



Background

- ❖ Post operative pain is reported by >80% of adults. Of those adults, more than half reported inadequate pain management²
- ❖ The American Pain Society recently published practice guidelines with 32 evidence-based recommendations². One recommendation based on strong high quality evidence was to use multimodal analgesia (MMA) combined with nonpharmacological strategies to achieve effective post-operative pain management¹.
- ❖ Inadequate pain relief can lead to both psychological and physiological consequences such as: impaired recovery, decreased function, chronic pain and reduced quality of life².
- ❖ MMA includes a selection of analgesic medications and techniques provided across the different phases of the perioperative experience
- ❖ Perioperative nursing staff provide pain management during the immediate postoperative period as patients emerge from anesthesia and continue either to discharge home or transfer to inpatient care. Establishing an effective pain management plan from the beginning is essential.

Objective

- ❖ To develop and implement an educational program for perioperative nurses about multimodal analgesia including the benefits to the patient's post-operative pain management over the use of opioids alone.



Implementation Process

Preparation

- ❖ In partnership with the Pain Stewardship Interdisciplinary committee, we sought to implement an established best practice in pain care and investigate the impact of incorporating this practice at UCM.
- ❖ The pilot project with orthopedic surgery identified barriers to implementation, these lessons were used as the MMA protocol is expanded to other surgical specialties.
- ❖ The education and content strategies for MMA were developed and presented to the peri-anesthesia nurses.
- ❖ A pre-operative order set was created and made available to the Orthopedic Surgical team.
- ❖ A trial period was established in the ambulatory perioperative area for the Orthopedic service before it was implemented house wide.

Education and Training

- ❖ Educational in-services took place on the unit.
 - During the educational sessions, nurses discussed possible barriers to the implementation of MMA and how to mitigate those issues.
- ❖ Using a multidisciplinary approach, the peri-anesthesia nurses collaborated with physicians to encourage the use of the pre-operative order set when not initiated by the surgical provider team.

Implementation Timeline

Initiated Trial of Pre-op MMA meds & order set in DCAM (Ambulatory OR) Pre-op with Ortho service
April - May 2017

Implementation to CCD (main OR) Pre-op with all surgical services
June 2017

Patients receiving any type of MMA has increased from 4.9% to 46.7%
June - Sep 2017

Outcomes

- ❖ Attendance at educational sessions was high with 85% of the pre-operative staff nurses participating.
- ❖ Periodic observations found that nurses provided their patients with information about MMA, including how MMA would help in the management of post-surgical pain.
- ❖ The proportion of patients receiving any MMA medication increased from 4.9% to 46.7% on average, between June to September of 2017.
- ❖ The availability of a standardized, automatic order set for MMA greatly increased utilization and can promote evidence-based patient care with rapid translation into clinical practice.

Next Steps

- ❖ The use of the MMA pre-op order set, in conjunction with a variety of analgesic medications and techniques, is expected to offer more effective control of post-operative pain and increased patient satisfaction.
- ❖ Following implementation of the MMA guideline, our next step is to evaluate patient outcomes such as satisfaction, length of stay or time to discharge.
- ❖ Additional non-pharmacological interventions to be introduced prior to surgery. This will allow for the patient to become familiar and practice the techniques prior to surgery.

References

- ¹ Cooney, M (2016). Postoperative Pain Management: Clinical Practice Guidelines. Journal of Perianesthesia Nursing, 2016;31:5: 445-451.
- ² Chou, R., Gordon, D.B., de Leon-Casasola, O.A., Rosenberg, J. M., Bickler, S., Brennan, T., ... & Wu, C. L. (2016). Guidelines on the management of postoperative pain, The Journal of Pain, 17:2:121-157.