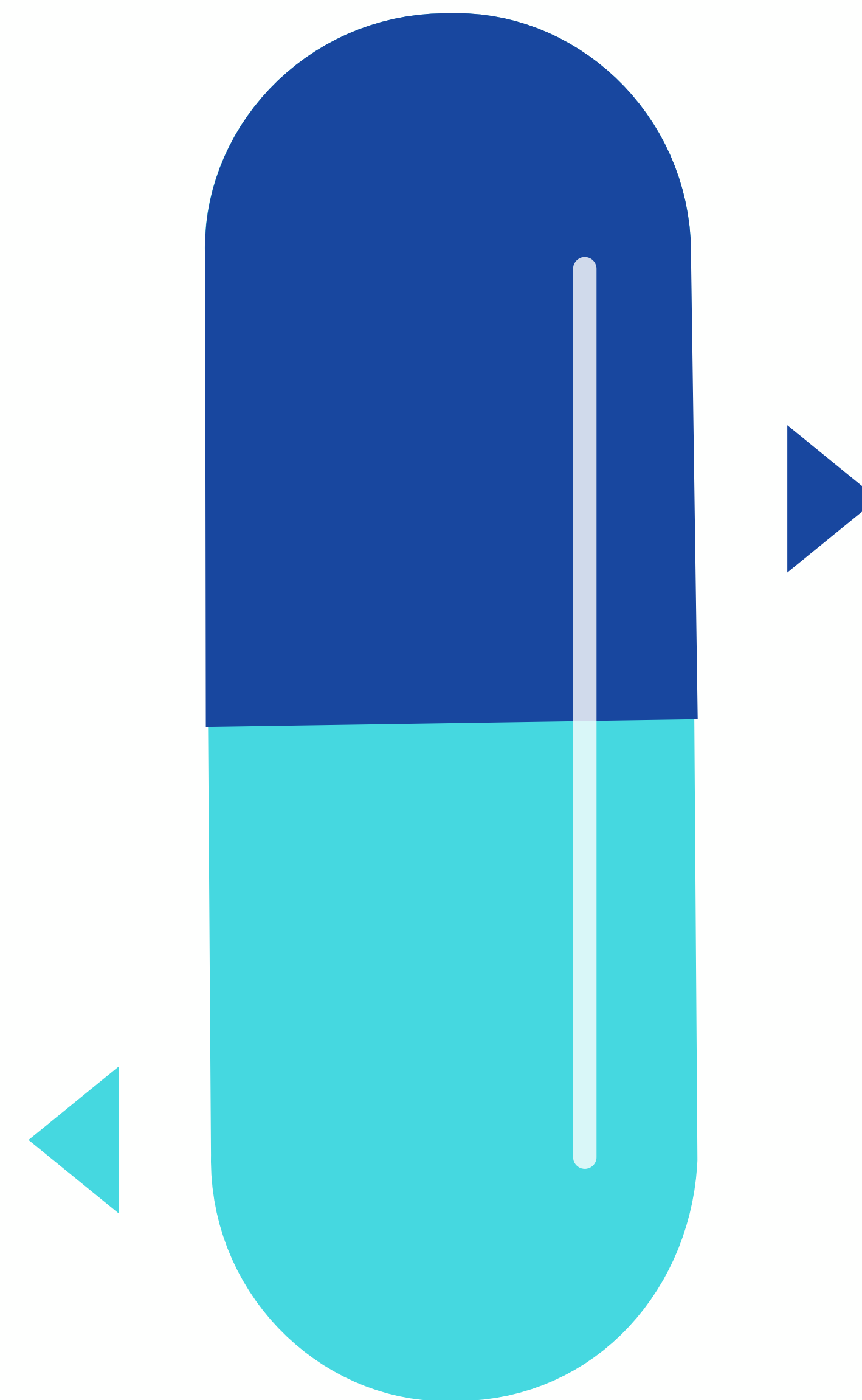


Buprenorphine vs. methadone for postpartum pain and opioid use outcomes among women with opioid use disorder after cesarean delivery

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Buprenorphine and methadone are common medications for opioid use disorder [OUD] in pregnancy

Buprenorphine is a **partial agonist with a high affinity to the mu-receptor**, potentially increasing opioid needs and complex pain management after surgery



Data suggests people receiving methadone and buprenorphine have **similar opioid needs for pain after cesarean delivery**

However, **pain management disparities** of medication for OUD [MOUD] persist

We assessed **whether parturients receiving buprenorphine MOUD** after cesarean experience **higher postoperative pain and opioid dose outcomes**, compared to methadone MOUD

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Patients receiving **buprenorphine and methadone** MOUD who **had cesarean delivery** at our institution were identified [2018-2022]

