### Background

Post Anesthesia Care Unit (PACU) nurses at our hospital identified concerns after several adverse drug events occurred associated with opioid administration for pain management, some requiring the use of an opioid antagonist. Despite aggressive administration of opioid medications to treat acute post-operative pain, a sedation scale was not used in the PACU. The nurses, instead, relied on a combination of clinical judgment, pain scores, vital signs and the Aldrete Scale to guide opioid administration. Their goal was to identify and implement specific practice guidelines that included a sedation assessment. The Pasero Opioid-Induced Sedation Scale (POSS) which measures sedation and provides interventions to guide safe opioid administration was currently being used in their health care system's medical/surgical areas, but not in the PACUs.

### Methods

**Process:** Nursing team members conducted a literature review, consulted with in-hospital and national clinical experts in pain management, investigated available resources, and asked the hospital’s pain management experts to serve as the team leaders. Based on the evidence gathered and the successful implementation of the POSS in medical/surgical areas, the team proposed to implement the POSS in their PACU. In order to implement the changes in their unit, it was necessary to seek approval and adoption from all hospitals within their health care system.

Team Members for the project included: PACU Nurses, Nurse Researcher, Clinical Outcomes Manager, Pain Management Nurse and PACU Clinical and Administrative Managers.

To change the care and monitoring of the PACU patients with the enhancement of the POSS, nursing policies and documentation forms needed to be revised.

- The Perioperative flow sheet was revised to include the POSS process for opioid administration and specific patient care and monitoring activities.
- Two nursing policies were revised including “Documentation of Perioperative Nursing Care” (Perioperative Flow Sheet) and “Discharge Criteria for PACU and Ambulatory Surgery”
- Staff Education was developed including:
  - Computer education for PACU nurses reviewing patient care and monitoring using the POSS
  - In-services for PACU nurses highlighting the flowsheet changes
  - Managers, Directors, and hospital nurses informed of the changes

Approval for the policy and documentation revisions for Grant Medical Center was obtained from the following:

- Grant PACU Shared Governance Council
- Grant PACU and OR Managers and Directors
- Surgery Anesthesia Continuous Process Improvement Committee
- Grant Pain Committee
- Surgery Peer Committee (represented by each of the 8 hospitals)

In addition, appropriate approvals were required from each hospital. Because each hospital varies in administrative practices and resources needed, adaptations were made to the general policies and procedures.

It was decided that during the implementation process team members will visit PACU nurses to provide support and answer questions.

### Evaluation

Ongoing evaluation will include monthly reviews of Narcan® usage to document any adverse event associated with opioid administration in the PACU and upon arrival to the clinical unit. In addition, documentation flow sheet audits will be made to ensure that the POSS process is being consistently and appropriately implemented in the PACU. Surveys will be developed and administered to PACU nurses to measure practitioner’s comfort with the use of the scale, practitioner’s confidence in use of the scale as a guideline for opioid administration, practitioner’s need for additional physician notification or physician orders and how PACU and unit nurses’ satisfaction with handoff communications.

### Future plans

Opportunities have been identified to expand the use of the POSS in the sedation/analgesia protocols and use in procedural areas. The remaining seven other hospital PACUs in our healthcare system are now in process of building this patient safety initiative into their care and monitoring.

### Discussion

Unit nurses can successfully implement an evidence-based system wide change when they partner with the appropriate interdisciplinary groups. A team leader and project team is needed to coordinate efforts, address barriers, communicate and implement change. The time period required to make the changes and implement the process took eleven months. One positive change spiraled into multiple changes as the impact of change affects many processes including encouraging multimodal pain options and changing documentation and reporting policies. The change also strengthened communication between PACU nurses with care providers on the clinical unit.

### References


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