

Changes in Nursing Interventions: Transitioning to Monitored Anesthesia Care for Endoscopy Procedures Performed in an ASC

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Background

Due to the pharmacological properties of propofol, monitored anesthesia care (MAC) has been rapidly increasing in popularity for complex GI procedures as well as routine upper endoscopy and colonoscopy (Al-Awabdy & Wilcox, 2013).

The use of MAC sedation was first trialed at one of our ASCs in 2012. Two of the four procedure rooms used MAC, while the other two continued to use moderate sedation during the trial. Due to the trial success, the remaining five ASCs began to transition to MAC with a goal of 100% transition. As of today, five out of six ASCs have transitioned to 100% MAC. The transition will be complete in 2016.

This transition has led to a number of changes for our nursing staff and the delivery of patient care in our Ambulatory Surgery Centers (ASCs). The goal of this poster is to share what we have learned from this transition from the nursing perspective obtained by surveys of all RNs. Objectives of the poster:

- Share the results of a retrospective analysis of documented nursing interventions performed intra-procedure and in recovery comparing the two sedation types.
- Share educational information that has been useful in educating our staff while implementing MAC versus moderate sedation.

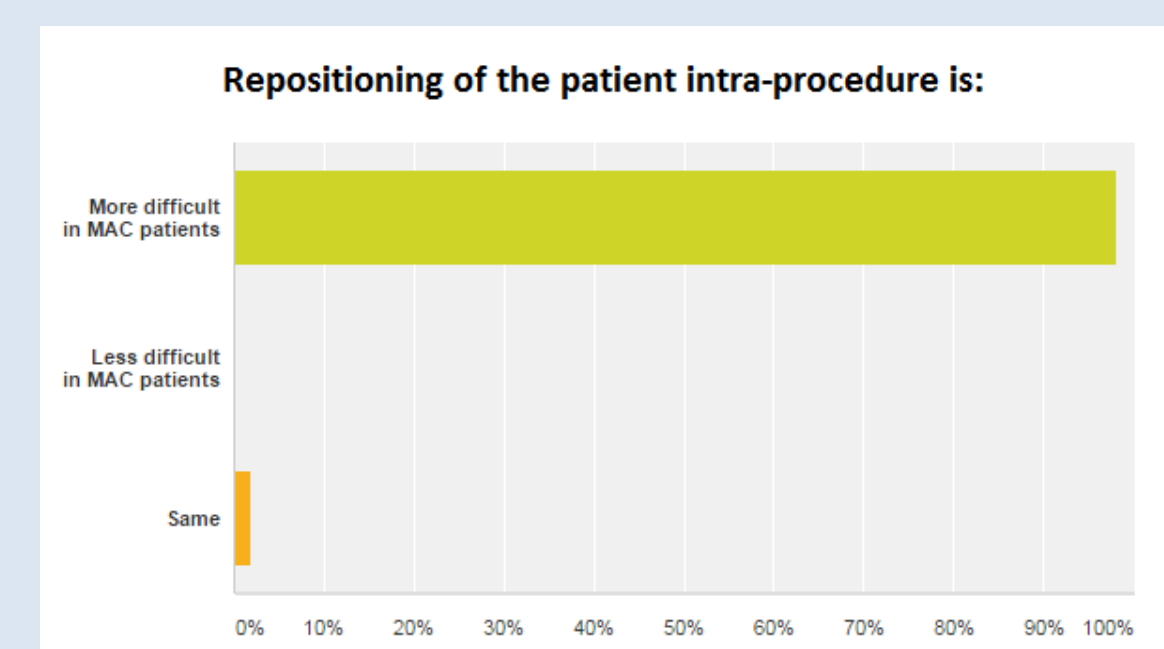
Impacts of the Transition to MAC on Nursing Interventions by Care Area

Intra-Procedure Challenges

Patient Positioning

With the use of moderate sedation, patients can assist with repositioning. Patients receiving MAC cannot assist, causing an increased risk for RN or patient injuries, and at times, the need for additional nursing resources.

- From the results of our nursing survey it was found that 98% of nurses perceived it was **more difficult to position a patient** receiving MAC versus moderate sedation.



Changes in Nursing Interventions

- Pre-procedure positioning of patients in left lateral position with right knee over left leg and torso tilted forward.
- Education on pre-procedure positioning of patients added to abdominal pressure training classes.
- The use of drawsheets was implemented throughout all ASCs.
- Education on the use of drawsheets and review of proper ergonomics was completed.

