

Invasive Ventilation Sedation Protocol



Janet Fricker BSN, RN-BC, CPAN; Joyce Burke BSN, RN CPAN, NE-BC; Jordyn Boise BSN, RN; Jolly Li M.D.

Objective

To develop an interdisciplinary communication process which facilitated the comprehensive plan of care for operative patients with comorbidities who required extended intubation time during the post-anesthesia period.

Literature Review

- The American Society of PeriAnesthesia Nurses defines nursing practice and establishes frameworks that ensure the safe, ethical care of patients undergoing procedures requiring anesthesia (2017).
- Controlled and carefully monitored sedation is an effective measure to minimize discomfort following surgery (Grap, Munro, Best, Hamilton, ... Sessler, 2012).

Background

- The Post Anesthesia Care Unit (PACU)
 experienced an increased volume of patients
 with complex co-morbidities
- These complex patients required longer postanesthesia time in the PACU due to extended intubation time.
 - Multiple calls from nursing to anesthesiology were required for ongoing orders and monitoring of intubated patients while still in the PACU
 - Appropriate levels of controlled sedation were needed to prevent patient-generated extubations while in the PACU and/or to minimize discomfort during transfer to ICU.
 - No order set existed for post-operative patients still intubated for extended periods while in the PACU

Process of Implementation

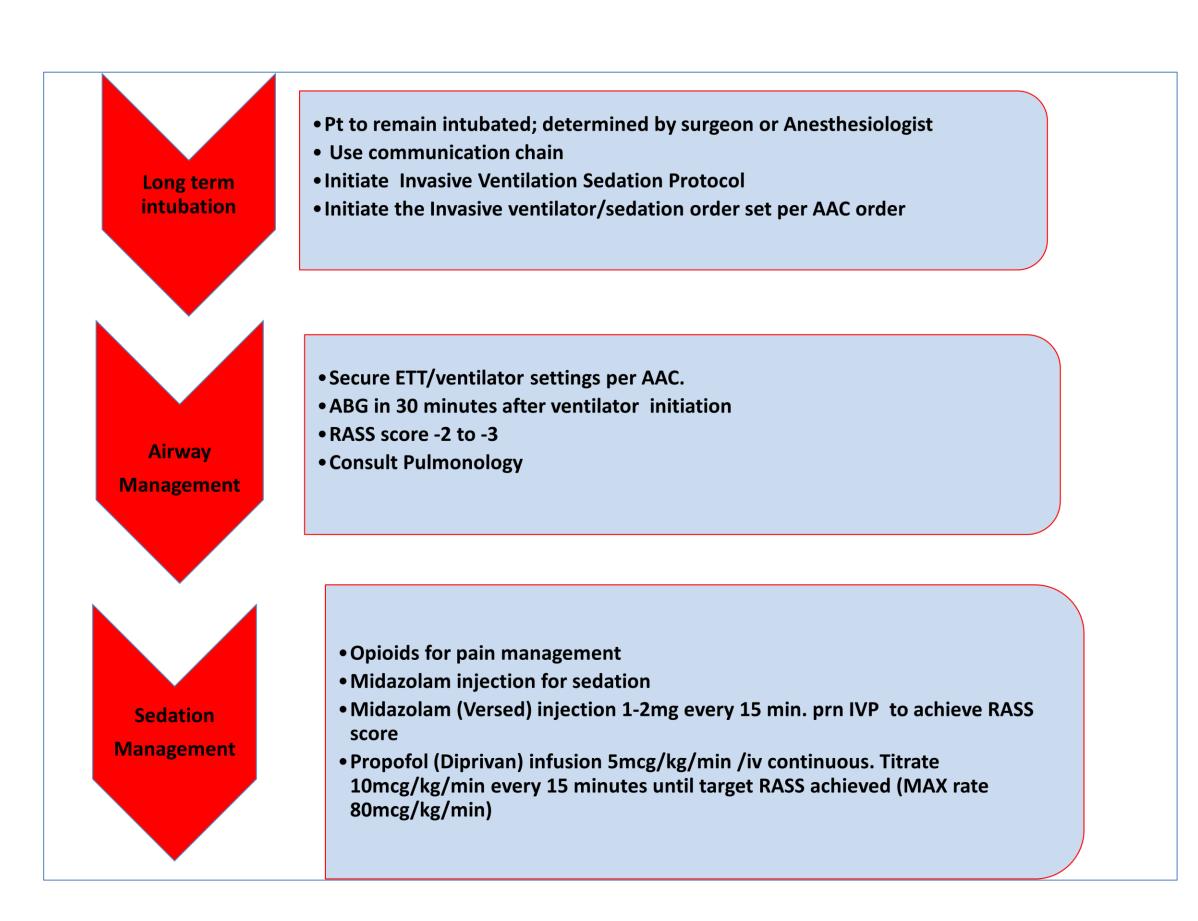
- Setting: Post-Anesthesia Care Unit of a 555 bed not-for-profit acute care facility in the midwest.
- Population: RN staff, surgeons, anesthesiologists, and ICU intensivists trialed a new protocol for managing complex patients who required longer term intubation periods post-operatively.
- Instrument: A post survey was administered to the interdisciplinary team at the conclusion of the pilot
- Time Frame: Intervention piloted for 3 months

