

## **AN EVALUATION OF MULTIMODAL PAIN RELIEF**

Primary Investigator: Deidra Matlock-Hendrix, BSN, RN Charge Nurse 5B Recovery Room  
Central Arkansas Veterans Healthcare System (CAVHS), Little Rock, AR

**Background:** Pain is a subjective experience and acute postoperative pain is a significant issue for surgical patients. Despite the benefits of effective pain management a substantial amount of Veterans still suffer from inadequately treated postoperative pain. Over half of the Veterans population suffers from medical conditions that are chronic and painful in nature. Due to past issues of addictions, some Veterans would refuse pain medications for fear of relapsing. Opioids are primary drugs used to treat severe and rapid escalating pain in the Peri-Anesthesia and post anesthesia areas. A single dose of these drugs may cost as little as a dollar per dose or as high as a hundred dollars per dose. Beginning the treatment for pain management early in the post operative period can help gain better pain control as well as decrease the use and potential side effects associated with an increase use of Opioids. Intravenous Acetaminophen (Ofirmev) is synergistic with both opioid and non-opioid sparing effects and is relatively inexpensive and non-habit forming.

**Purpose:** The purpose of this initiative is to compare patients' pain relief for Veterans receiving pain medication in the PACU. Specifically, we will compare the pain relief for patients that have received Ofirmev (Intravenous Acetaminophen) a non-opioid drug used in conjunction with opioids as opposed to those who only received opioids. This retrospective case control study will also identify earlier readiness for discharge from the PACU.

**Methods:** This retrospective case control study will compare patient pain control for those receiving IV Acetaminophen to matched cases that did not receive the same multimodal therapy for pain in recovery.

After identifying pain medications used in the PeriAnesthesia and post-anesthesia areas, a comparison will be made between patients when IV Acetaminophen was used. Specifically, we will determine if IV Acetaminophen relieved patient's pain relief and goal was achieved.

**Results:** Interim analysis on 17 matched cases revealed the mean pain score on admission for controls was a full point higher (6.71 vs. 5.71) than patients receiving IV Acetaminophen. Further the mean length of stay for controls was 141.06 minutes compared to 102.94 minutes for the intervention group.

**Conclusions:** Interim Analysis strongly suggest Veterans receiving IV Acetaminophen has less pain on arrival to PACU and met PACU discharge criteria nearly 40 minutes less time. The results may significantly impact pain control in Veterans with history of opioid addiction, increasing satisfaction with their surgical experience and decreasing healing time due to improved pain control.