Innovation of Skin Risk Assessment to Support Quality Improvement
Kristina Foster MS, RN, APRN, BC, CWOCN; Lacey Bergerhofer RN, BSN, CCRN; Michele Fix, RN, MSN, NE-BC
Children’s Mercy Hospitals and Clinics, Kansas City, Missouri

1. Describe Skin Integrity Risk Assessment (SIRA) developed to accurately identify pressure ulcer (PU) risk in all ages.

2. Demonstrate use of SIRA within electronic health record (EHR) as innovative method for PU prevention.

3. Include device-related pressure ulcer prevention.

Method

1. No risk assessment scale (RAS) validated across lifespan necessitates use of multiple tools in hospitals with varied populations.
2. Current tools are paper-based. Use of EHR improves process.
3. Devices are a leading cause of PU in hospitalized patients, current RASs do not include this risk.

Strategy & Implementation

Goals for development were to create a risk assessment tool that is:
- Easy to use
- Easy to understand
- Suitable for all ages
- Provides nursing decision support for PU prevention

Features:
- 8 subscales, each rated independently
- Subscale for assessment of device risk
- Patient assessment findings are ‘at risk’ or ‘not at risk’ utilizing the nomenclature in the tool
- No need for ‘scoring’ or identifying a threshold for risk
- Used within the EHR to guide pressure ulcer prevention interventions through assisting documentation of assessment and care planning.
- Planned patient interventions are visible in the electronic nursing assessment documentation

Purposes

Risk Assessment Form

Nursing Assessment

Individualized Plan of Care

Intuitive Workflow

Risk Assessment Form

At risk selection prompts intervention planning

Evaluation

- Rates of RA completion have increased since implementation.
- SIRA appears to have had a positive impact on pressure ulcer prevalence in the time since its implementation (October, 2011).
- Research is in process to establish the reliability and validity of the tool.

Implications for Practice

- SIRA provides comprehensive assessment of PU risk through incorporation of previously overlooked risk factors.
- Implementation of appropriate interventions for risk factors that are not addressed with other tools.
- Possible limitation: potential for over estimation of risk since a patient may be ‘at risk’ in any one individual subscale.
- Research may demonstrate that over estimation is a benefit, if pressure ulcer prevention is applied universally in all patient populations with positive outcomes.

Quality Monitoring

<table>
<thead>
<tr>
<th>Year</th>
<th>Recorded Pressure Ulcers</th>
<th>Start of weekly PU Prevalence in PICU</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>17</td>
<td>2012</td>
</tr>
<tr>
<td>2013</td>
<td>10</td>
<td>2013</td>
</tr>
<tr>
<td>2014</td>
<td>12</td>
<td>2014</td>
</tr>
<tr>
<td>2015</td>
<td>7</td>
<td>2015</td>
</tr>
<tr>
<td>2016</td>
<td>3</td>
<td>2016</td>
</tr>
<tr>
<td>2017</td>
<td>12</td>
<td>2017</td>
</tr>
<tr>
<td>2018</td>
<td>12</td>
<td>2018</td>
</tr>
<tr>
<td>2019</td>
<td>5</td>
<td>2019</td>
</tr>
<tr>
<td>2020</td>
<td>4</td>
<td>2020</td>
</tr>
<tr>
<td>2021</td>
<td>6</td>
<td>2021</td>
</tr>
</tbody>
</table>