Intervention:

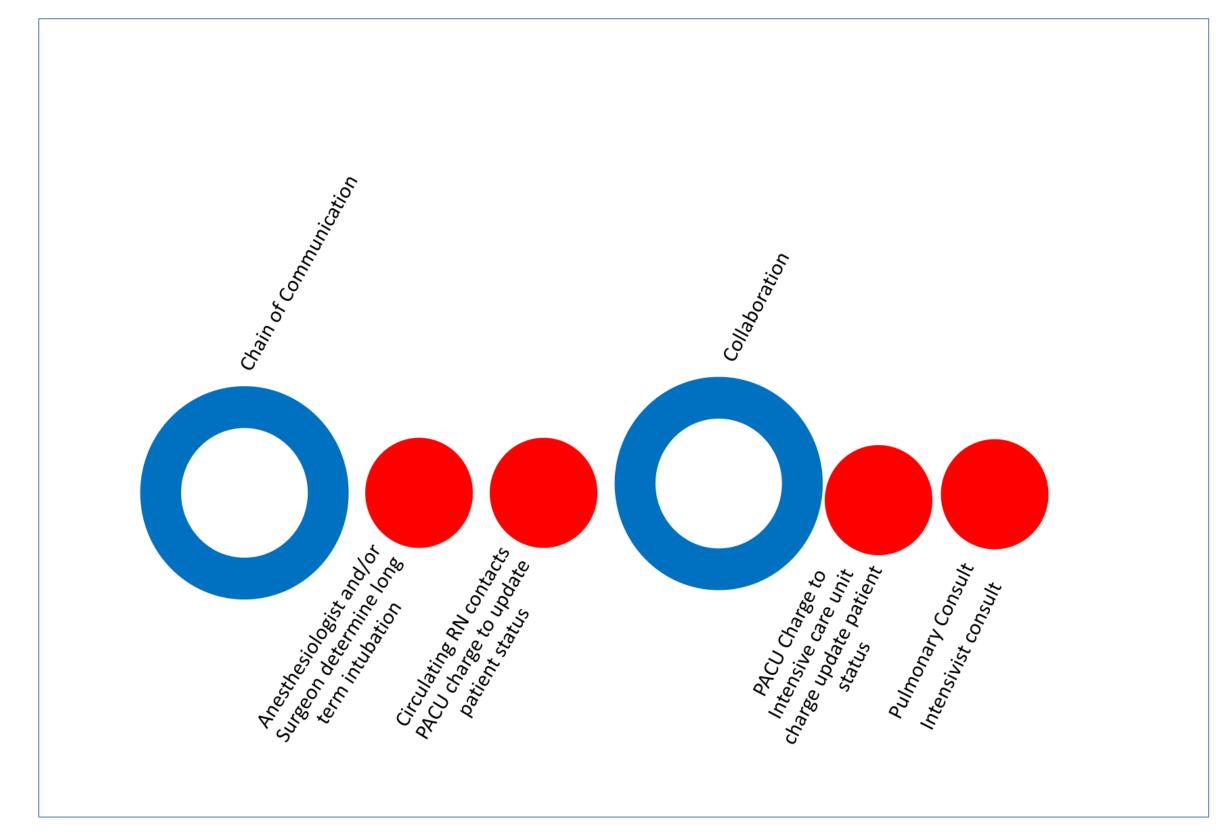
- I. Designed a New Plan of Care
- The plan of care for patients with complex co-morbidities during the post-anesthesia phase of their recovery was developed and facilitated.
- A pre-existing order set from the Intensive Care Unit was piloted with 10 complex patients requiring longer term intubation during the PACU period
- II. Developed a Communication Plan
- Clearly defined the roles and responsibilities of the PACU staff and surgical team.
- All departments involved were educated regarding the new plan of care/order set to be used for long term intubated patients in the PACU
- A staff survey was administered to evaluate the effectiveness of the protocol and the new communication strategy