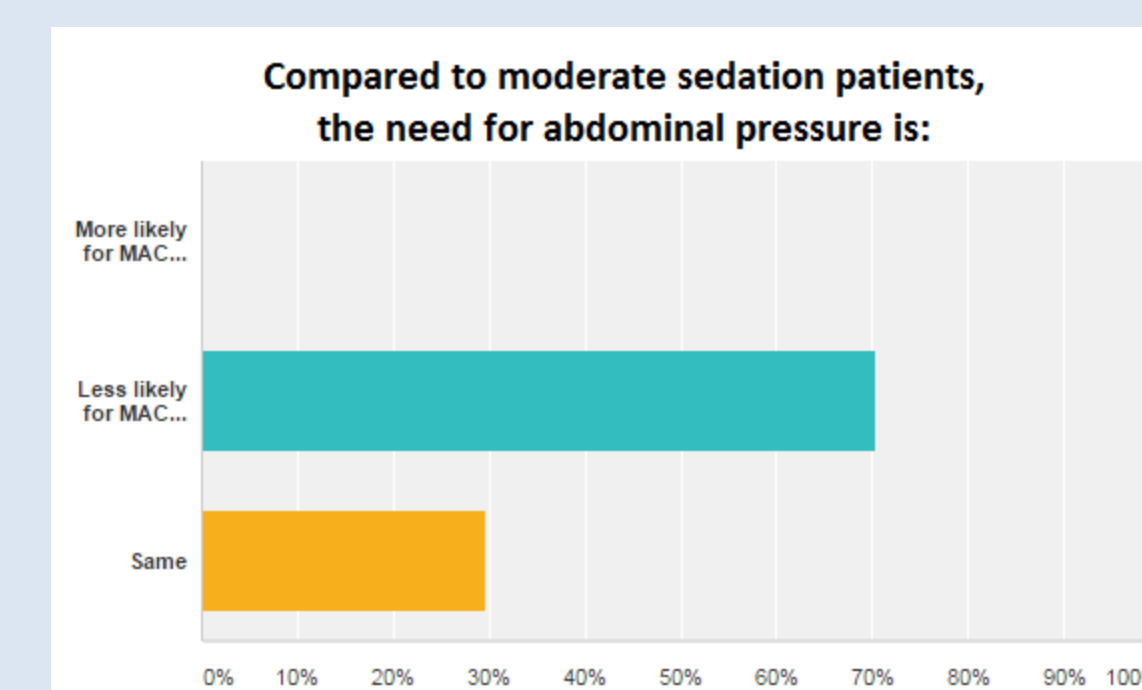
Outcomes of These Changes Include:

- A safer environment for RNs using drawsheets will contribute to decreased back, shoulder and wrist injuries.
- A decrease in aspiration risk in optimal positioning prior to medication administration.
- After these changes were implemented, 74% of RNs reported MAC sedated patients **needed to be positioned less often** when compared with moderate sedation patients.

Abdominal Pressure

The use of MAC decreases the ability to receive instant feedback from the patient. With MAC, patients are also no longer resisting abdominal pressure from nurses. Additionally, the level of sedation impacts specific reflexes which can increase the risk of aspiration.

- 70% of RNs reported a **decrease in the use of abdominal pressure** in patients receiving MAC.



- RNs report **no change** in force needed and time required for holding of pressure.

Changes in Nursing Interventions

- Training classes were given to all RNs regarding the importance of placement of abdominal pressure to prevent aspiration along with the decreased need for force.

Outcomes of the Changes Include:

