

# A Descriptive Study of Retrospective Data to Define the Incidence and Severity of Intraoperatively Recorded Pain Scores in Patients Undergoing Cesarean Delivery Under Neuraxial Anesthesia

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# ***Intraoperative Pain During Cesarean Delivery (PDCD)***

- Emerging data suggests that PDCD is a common complication
- Patient Reported Data Following Delivery<sup>1,2</sup>
  - Spinal Anesthesia 3.7% - 14%
  - Epidural Anesthesia 13.2% - 33%
- Pain During CD may lead to severe and long-term maternal complications
- No Current Data Available for Intraoperative Pain Scores
- No Current Data Available regarding anesthesia related reasons for pain

# Methods

- Retrospective Cesarean Delivery Chart Review 1/3/23 - 8/27/25  
Intraop Pain Score (15 min intervals)
- Inclusion Criteria
  - Singleton Delivery
  - Neuraxial Anesthesia utilized at or after incision
  - Pain Scores (at least 2) or Notes Indicating Pain (provider memos)
- Hand-searched by 3 Obstetric Anesthesiologists to verify
  - Neuraxial Type and Medication Dosing
  - Intraoperative Pain Scores
  - Pain Interventions and Indication for Conversion to GA
- Categorization of Neuraxial Inadequacy type based on adherence to medication administration protocols
- Descriptive Statistics/ Kruskal-Wallis, ANOVA F and Chi-square were Used to Analyze Data

# RESULTS



**1465 Patients**



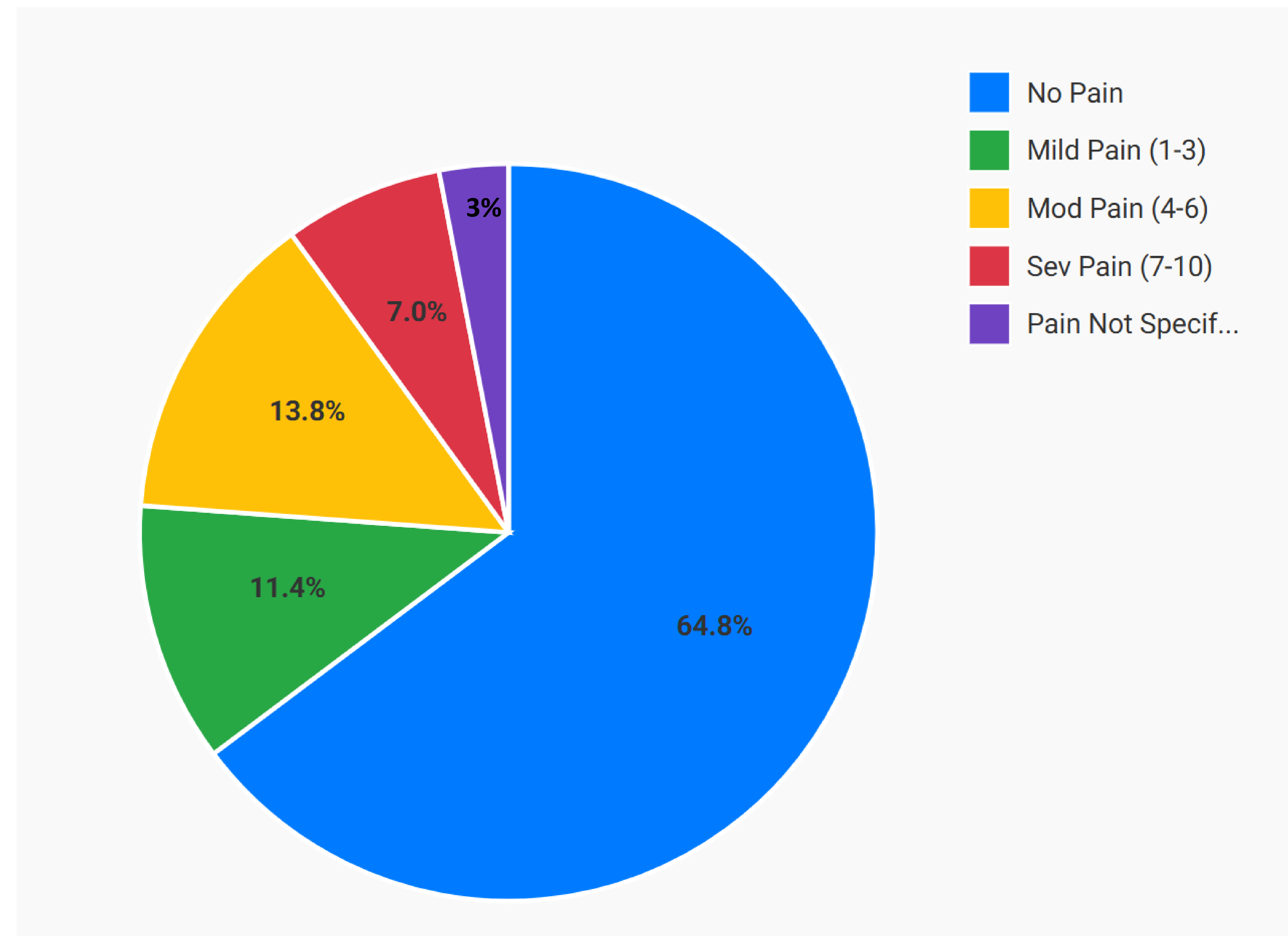
**81 Missing Data (5.5%)  
97 Excluded GA (6.6%)**