Patient, delivery, and anesthesia data were collected from medical records. Outcomes included total supplemental **milligram morphine equivalents** [MME] for pain, and **pain scores**

There were **177 patients in the final analysis** : 59 (33%) received methadone and 118 (67%) buprenorphine MOUD

Univariable linear regression assessed the **relationship between MOUD type and postpartum total MME** and maximum pain scores as well as to explore relationships between postpartum pain and **various predictor variables** in patients with OUD

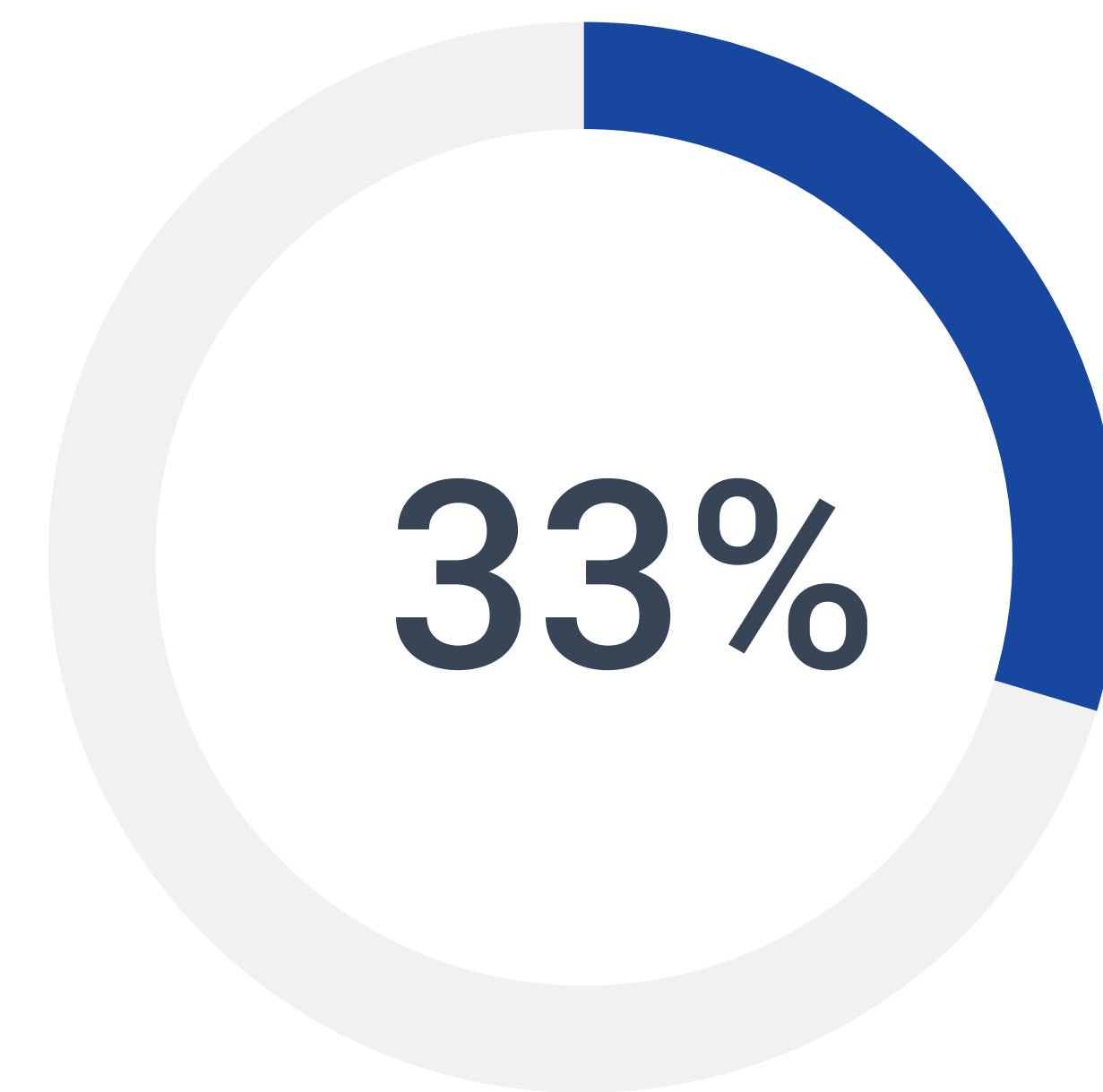
Postpartum total MME and pain scores were similar between methadone and buprenorphine groups

Univariable regression showed **several factors* associated with postpartum total MME**

*[IOL, labor prior to cesarean, converted to general, duration of surgery, hysterectomy, mean and max postop pain score]

