

Comparing Outcomes of Sedation with Monitored Anesthesia Care and Propofol to Nurse Administered Sedation with Fentanyl, Versed and Diphenhydramine. A Mariotti, MHA (M.D., SOM), A Faruki MD, C Lace MD, MG Lemley MD, Department of Anesthesiology, University of Colorado, Aurora, CO.

Purpose: In this project we compared the difference in patient and operational outcomes for two different sedation techniques prior to gastrointestinal (GI) procedures: Monitored Anesthesia Care (MAC) using propofol administered by physicians, and Nurse Administered Sedation (NAS) with fentanyl, versed, and diphenhydramine. We hypothesize that MAC will yield improved outcomes compared to NAS. Our first aim was to determine if MAC improved outcomes for patients defined by pain scores. Our second aim was to determine if MAC improved operational outcomes for hospital efficiency as defined by decreased PACU length of stay (LOS). **Methods:** We will test this hypothesis and evaluate aims using a retrospective cohort analysis under STROBE guidelines. On 8/1/21, the University of Colorado Hospital (UCH) changed its anesthesia procedures in the GI suite from NAS to MAC. We took advantage of this shift to identify our MAC cohort and compare to historical NAS outcomes. Data will be abstracted from the UCH electronic medical record (EMR). Cohort inclusion criteria is defined as patients who have undergone procedures in the GI suite and were sedated using MAC procedures between the dates of 8/1/2021 and 10/31/21. **Results:** Power calculations yielded a Cohen's d value under 0.2 for powers ranging from 80-95% showing our data is sufficient to detect small differences between MAC and NAS. Preliminary results show decreased PACU LOS up to 10 minutes and decreased overall pain scores. **Conclusions:** Preliminary data shows decreased perioperative times due to decreased PACU LOS. This provides opportunity to see more patients and increase access to care. Patients also reported decreased pain during recovery.