

## **Analyzing Nursing Factors Influencing Total Recovery Room Time**

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**Introduction:** Patients may undergo a minimally invasive surgical technique called knee arthroscopy to evaluate and treat knee joint issues. Some patients experience a prolonged length of stay (LOS) and require an extended stay in the post-anesthesia care unit (PACU). Prior research has demonstrated that clinical and nonclinical factors influence the discharge time for surgical procedures.

**Identification of the Problem:** To evaluate the factors contributing to increased LOS and provide insights for improving discharge efficiency in outpatient settings.

### **Purpose of the Study:**

- To identify clinical and nonclinical factors that prolonged the LOS
- To locate and evaluate nurse-sensitive measures associated with prolonged LOS

### **Methodology:**

- Quantitative, retrospective electronic medical record review from January 2021 to December 2022
- Reviewed 1068 charts of patients who underwent any arthroscopic knee procedures at an ambulatory surgery unit in South Florida
- Factors measured: Demographics, post-operative medications given or regional block received, transportation delay, length of anesthesia, ASA, PACU staffing, length of procedure, duration in Phase I and Phase II

**Results:** Variables with statistically significant increased PACU LOS:

- Gender: Female patients
- Initial report of pain
- Use of opioid analgesic medications
- Use of antiemetic medications
- Use of non-steroidal anti-inflammatory drugs (NSAIDs)
- Increased nursing staff

**Discussion:** These findings highlight several areas where nursing interventions could potentially impact LOS in the PACU:

- Effective pain management strategies that address individual needs, particularly for females and those reporting higher pain scores
- Preoperative education on pain management expectations and side effects of medications could help patients establish a realistic, acceptable pain goal
- Strategies to prevent nausea and vomiting, such as utilizing early interventions
- Nurse leaders should evaluate staffing models, staff-to-patient ratios, and the distribution of nursing tasks

**Conclusion:** Understanding the factors contributing to extended LOS can help healthcare providers develop strategies to minimize LOS, optimize patient care, and reduce healthcare costs. Past research has focused on anesthesia factors; thus, recognizing additional factors for late discharge in PACU may enhance patient flow and shorten the time to discharge.

**Implications for perianesthesia nurses and future research:**

- Evaluate PACU nurses as individuals and as a team