provider
  - Fellow (who will notify attending)
  - PICS Attending (Nocturnalist if after 5pm)
- Perform intervention as ordered
- Reassess and rescore every 30 minutes

SCORE

PEWS greater than or equal to 6 or a score of 3 in any single category
- Consult with Charge RN and PICS Resource RN to confirm score
- Notify Residence or Primary Team
- Perform intervention as ordered
- Reassess and rescore every 2 hours

NURSING INSTRUCTIONS

Pediatric patient admitted to MD Anderson

PEWS = pediatric early warning score

1See Appendix A for PEWS tool. Score should be documented in the patient’s medical record.
## APPENDIX A: Modified PEWS Tool

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Score&lt;sup&gt;1&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td><strong>Cardiovascular System</strong></td>
<td></td>
</tr>
<tr>
<td>Rate</td>
<td>Within normal parameters for age</td>
</tr>
<tr>
<td>Color</td>
<td>Pink</td>
</tr>
<tr>
<td>Perfusion</td>
<td>Capillary refill 1-2 seconds</td>
</tr>
<tr>
<td><strong>Respiratory System</strong></td>
<td></td>
</tr>
<tr>
<td>Rate</td>
<td>Within normal parameters for age</td>
</tr>
<tr>
<td>Effort</td>
<td>No retractions</td>
</tr>
<tr>
<td>Oxygen</td>
<td>N/A</td>
</tr>
</tbody>
</table>
  - \( \text{FiO}_2 24-40\% \)
  - \( 2 \text{ L/minute O}_2 \)
  - Any assisted ventilation<sup>3</sup> or initiation of \( \text{O}_2 \)
  - \( \text{FiO}_2 40-49\% \)
  - At least 3 \text{ L/minute O}_2

<sup>1</sup> Add 2 extra points if patient requires frequent interventions (e.g., suctioning, positioning, change in \( \text{O}_2 \) needs, multiple IV attempts required, or every 15-minute or continuous nebulized treatments) or has persistent post-op vomiting as defined in patient’s orders.

<sup>2</sup> Includes home BiPAP/CPAP or home ventilator at baseline settings.

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SUGGESTED READINGS


This practice consensus statement is based on majority opinion of the Pediatric experts at the University of Texas MD Anderson Cancer Center for the patient population. These experts included:

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DEVELOPMENT CREDITS

This practice algorithm has been specifically developed for MD Anderson using a multidisciplinary approach and taking into consideration circumstances particular to MD Anderson, including the following: MD Anderson’s specific patient population; MD Anderson’s services and structure; and MD Anderson’s clinical information. Moreover, this algorithm is not intended to replace the independent medical or professional judgment of physicians or other health care providers.