**1288 Patients**

**Pain**

**n= 453**

**35.2%**



**Higher intraop pain score  
associated with:**

Longer length of stay  
Parity of 4 or more  
Preeclampsia  
Chronic hypertension  
Blood transfusion  
NICU  
MICU  
Conversion to GA

# RESULTS

## Anesthesia Type

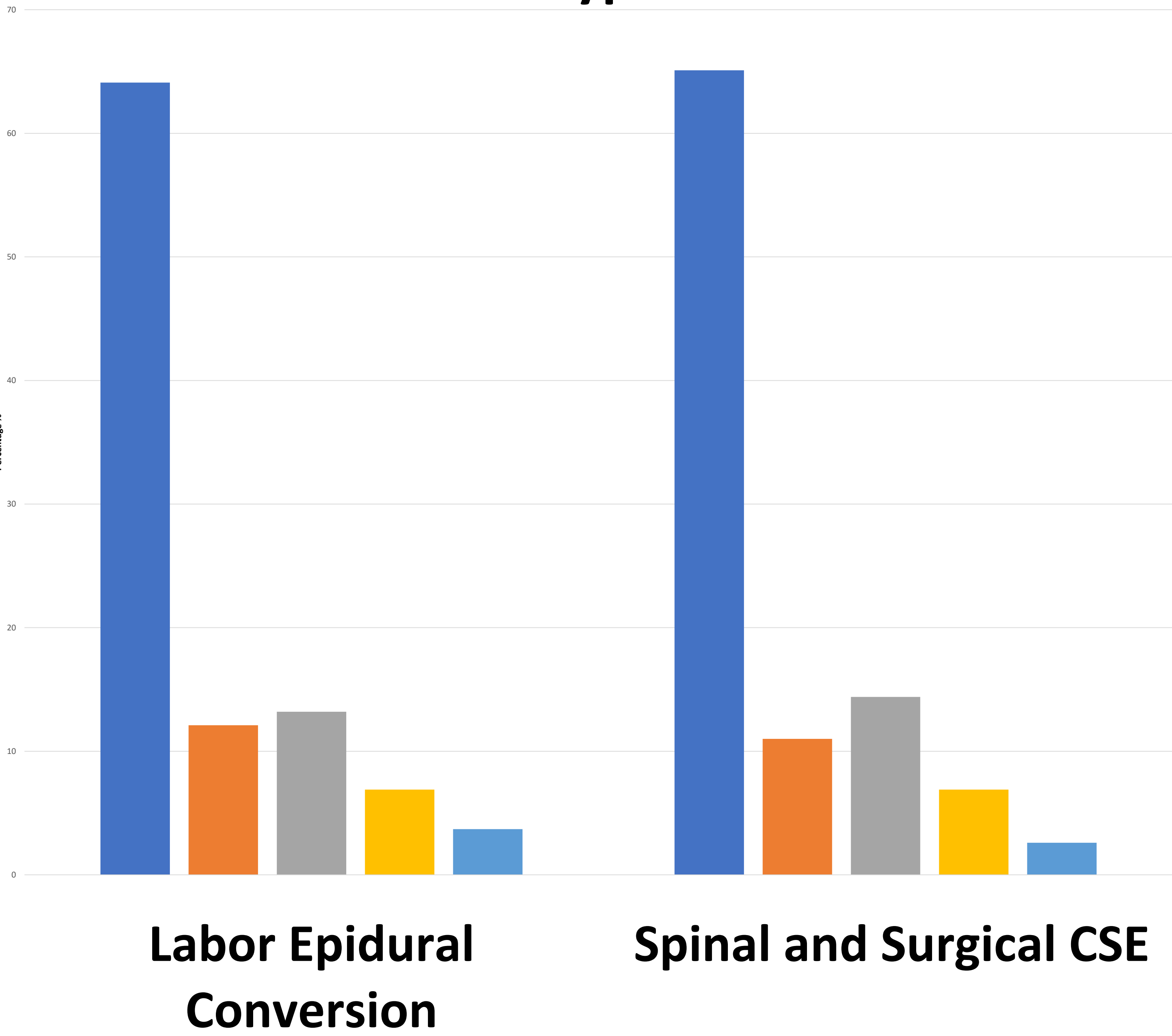
Labor Epidural Conversion - n = 568

Spinal or Surgical CSE - n = 693

Surgical Epidural or DPE - n =16

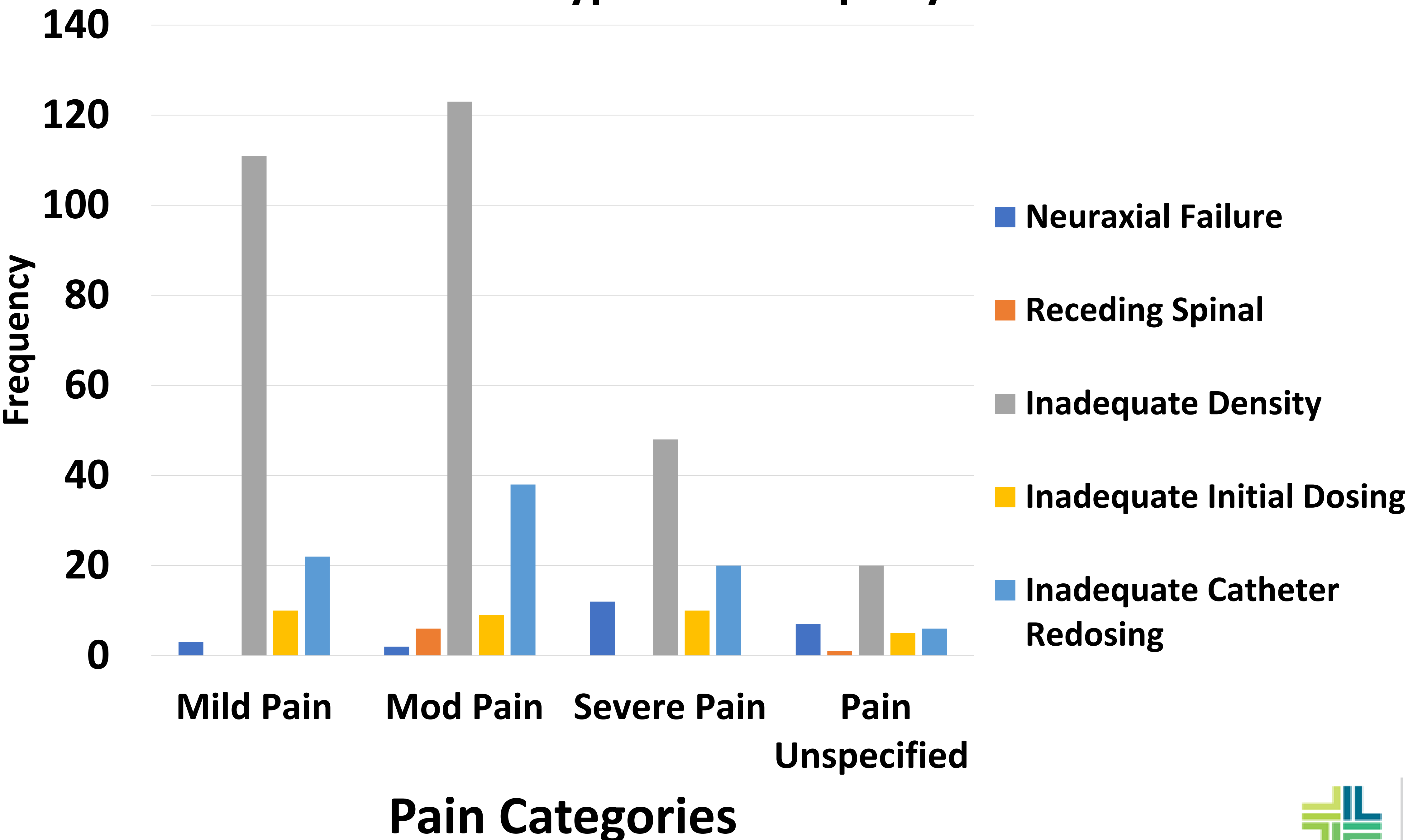
IT Cath – n = 11

Initial Type of Anesthesia



44 pts Convert to GA Intraop

Type of Inadequacy



# DISCUSSION

Pain during cesarean delivery (PD CD) was common – 35.2% of Patients

Only a small portion of patients experienced Severe Pain

Type of Anesthesia utilized did not alter risk of pain

The majority of Inadequacies were categorized as “Density”

Inadequacies in Initial Dosing and Redosing may be targets for preventable harm (26% of patients with pain)