

# Integration of dexmedetomidine into the operating room

## Abstract

The best institution for this project presents large institutional barriers in terms of providing anesthesia providers with the necessary access to readily administer dexmedetomidine to their patients in a safe and effective manner.

## Introduction

Opioids have a long-standing history of being the primary agent used in the treatment post postoperative pain. However, the use of opioids does come at a cost and is not without peril. Possible complications associated with opioid use include an increased incidence of gastrointestinal dysfunction, hyperalgesia, and respiratory depression (Colvin et al., 2019). All of these effects are detrimental to patient care, increase the patient's length of stay in the post-anesthesia care unit, and add unnecessary expense to patient care.

According to (Kaye et al., 2020) it is key to reduce opioid administration and implement a balanced multimodal approach to the treatment of postoperative pain. Dexmedetomidine is an ideal adjunct to incorporate in a multimodal approach to postoperative pain management and reduction of postoperative nausea, vomiting, and delirium. Dexmedetomidine offers analgesia and anxiolysis, an increased safety profile as compared to opioids, and does not depress respiratory drive, even under super therapeutic plasma concentrations (Kaye, et al., 2020).

## Hypotheses

Increased availability and ease of access Precedex will increase its use and safe administration.

## Methods

The best institution for this project presents large institutional barriers in terms of providing anesthesia providers with the necessary access to readily administer dexmedetomidine to their patients in a safe manner.

Ultimately, Precedex was introduced in seven new operating rooms making it more accessible to providers. The intent of this intervention was to assess whether the increased availability would increase the overall usage of the medication.

## Results

Due to circumstances related to institutional barriers the results of this project are not available.

## Discussion

Ultimately, the desired intervention was put into place seven operating rooms, were newly stocked with Precedex, therefore, making it more available to anesthesia providers. However, due to institutional barriers, the ultimate outcome of the intervention is unable to be quantified and evaluated. Given institutional barriers the data regarding the usage of the newly stocked anesthesia workstations was unable to be obtained.

## References

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