# Prevention of Medical Device Pressure Injuries in Pediatric ICU Patients Line | Children's Hospital



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#### **BACKGROUND**

On 05/06/2020 a patient under the age of 12 months was admitted to PICU for Acute Bronchiolitis. The patient subsequently developed a wound on 05/08/2020 where their Patient ID band had come in contact with their right foot, causing a skin tear that was classified as an unstageable pressure wound. As this wound was deemed a pressure ulcer by the wound team, it was reported to the appropriate accreditation bodies as a Sentinel Event.

### **PURPOSE**

Prevention of future sentinel events through education of nursing staff using evidence-based guidelines for skin assessment and rotation of medical device sites.

# **Root Cause Analysis**

Primary findings of the RCA included the following:

- -Lack of documentation regarding skin assessment every 2 hours in the preceding 56 hours of care prior to the discovery of the injury
- -The standard issue ID bracelet had an unyielding sharp edge that did not give when the patient began to swell from IV fluids

# **Improvements**

-Changing the ID Bracelets from Standard Patient ID bands to a soft band that can be adjusted in all patients under the age of 12 months or with skin that is compromised (Special Thanks to Valarie Burnett, MSN, RN, for finding the soft bands)

-Documentation of skin assessment and turning every two hours in patients that are unable to turn themselves or have a decreased ability to sense pain and discomfort





# Other Improvements

- -Rotation of the pulse oximetry site every 4 hours
- -Recommendation that any patient with a Braden Score Q of 18 or lower have a focused and skin assessment every 2 hours
- -Release of blood pressure cuffs and assessment of the skin under the cuff frequently as skin maceration and uncomfortable chaffing can occur. This is especially true in patients that are febrile, or fluid overloaded, as their skin may become moist under the cuff.









Source: Google Images

#### **Evidence**

In 2005 the Pennsylvania Patient Safety Reporting System issued a Patient Safety Advisory that although generally considered safe, there had been 8 reported incidents of skin compromise reported. It recommended rotating sites at least every 4 hours in ICU patients and possibly more in patients that have obvious skin perfusion issues.

A separate study conducted in 2017 showed that in patients with a Braden Score of > 15 SpO2 probe sites accounted for 6% of pressure injuries in these patients.

## Goals for the Future

- Reduce medical device related pressure injuries in Pediatric ICU patients
- Develop a "Skin Champion" team to help develop new evidence-based policies to reduce pressure injuries
- Continue to update best practice guidelines to improve quality of care and patient outcomes

### REFERENCES

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