

The literature supports the use of music in the health care environment as a way to individualize care and decrease pain and anxiety. It is an inexpensive alternative to provide a complimentary and holistic approach to patient care.

**EBP Question/Purpose:** Does the use of music have a positive effect on pain and anxiety in the PACU after Adenotonsillectomy for children 5 to 10 years old? We will examine patient, family and nurse satisfaction.

**Methods/Evidence:** Before the child went into surgery, a pre-operative nurse asked the child and/or the parents his/her favorite type of music. Patients/families had a choice of music from a number of music listening stations. The nurse obtained an iPod (Apple Inc, Cupertino, CA) and speakers and or headphones. Once patients arrived in the PACU and after initial assessment, the music was started. Surveys were used to collect information on anxiety, patient/family and nurse satisfaction at the conclusion of the PACU stay.

**Significance of Findings/Outcomes:** 64% of patients/families agreed that music calmed their child in the PACU. 72% of staff agreed that using music is a good way to decrease pain and anxiety for patients. 80% of both patient/families and staff would recommend music listening to others in the PACU. Our findings indicate that music listening is a useful non-pharmacological intervention for pain and anxiety in this population.

**Implications for perianesthesia nurses and future research:** This information supports the use of alternative options, specifically music listening, for pediatric pain and anxiety management in the perianesthesia setting. Our follow-up study will examine expanding the use music listening to other patient populations.

### **SURGICAL NORMOTHERMIA; ACHIEVING THE TRIPLE AIM**

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**Introduction:** Unplanned hypothermia is a common complication of surgery and can lead to serious complications. An effective way to maintain normothermia is through pre-warming.

**Identification of the problem:** Our organization experienced a lack of pre-warming for hypothermia prevention. There is a vast but diverse amount of evidenced based intervention for unplanned hypothermia prevention. This immense and somewhat conflicting information can pose a challenge for organizations when deciding what is the most optimal as well as practical method to prevent unplanned hypothermia. After comprehensive review of literature and professional practice guidelines it was found that hypothermia prevention can be achieved by both passive and active pre-warming methods. In

addition to seeking quality clinical care logistics and cost effectiveness are also a consideration.

**Purpose:** The aim of this project was to evaluate diverse approaches to hypothermia prevention to determine which was most aligned with achieving high quality, cost containment, and improved population health.

**Methods:** A pilot project was conducted to test the feasibility and usefulness of both pre-warming methods. The project was conducted in all perioperative departments. Passive pre-warming was provided using a warmed cotton blanket with a sheet on top, head covering, socks, and patient education. Active pre-warming was obtained with use of forced warm air Bair Paws Gown device and patient education. Sample population included all patients having colorectal or hysterectomy procedures. The sample population was evenly divided so that half received passive pre-warming and the other half received active pre-warming. A data collection tool was developed. All perioperative staff was educated and in-serviced on each method including equipment.

**Outcomes:** After collecting data for a one month period our final sample size was N=30. 12 received passive pre-warming and 18 received active pre-warming. Data analysis showed that there was not a significant change in the mean body temperature from data point SDS admission and OR arrival. When compared to baseline data using either passive or active methods, both yielded good normothermia maintenance with necessitates intervention.

**Conclusion:** After analyzing the data it was decided that there was not enough clinical benefit related to superiority in pre-warming for hypothermia prevention, when comparing passive and active methods. The cost of the active warming Bair Paws Gown device is significantly higher than the passive warming supplies, and logistically the passive pre warming can be easily implemented as these resources currently exist.

**Implications for the perianesthesia nurses and future research:** Ongoing research is needed for new methods to maintain Normothermia in the surgical patient.

### **EFFECTS OF TRANSPORT ON ORAL TEMPERATURE OF POST-SURGICAL PATIENTS TRANSPORTED FROM PACU TO NURSING UNITS**

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**Introduction:** Maintaining normothermia beyond the walls of the PACU is critical for patient stabilization and meeting a pre-determined clinical pathway. At one Southern California Community Hospital there were complaints/reports of patients being hypothermic on arrival to the inpatient unit. This was despite the fact that those patients met the criteria of normothermia prior to discharge from PACU.

**Identification of the problem:** There is a gap in the literature on the effect of intra-hospital transport on patient temperature.

**Purpose of the Study:** The purpose of this descriptive study was to determine changes in oral temperature resulting from transport between the PACU to inpatient nursing units. One research question guided this study: Does oral temperature change as a result of transport from PACU to inpatient nursing units?