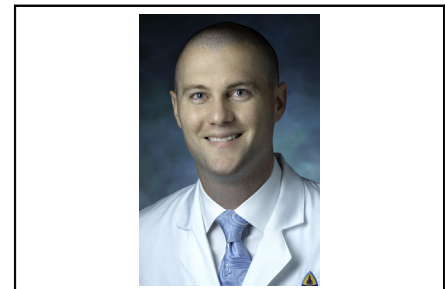


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Commentary: A missing link between good theory and suspect prescription practice

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CENTRAL MESSAGE

Persistent opioid use after cardiac surgery is a problem that requires system-level interventions to translate opioid-sparing anesthesia and analgesia into a reduction in discharge opioid prescriptions.

In some ways, the cardiac surgical community has been a leader in applying opioid-sparing principles. At the turn of the century, fast-track cardiac surgery, which sought to shift away from the use of opioids as the primary anesthetic, was designed to hasten recovery through the early achievement of key recovery milestones, such as extubation and liberation from the intensive care unit.¹ More recently, we have seen the incorporation of comprehensive perioperative protocols, such as Enhanced Recovery After Surgery programs, which bundle evidence-based interventions across all phases of the surgical encounter in an effort to optimize the patient's condition, reduce injury, and promote recovery.² One foundational aspect of Enhanced Recovery After Surgery programs is the provision of a multimodal, opioid-sparing, pain management plan that combines a number of nonopioid analgesics and regional techniques to both optimize pain control and limit the side effects associated with opioid administration.³ Yet despite more widespread opioid-sparing practice, evidence has begun to mount suggesting that cardiac surgical patients suffer longer-term harm from opioids. Studies have shown that cardiac surgery is a contributor to chronic opioid use, with 12%-15% of opioid-naïve patients continuing to use opioids more than 90 days after surgery.^{4,5} Termed "persistent opioid use", this association not only ranks among the highest of major surgical subspecialties,⁶ but also serves to

markedly increase the odds of misuse, abuse, and diversion of opioid prescriptions, thereby exacerbating the present national opioid crisis.

It turns out that limiting (or eliminating) opioids during the surgical encounter has not yet led to meaningful reductions in long-term opioid use. One group revealed that despite providing opioid-free perioperative care, they still prescribed the same number of opioids at the time of discharge.⁷ In response, systems-level interventions are needed to translate phase-of-care reductions in opioid use into prescriber practices. It is in this context that the study by Einarsson and colleagues⁸ provides what at first glance seems like an elegantly simple solution to a problem of growing complexity. The authors describe the results of a before–after study involving modification of the default number of pills prescribed at discharge in their electronic medical record. This modification, easily supported by most information technology infrastructures, still allowed the provider flexibility and autonomy to prescribe medications as deemed appropriate. The result was an almost immediate 25% reduction in opioids prescribed (roughly 15 pills per patient), which, according to a recent publication, could impact the likelihood of persistent opioid use among this cohort.⁹

Although this result is encouraging, there is much more to understand before adopting this practice across the cardiac surgical enterprise. The authors do not provide

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information regarding baseline opioid tolerance, subsequent prescription refills, or other opioid-reducing practices that may have paralleled their efforts. Therefore, questions remain regarding the effectiveness of pain control associated with the rote reduction in opioids, particularly if non-opioid alternatives are not provided in their place. Nonetheless, the investigators in this study have managed to take the first step toward identifying a potential missing link between opioid-sparing theory and subsequent opioid prescription practice.

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