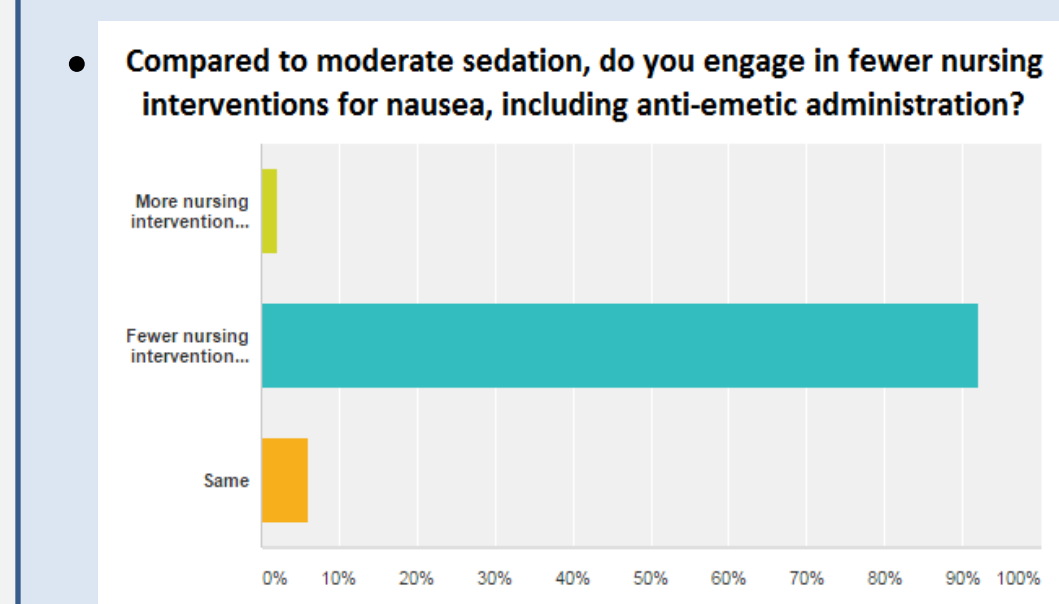
- A reduction in the use of abdominal pressure leads to a safer environment for the patients (reduction in aspiration risk) and nursing staff (reduction in injury risk).

Post-Procedure Challenges

Anti-Emetic Administration

Monitored anesthesia care (MAC) typically involves administration of propofol, which has been noted for its anti-emetic properties. An improvement for the patient as an implementation of MAC would be less anti-emetic administration in recovery.

- 92% of RNs reported that they engaged in **fewer nursing interventions for nausea** in the post-procedure care area.



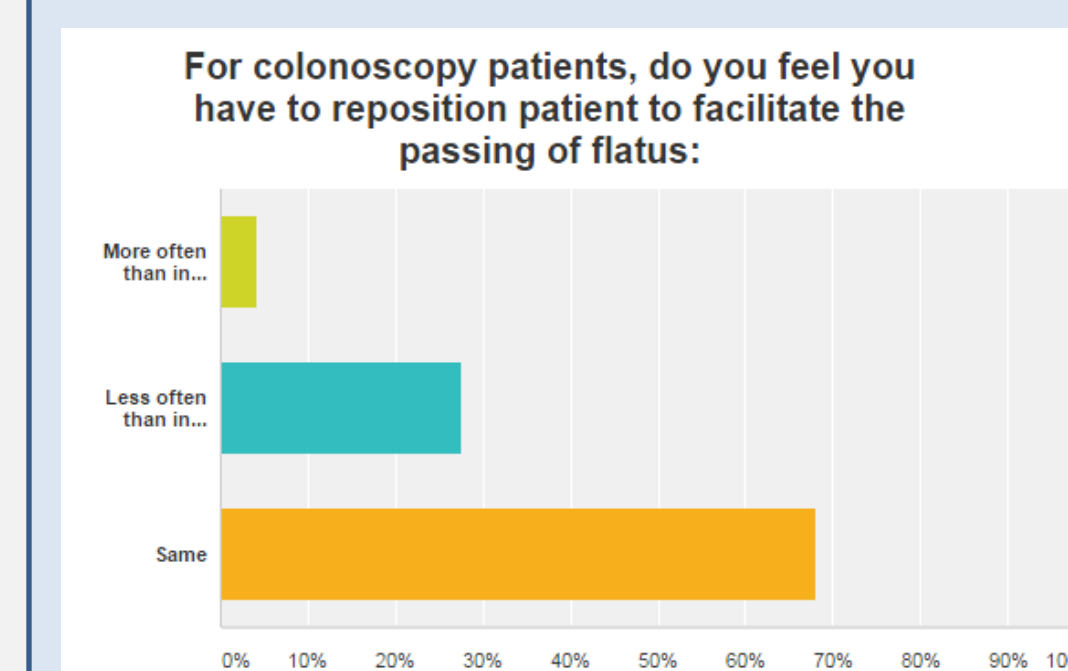
Analysis of Nursing Interventions for Nausea

- Since 1/1/2015, there have been 17.86 administrations of zofran per 1000 moderate sedation procedures, compared with 7.02 administrations per 1000 MAC procedures.
- This is roughly a **250% percent decrease in anti-emetic administration**.

Patient Comfort and Time in Recovery

One measure of patient comfort in the recovery room is abdominal discomfort from intra-procedure insufflation of air resulting in distension. An improvement for the patient as a result of MAC sedation would be suggested in less effort by the RNs to help reposition or walk patients to help expel air.