Successful Practice/Outcomes

Implemented a new long term intubation order set in the PACU



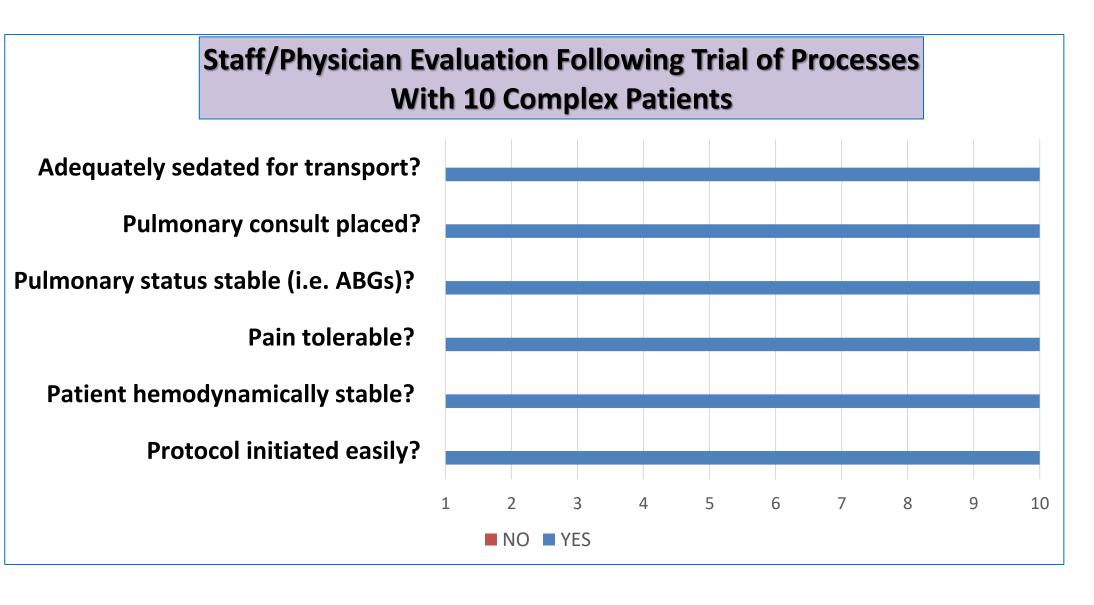
 Implemented a new communication chain between peri-operative departments for anesthesiologists, operating room circulator, and the PACU charge nurse



Successful Practice/Outcomes

Survey Results:

- 9 out of 10 patients were sufficiently sedated upon transport and handoff to the Intensive Care Unit,
- All 10 patients were hemodynamically stable.
- All 10 patients had well managed pain
- Protocol was initiated easily
- No patients self -extubated



Qualitative Findings:

- Anesthesiologists voiced satisfaction related to less phone calls, more hemodynamically stable patients and smoother transition between phases of care.
- Intensive Care staff agreed, the protocol improved satisfaction among the staff receiving intubated patients from PACU, improved patient care and safety during handoff.

Implications for Advancing Peri-Anesthesia Nursing

These staff led interventions resulted in a protocol and a chain of communication which enhanced the safety and quality of care for complex long term intubated patients.

 This study suggests an invasive ventilation sedation protocol with clear guidelines and communication among staff has the potential to ease patient transition from one phase of care to the next safely and efficiently.