Not All Scales Are Created Equal

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Problem

- Increase in Hospital Acquired Pressure Injury
- Current scale not specific to critically ill patients
- No standardization of prevention measures used

Background

- Numerous tools were discovered during a literature review and it was decided that a comparison of the Jackson Cubbin Pressure Area Risk Calculator versus the Braden Scale was to be piloted in the critical care area.
- Multiple pressure injury prevention methods were used in critical care area due to knowledge deficit and multiple products offered.
- Braden Scale scores varied with rater and experience as a bedside clinician.

Goal

- Find a pressure injury scale that is sensitive to the critical care population.
- Decrease inter-rater variability when assessing skin for risk of pressure injury.
- Standardize prevention methods used in critical care.
- Decrease hospital acquired pressure injury in critical care.

Implementation

- Comparative study between Braden Scale and Jackson Cubbin Scale.
- Educated bedside clinicians on both Braden Scale and Jackson Cubbin Scale and how to score each category.
- Developed standardization of prevention methods for patients at high risk for pressure injury.
- Developed flow chart for prevention decisions that was easily accessible to bedside clinicians.

Jackson Cubbin Scale

<table>
<thead>
<tr>
<th>Factor</th>
<th>Braden Scale</th>
<th>Jackson Cubbin Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin</td>
<td>Moderate/Low</td>
<td>High risk</td>
</tr>
<tr>
<td>Mobility</td>
<td>Moderate/Low</td>
<td>High risk</td>
</tr>
<tr>
<td>Activity</td>
<td>Moderate/Low</td>
<td>High risk</td>
</tr>
<tr>
<td>Nutrition</td>
<td>Moderate/Low</td>
<td>High risk</td>
</tr>
<tr>
<td>Emergency Conditions</td>
<td>Moderate/Low</td>
<td>High risk</td>
</tr>
</tbody>
</table>

References


Conclusion

- Bedside clinicians indicated that the Jackson Cubbin Scale was more sensitive to the critical care population.
- The Jackson Cubbin Scale was more reliable in scoring the patients due to the objectivity of the scale which led to a decrease in inter-rater variability.
- Braden Scale presented a larger number of high risk patients which indicated a higher sensitivity
- The Braden Scale led to more high false positives and higher risk scores in the critically ill patients.
- Jackson Cubbin Scale was more specific for critically ill patients and had a higher positive predictive value.

Recommendations

- Standardizing pressure injury prevention products and implementing a decision tree for types of prevention products used on high risk patients.
- Implement the Jackson Cubbin Scale in critical care areas to aid in identifying and scoring high risk patients for early implementation of prevention methods.

Outcomes

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Braden Scale</th>
<th>Jackson Cubbin Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specificity</td>
<td>94.3%</td>
<td>90.9%</td>
</tr>
<tr>
<td>Positive Predictive Value</td>
<td>90%</td>
<td>68.8%</td>
</tr>
<tr>
<td>Negative Predictive Value</td>
<td>97%</td>
<td>94.3%</td>
</tr>
</tbody>
</table>

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