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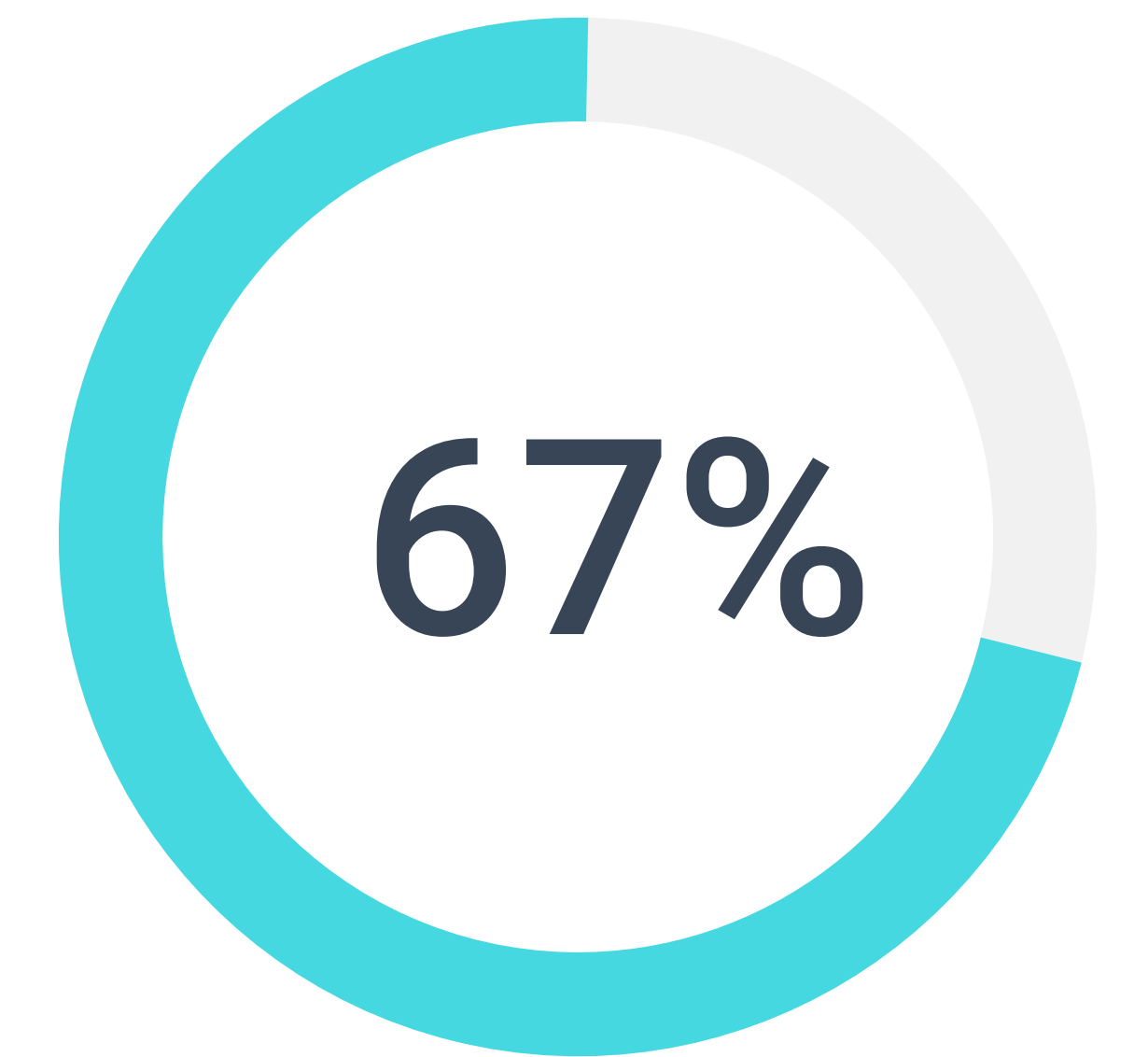
BUPRENORPHINE



Buprenorphine MOUD dosing varied

- **29%** received no MOUD during hospitalization
- **45%** continued their usual daily regimen as inpatients
- **26%** received a least one buprenorphine dose but did not take their usual daily regimens while inpatients

METHADONE



Associated with **more emergency cesareans**
[71.2% methadone vs 53.4% buprenorphine, P=0.02]

Otherwise, baseline and characteristics were not different between groups

All patients receiving methadone **MOUD continued it postoperatively**

Patients who **received their usual daily dose, or at least one dose, of buprenorphine** during their hospital stay, **had significantly lower total MME** compared to those who did not receive any buprenorphine [mean total MME **71.0mg vs. 247.8mg**, P<0.001]

Buprenorphine is not associated with increased pain or opioid requirement after a cesarean compared to methadone

Continuing buprenorphine postoperatively appears to **reduce total additional postoperative opioid requirements**