



A Descriptive Analysis of Perioperative Methadone Use in Patients Undergoing Orthopedic Procedures in the United States

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INTRODUCTION

Methadone is increasingly used in perioperative settings

- Prolonged duration of action and potential to reduce postoperative pain and opioid requirements
- Its adoption likely varies across hospitals and procedure types

This study examines the current patterns of perioperative methadone use in the United States

METHODS

Premier Healthcare database

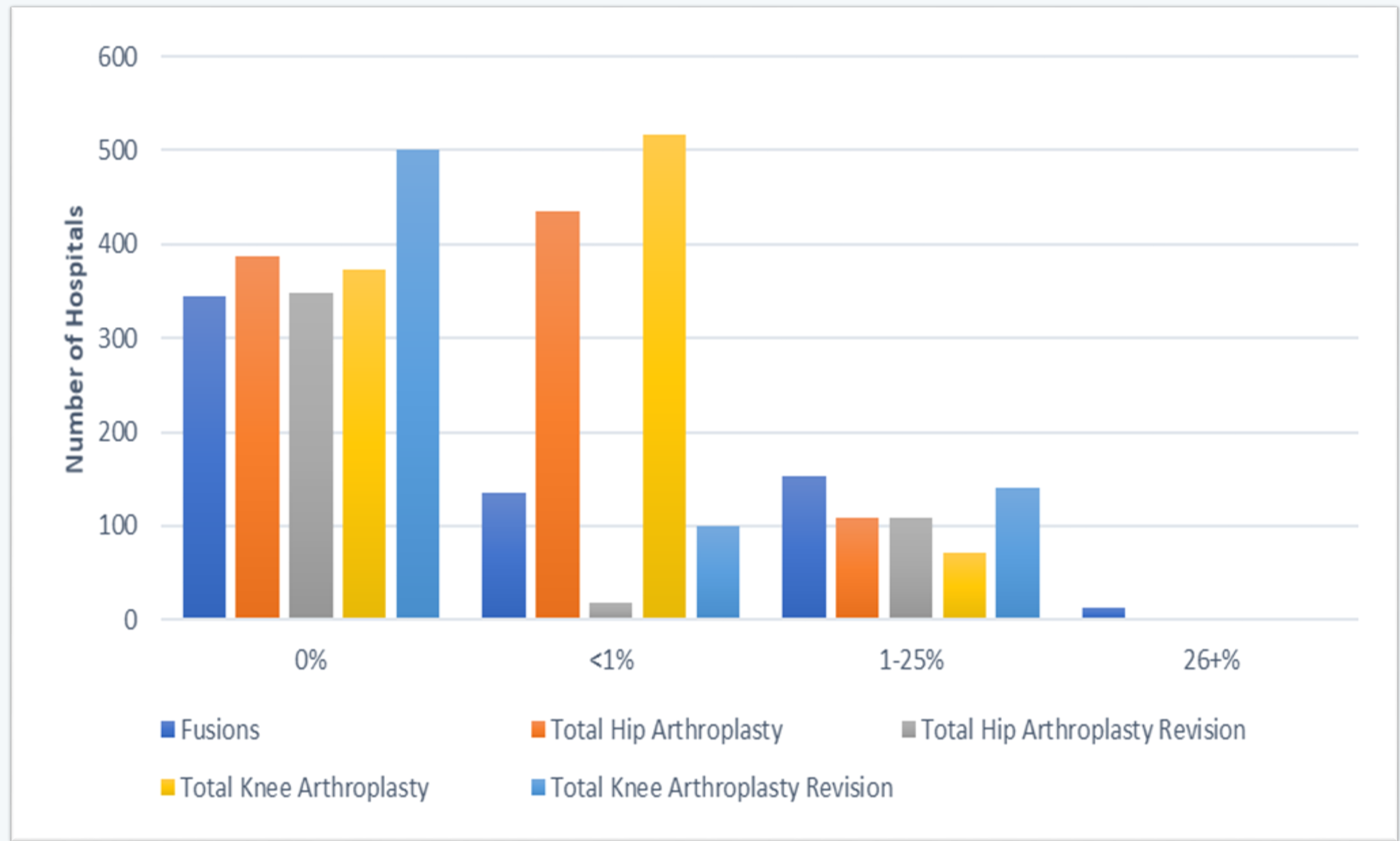
Institutions conducting at least 10 of the following procedures annually: **spinal fusions**, **primary THA**, **revision THA**, **primary TKA**, and **revision TKA**.

We report the **proportion of patients (%)** receiving perioperative methadone per procedure group.

Hospital-level procedure-specific utilization was reported grouped by surgery type and categorized into

- 1) no perioperative methadone use
- 2) use in <1% of patients
- 3) use in 1-25% and
- 4) use in ≥ 26%

Figure 1. Hospital Distribution (n) and Patient Proportion (%) for Prescribed Perioperative Methadone Use, Stratified by Procedure Type



DISCUSSION

Methadone utilization can be a valuable tool in peri- and postoperative management, offering potentially enhanced pain control and could benefit opioid sparing strategies. Our descriptive analysis of its perioperative usage showed low numbers around the country. Its utilization varies widely across institutions and procedures, likely reflecting differences in provider and individual preferences. Further prospective research on perioperative methadone usage is crucial to evaluate trends and benefits on pain management and postoperative opioid requirements.

RESULTS

The use of perioperative methadone varied significantly across institutions and procedure types

Spinal fusions

345 institutions did not use perioperative methadone
135 administered it to < 1% of patients
153 used it for 1–25% of patients
12 prescribed it to ≥ 26%

THA

388 institutions reported no use
436 used it for < 1% of patients
109 prescribed it to 1–25%
1 institution prescribed it to ≥ 26%

THA revisions

348 institutions did not use methadone,
19 administered it to < 1% of patients
108 prescribed it to 1–25%
1 institution used it for ≥ 26%

TKA

373 institutions reported no usage
517 prescribed it to < 1% of patients
71 used it for 1–25%
1 institution prescribed it to ≥ 26%

TKA revisions

501 institutions reported no use
100 used it for < 1% of patients
141 prescribed it to 1–25%
1 institution used it for ≥ 26%

