

Multimodal Opioid-Sparing Analgesia: Increasing Regimen Adherence in Minimally Invasive Abdominal Surgery

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INTRODUCTION

- 11.5 million people in the U.S. misused opioids in the past year in 2016.¹
- Opioid overdose is the leading cause of injury-related deaths in the U.S. – exceeding MVAs for the first time.³
- 44 people die every day from overdoses involving prescription opioids.¹
- Patients who use opioids for pain control postoperatively and at discharge are at 44% increased risk for opioid dependence – after only **5 days of use**.^{2,3,4}

Problem Statement

Can opioids used for pain management among postoperative minimally invasive surgery (MIS) of the abdomen be reduced with adherence to a multimodal opioid-sparing analgesia regimen?

OBJECTIVES

Project Goal: Implement a multimodal opioid-sparing analgesia regimen and examine outcomes

Modify a multimodal analgesic regimen to reduce opioid consumption postoperatively in MIS patients

Implement multimodal analgesic regimen among opioid naïve postoperative MIS patients & evaluate opioid reduction

Make recommendations for sustainability & scalability for multimodal opioid-sparing analgesia use among postoperative GI/General MIS patients at LLUH Surgical Hospital and to the Department of Surgery

METHODS

Aim 1

Modification of Multimodal Opioid-Sparing Analgesia Regimen & Education/In-Service

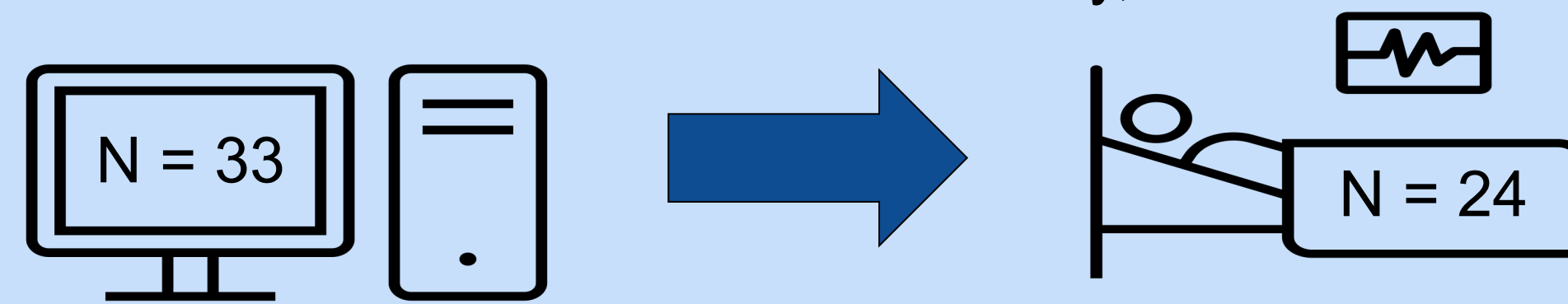
- Regimen Evaluation
- Education Development
- Regimen Reference Development
- Pre-data Chart Review

Aim 2

Regimen Adherence Implementation & Evaluation

- Education & Training
- Regimen Reinforcement
- Data Collection
 - MME
 - Patient reported pain
 - Regimen Satisfaction
 - Clinician Fidelity
- Analysis
 - Descriptive statistics
 - Chi-Square
 - t-Test

Implementation at a non-profit, academic, Level I trauma hospital in San Bernardino County, CA.



