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.

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**SURGICAL NORMOTHERMIA; ACHIEVING THE TRIPLE AIM**

Primary Investigator: Dawnmarie Devito, MSN-ED RN CPAN
Robert Wood Johnson University Hospital, New Brunswick, New Jersey
Co-Investigators: Michele Dickson, BSN RN CAPA, Susan Elliott, BSN RN, Karin Graulich, MSN RN, Danuta Niewinska, BSN RN, Jennifer Pirozzi, BSN RN CNOR

**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 necessities 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.

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

Primary Investigators: Kathy Dureault, MSN RN CPAN
St. Joseph Hospital, Orange, California
Co-Investigator: Susan Violette, ASN RN CPAN

**Introduction:** Maintaining normothermia beyond the walls of the PACU is critical for patient stabilization and meeting a predetermined 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?
Methodology: A pre-post measurement of oral temperature on a convenience sample of post-surgical adult patients transported from PACU to an inpatient or observation unit. Data was collected by two trained PACU support techs using an author-developed data collection tool.

Upon readiness for discharge, and within 2 minutes prior to physically leaving the PACU, the support tech will take an oral temperature per protocol with a designated oral thermometer and document on the data collection tool. The same tech with the same thermometer rechecks and documents the temperature upon arrival to the inpatient unit.

Results: Preliminary data of 82 patients demonstrates a mean temperature reduction during transport of 0.48 degrees F and that the effects of length of transport on temperature are not significant at this time.

Discussion: Because preliminary data demonstrates that there is minimal effect on temperature from transport, other etiologies must be explored. Effectively stabilizing patient is an essential component of PACU care. In this cost and time-constrained healthcare environment it is imperative to consider stabilization beyond the PACU.

Conclusion: A better understanding of the effects of transport on temperature provides important information to optimize patient condition in limited time.

Implications for perianesthesia nurses and future research: A consistent method of measuring temperature across the continuum of care is essential. A future opportunity exists to compare the temperature of 30 minutes before transport to the temperature of 2 minutes before transport from PACU.

PACU PIONEERS AROUND THE WORLD: NURSING QUALITY IMPROVEMENT STRATEGIES IN KENYA

Primary Investigator: Summer Fitts, BSN RN CPAN
Vanderbilt University Medical Center, Nashville, Tennessee
Co-Investigator: Serah Nyaga, RN
AIC Kijabe Hospital, Kijabe, Kenya
Co-Investigators: Grace Umutesi, MPH, Dr. Matthew McEvoy, MD, Dr. Mark Newton, MD

Introduction: Currently, five billion people worldwide do not have access to safe surgical, anesthesia, and perianesthesia nursing care. Global efforts to scale up delivery of safe, context-relevant nursing care need to be tailored to environments of low and middle income countries (LMICs).

Identification of the problem: Literature on Post-Anesthesia Care Units (PACUs) and perianesthesia nursing in LMICs is sparse or non-existent. Understanding the state of perianesthesia nursing practices is a first step toward improving safe and patient-centered care in LMICs.

QI Question/Purpose of the Study: The goal of this work was to develop quality improvement (QI) tools to assess the delivery of perianesthesia nursing care in PACUs in a low-resource setting. These tools were piloted by collecting data from the PACU in a tertiary referral hospital in Kenya.

Methods: Four QI tools were developed using a multidisciplinary team in order to assess the quality of nursing care in the PACU at a 350-bed Kenyan hospital. Resources from leading global health organizations and the American Society of PeriAnesthesia Nurses (ASPAN) were used to guide this process. The QI tools included: facility assessment, patient observation, semi-structured interview guide for perianesthesia nursing, and semi-structured interview guide for anesthesia providers. The 90-question Facility Assessment was developed to understand the available resources in PACU. The patient observation tool (POT) captured data including patient demographics, events, interventions, length of stay, and delays in PACU. All PACU nurses were interviewed using a semi-structured interview guide and a validated tool to evaluate the quality of nursing work environment: the Practice Environment Scale - Nursing Work Index.

Outcomes/Results: Average PACU length of stay was 1 hour 46 minutes, ranging from 30 minutes to 5 hours. Delays in discharge from PACU occurred in 58% of patients. Top reason for delay was the ward nurse was not available to pick up the patient. Nurse documentation of vital signs was frequently missed. On average, 94% of patients’ respirations, 34% of temperatures, and 36% of blood pressures were not documented.

Discussion/Conclusion: Use of QI tools, with support of a multidisciplinary team, offer practical methods to assess perianesthesia nursing, promote safe PACU practices, and gather evidence for setting standards in LMICs.

Implications for perianesthesia nurses and future research: Further iterations of the tools and additional trials should be implemented in other LMIC facilities.

FACTORS NURSES CONSIDER WHEN MAKING THE DECISION TO MEDICATE FOR PAIN IN THE PACU: THE EMBEDDED KNOWLEDGE WITHIN PRACTICE

Primary Investigator: Danielle Dunwoodoo, PhD MS BSc BScN RN
Halton Healthcare, Oakville, Ontario
University at Buffalo, School of Nursing, New York

Introduction: Within the clinical setting, pain and sedation scales alone are not enough to support clinical judgment with acute pain management (Jarzyna et al., 2011).

Identification of the problem: Because sedation measurement rests along a fluctuating continuum, it is possible for a patient to be sedated and then shift to increasing alertness, and then to drift back to a sedated state. This potential for acute clinical transition can be challenging to nurses of all levels from novice to expert.

Purpose of the Study: The purpose of this study was to examine how nurses working in the Post-Anesthetic Care Unit (PACU) identify and describe excessive sedation and what criteria they use to make decisions about medicating patients for pain.

Methodology: Utilizing Heideggerian Hermeneutics methodology, 20 expert PACU nurses were asked to participate in