Using Evidence-Based Practice to Reduce Pressure Ulcers in NICU and PICU

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**Problem:** NICU and PICU patients are at high risk for pressure ulcers (PU). The purpose of this EBP change was to implement strategies for assessment and prevention of device related PU.

**Evidence:** Over 50% of pediatric and neonatal pressure ulcers are related to devices (Baharestani, 2007). Risk assessment (Curley 2003, Gray 2004, and Huffines and Logsdon 1997) may lead to reduced patient PU. Premature infant skin and critically ill child physiology creates higher PU risk and interventions for prevention are available (Baharestani, M and Ratliff, C. 2007, and Lund, et al., 2007).

**Strategy:** Used the Iowa Model (Titler, et al., 2001) to implement assessment and preventative measures. We utilized a staff nurse expert group called Skin Team Advocates and Resources (STARs) to lead our changes at the bedside. These staff nurses were key in leading patient population specific interventions, as well as just in time staff education regarding pressure ulcer staging and prevention.

**Practice Change:** Interventions included elimination of PIV adhesive wrap, adding a skin barrier under IV catheter hubs, use of soft NPCPAP tubes and development of an improved taping method, and site rotation changes for temperature probes and BP cuffs. STARs team nurses led audits and improvement efforts.

**Evaluation:** Staff involvement in reviewing evidence, tools and interventions promoted acceptability of practice changes.

**Results:** Average prevalence decreased in NICU-1 from 43% to 0%; NICU-2 from 4% to 2%; and PICU from 20% to 5%.

**Recommendations:** Involve staff in reviewing the evidence and developing interventions to facilitate early adoption. Sharing the audit results and benchmarking with just in time bedside staff education provides energy and involvement.

**Lessons Learned:** Change efforts are most successful when involving bedside caregivers, data is transparent and shared in a timely manner, and work is shared across units to improve care overall.
Bibliography:


Lund, C., et al. (2007). The Neonatal Skin Care Evidence-Based Clinical Practice Guidelines. AWHONN.