

INFOGRAPHICS IN ANESTHESIOLOGY

Complex Information for Anesthesiologists Presented Quickly and Clearly



THE EARLY DAYS

Do immediate perioperative opioid prescribing practices affect long-term opioid utilization?



604,093 Medicare beneficiaries undergoing total knee arthroplasty

Exposure = surgeon opioid prescribing based on opioid prescriptions filled in immediate perioperative period (7 days before to 7 days after surgery)



Higher-prescribing surgeons

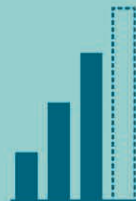


Top 25%
Patients prescribed
36.1 MME/d
(95% CI, 36.0–36.3)
in immediate postoperative period

Equivalent to: Oxycodone 5mg x5



Lower-prescribing surgeons



Bottom 75%
Patients prescribed
17.3 MME/d
(95% CI, 17.2–17.4)
in immediate postoperative period

Equivalent to: Oxycodone 5mg x2



OUTCOMES

Opioid prescriptions filled

Patients of high-prescribing surgeons

11.4 MME/d
(95% CI, 10.9–12.0)



Medium-term

8–90 d postop

Difference: **-2.4 MME**
P-value: <.001



Patients of lower-prescribing surgeons

9.0 MME/d
(95% CI, 8.7–9.2)



Long-term

91–365 d postop

Difference: **+1.0 MME**
P-value: <.001



2.8 MME/d
(95% CI, 2.5–3.1)



3.8 MME/d
(95% CI, 3.6–3.9)



Cen *et al.* found a *statistically* significant but *not clinically* meaningful association between surgeon opioid prescribing practices in the immediate perioperative period and medium- and long-term postoperative opioid prescriptions filled following total knee arthroplasty.¹

MME, morphine milligram equivalents; Oxy, oxycodone.

Infographic created by Holly B. Ende, Vanderbilt University Medical Center; James P. Rathmell, Brigham and Women's Health Care/Harvard Medical School; and Jonathan P. Wanderer, Vanderbilt University Medical Center. Illustration by Annemarie Johnson, Vivo Visuals Studio. Address correspondence to Dr. Ende: holly.ende@vumc.org.

1. Cen X, Jena AB, Mackey S, Sun EC: Surgeon variation in perioperative opioid prescribing and medium- or long-term opioid utilization after total knee arthroplasty: A cross-sectional analysis. *ANESTHESIOLOGY* 2022; 137:151–62.