- Comparing MAC and moderate sedation, 68% of RNs reported that patients had to be repositioned to help them expel insufflated air **about the same for both sedation types**. 28% felt they were repositioning less often, and 4% felt they repositioned more often.



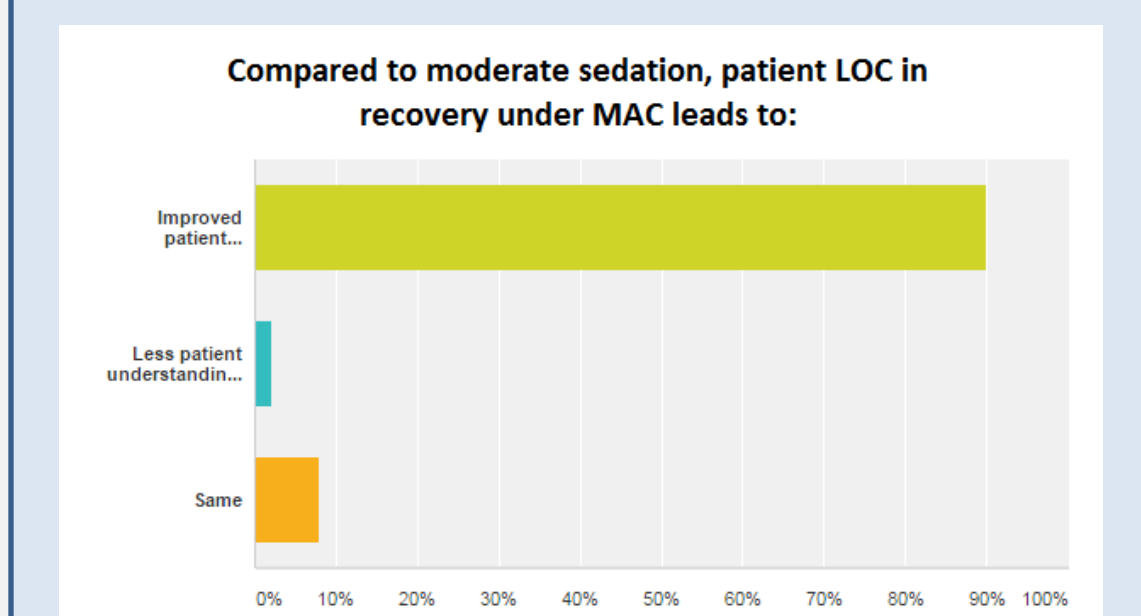
Changes in Nursing Interventions

- Many survey respondents stated a perception of shorter recovery times.

Discharge Teaching

Discharge teaching is a core nursing intervention and vital to patient care post-procedure. We queried nursing perceptions on the impact of MAC on the patient understanding of discharge instructions due to the patient's level of consciousness

- 90% of RNs reported that the **improvement in LOC** in MAC sedation resulted in an **increase in patient understanding** of discharge instructions.
- Survey respondents reported patients were less "groggy and forgetful" and that they "remembered a lot more of what the doctor and I were telling them".



Changes in Nursing Interventions

- While patient LOC was not measured directly, an RN perception of improved LOC can positively impact the approach to discharge teaching.

Acknowledgements

Thank you to the nurses of the Minnesota Gastroenterology Endoscopy ASCs for their input in the surveys, and for their constant compassion for patients and families.

Thank you to the anesthesia providers who continue to share their knowledge in our collaborative efforts to provide premier gastroenterology care.

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Future Directions

The implementation of nearly 100% of patients receiving monitored anesthesia care has resulted in a number of positive changes for our patients and nurses.

- Less focus on intra-procedure documentation, as this task is completed by Anesthesia.
- This leads to an increase in nursing attention to patient support, assistance with therapeutics and specimen collection.

The nursing survey has unveiled some opportunities for future discussion and improvements for nursing staff. Including:

- The role of the intra-procedure RN has changed with the addition of anesthesia in the room. RNs report feeling less engaged with the patient.
- Some RNs have misconceptions about the nursing role intra-procedure being assumed by endoscopy technicians, as they are no longer involved in sedation intra-procedure.
- We have identified a need for greater attention to RN ergonomics with patient positioning, moving, abdominal pressure application.
- Currently anesthesia does not document in the EHR resulting in a hybrid medical record of both paper and electronic components. Paper needs to be scanned into the EHR, and this increases the workload of the Health Information Management department staff. Nurses have to document in two (2) places. Plans are in motion to make changes.

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