

lost in the shuffle. Simple measures to appreciate them are very effective.

### IMPROVING FIRST CASE SURGICAL START TIMES BY IMPROVING WAYFINDING

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**Introduction:** Wayfinding refers to a process of navigating from one space to another. On the day of surgery, patients can be confused and nervous. These stressors affect their ability to process information. This project examined ways to improve wayfinding in a large hospital.

**Identification of the problem:** First case surgical delays are costly when the Operating Room (OR) stands idle waiting for the patient. Late first Cases may cause late starts for the rest of the surgical day resulting in staff overtime and patient dissatisfaction.

**QI question/Purpose of the study:** Through two Plan, Do, Study, Act (PDSA) cycles, we identified ways to reduce late starts. The first PDSA cycle question: "In the patient's path of travel from hospital door entry to OR transfer, what are causes of delay?" It was found that patients got lost from hospital entry to preoperative area (Preop). The second PDSA question was "With additional temporary signage will start time delays be reduced?"

**Methods:** PDSA 1: student nurses observed 30 patients' pathways from hospital entry to OR transfer and documented time spent at key stopping points. Their observations were compared to times documented in the electronic medical record (EMR) and confirmed that manual time observations matched EMR times. Signs were added between PDSA1 and PDSA2. PDSA 2 consisted of an EMR review of 200 Cases: 100 pre-signage cases and 100 post-signage cases.

**Outcomes/Results:** PDSA1 findings: 28 Cases were used in the final analysis. 9 of 16 first case starts were delayed. One reason for delay was time spent finding preop (33minutes). Temporary signage was placed at strategic points noted to cause patient confusion. PDSA2 findings: The 100 pre-signage cases averaged 36.5 min to preop-checkin while the 100 post-signage cases averaged 21.5 minutes (-41.1% change).

**Discussion:** PDSA1 helped to identify wayfinding from front door to Preop as a delay. PDSA1 also verified EMR use for looking at larger case numbers. PDSA2 demonstrated strategically placed signs reduced patient confusion in wayfinding.

**Conclusion:** Viewing the wayfinding from the patients' perspective as well as functional and aesthetic design is important.

**Implications for perianesthesia nurses and future research:** In large hospitals, wayfinding should be studied more. Understanding path of travel is important in Perianesthesia nursing for both inpatient and outpatient surgeries.

### EFFECTIVENESS OF MPEWS AT PREDICTING PEDIATRIC RISK EVENTS AND UNPLANNED ICU ADMISSIONS IN A PACU SETTING

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**Introduction:** Pediatric early warning scores have been studied as a way to help nurses analyze the large amount of care data gathered and synthesize it into a score denoting risk and need for closer monitoring.

**Identification of the problem:** There is no validated tool for evaluating the risk of pediatric PACU patients based on data obtained in the PACU. This information could be valuable in the determinations of disposition and level of care needed.

**Purpose of the Study:** To determine the sensitivity and specificity of the Modified PEW System Score (MPEWS) to predict an unplanned ICU admission or risk event within 24 hours of PACU discharge among pediatric PACU patients.

**Methodology:** This study used a case control design. Cases were selected from patients 0-18 that experienced a risk event or unplanned ICU admission within 24 hours of PACU discharge. Controls were selected randomly from patients that did not have a risk event or unplanned ICU admission after PACU discharge to acute care unit. Patient data was pulled from the electronic medical record and analyzed logistic regression. Area under the ROC (AUC) curve was calculated to determine discriminative power.

**Results:** A total of 61 Cases and 210 controls were scored. For each increase in MPEWS score, the odds of being admitted to the ICU were 1.57 times the odds from the MPEWS 1 unit lower and the ROC AUC was 0.70, indicating acceptable, but weak, discrimination. However, cutpoint analysis failed to identify an appropriate MPEWS score that resulted in high sensitivity and specificity.

**Discussion:** Cases were significantly younger than control patients (median age 4.3 years vs. 9.3 years). ROC AUC improved from 0.70 to 0.75 when age was included in the model suggesting that it may warrant inclusion in the scoring algorithm.

**Conclusion:** The MPEWS showed a statistically significant ability to predict risk events and unplanned ICU admissions, however, it lacked the discrimination needed for clinical decision-making.

**Implications for perianesthesia nurses and future research:** Though not clinically significant, MPEWS may hold promise in establishing a common language of acuity between PACU and acute care nursing. Future tools developed may consider inclusion of age as indicator of increased risk.

### ARE EMPLOYEE LONGEVITY AND JOB SATISFACTION RELATED TO GENERATIONAL DIFFERENCES AMONG THE BABY BOOMERS, GENERATION XERS, AND THE MILLENNIALS?

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