Pre-implementation: chart review
June – August 2022

Implementation: regimen
September - December 2022

Aim 3

Project Sustainability & Scalability

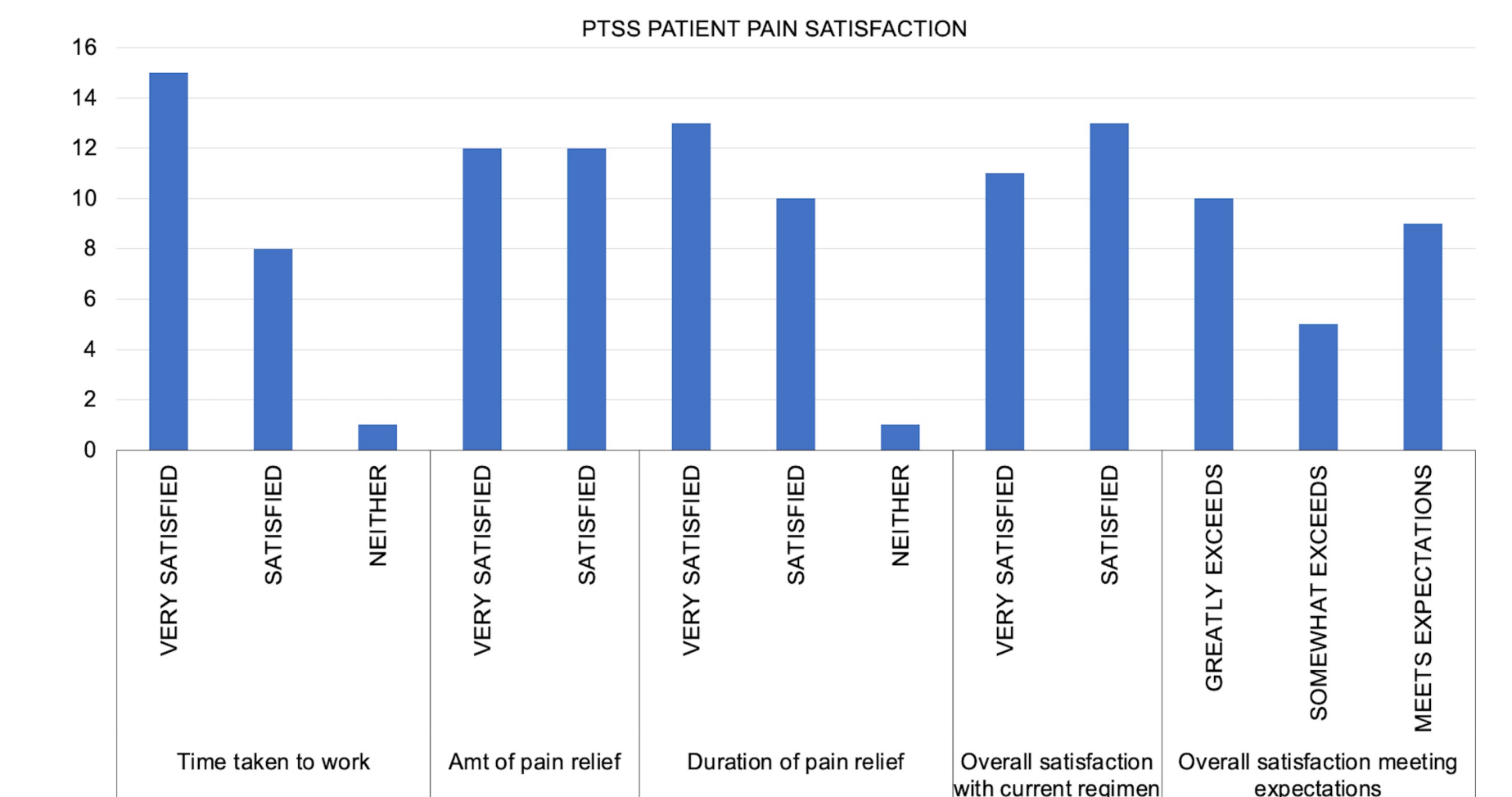
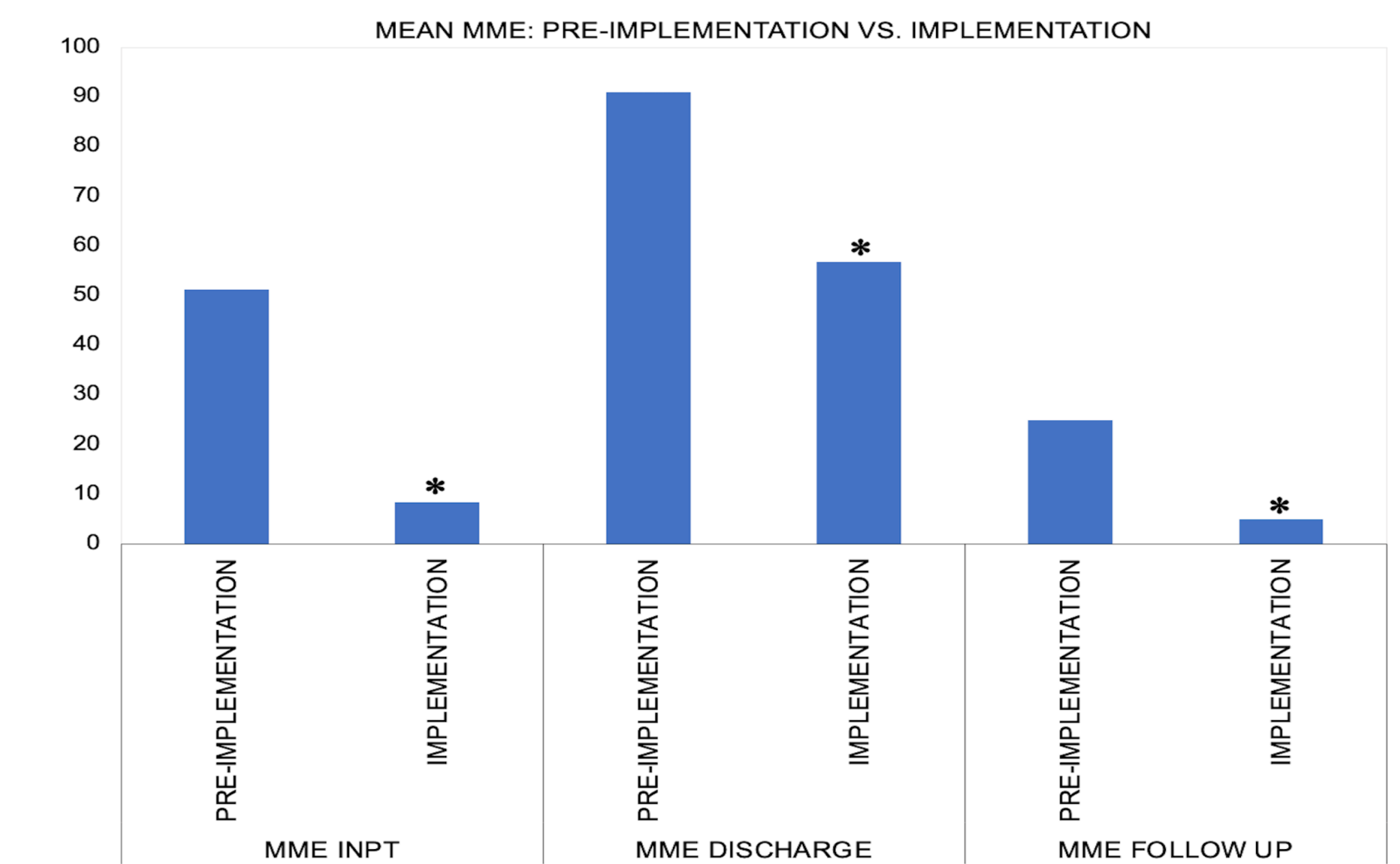
- Continue Education
- Standardization of Practice
- QR Code implementation
- Publications & Presentation

SCAN ME



RESULTS

Outcome	Pre-Implementation N = 33	Implementation N = 24	P-Value p = .05	Percent Decreased
Outcome: MME				
Inpatient	51.2 (67.6)	8.3 (10.6)	p = .003	88.2%
Discharge	90.9 (19.5)	56.7 (37.6)	p = .000	54.7%
Follow Up	24.9 (33.1)	5.0 (14.1)	p = .007	85.4%
Outcome: Clinician Fidelity				
Inpatient Nonopioid Adherence	9 (27%)	22 (92%)	$X^2 = 23.25$ p < 0.0001	-
Inpatient Opioid Adherence	14 (42%)	20 (83%)	$X^2 = 9.51$ p = .002	-
Discharge Nonopioid Adherence	17 (52%)	16 (67%)	$X^2 = 1.26$ p = .261	-
Discharge Opioid Adherence	17 (52%)	16 (67%)	$X^2 = 1.26$ p = .261	-
Discharge Opioid Quantity Adherence	19.9 (14.8)	10.5 (4.4)	p = .003	47%



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