

**ELIMINATING MEDICAL DEVICE-RELATED PRESSURE ULCERS (MDRPU)  
CAUSED BY CONTINUOUS BLOOD PRESSURE CUFF MONITORING**

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**Identification of the problem – Overview:** Medical device related pressure ulcers (MDRPU) can cause harm and are often avoidable. Over a 5-month period, from March 2013 through July 2013, an increased trend in MDRPU caused by blood pressure (BP) cuffs was identified. The 9 identified injuries during this time frame were reported to the multi-disciplinary collaborative (Perianesthesia/Perioperative Skin Committee).

**Performance Improvement Question:** Is there a cost effective, and simple, method that can be implemented to eliminate the incidence of MDRPU caused by the BP cuffs in the Perioperative/Perianesthesia Setting?

**Purpose:** Explore interfaces available to reduce MDRPU caused by BP Cuffs using a collaborative and interdisciplinary approach.

**Goal:** Reduce the incidence of MDRPU from BP cuffs to 0-1 per year.

**Methodology:** In July 2013, the Perianesthesia/Perioperative Skin Committee [which included the certified wound, ostomy, continence nurses; staff nurses; nurse educators; nursing informatics; physicians; ancillary staff; and nursing leadership] was asked to investigate the incidences of the MDRPU caused by BP cuffs. The collaborative team conducted a literature review and investigated the evidence supporting best practice. Evidence recommended a protective interface between the skin and device to reduce MDRPU in acute care settings. A protective interface (stockinette-cotton/polyester sleeve) between the skin and the BP cuff has been shown to reduce MDRPU in acute care settings. This was implemented throughout the perioperative/perianesthesia stay. This change in practice was disseminated throughout the Perioperative/Perianesthesia team, was monitored, and sustained.

**Significance of Findings/Outcomes:** There were 2 incidences in the year following implementation of the practice. Upon investigation it was revealed the stockinette was not used in either of these incidences. From January 2014 through February 2017, there were no MDRPU related to the BP cuffs in the Perioperative/Perianesthesia area.

**Implications for perianesthesia nurses:** This quality improvement practice change resulted in eliminating medical device-related pressure ulcers caused by BP cuffs. "Eliminating Medical-Device Related Pressure Injury from Blood Pressure Cuffs during Continuous Monitoring in the Perioperative Setting: A Novel Approach", has been accepted for JOPAN publication, 2017.