Commentary Holst and Habermann

## Commentary: Time to make moves on opioid prescribing following cardiac surgery



Kimberly A. Holst, MD,<sup>a</sup> and Elizabeth B. Habermann, PhD<sup>b</sup>

From the Departments of <sup>a</sup>Cardiovascular Surgery and <sup>b</sup>Health Services Research, Mayo Clinic, Rochester, Minn. Disclosures: Authors have nothing to disclose with regard to commercial support.

Received for publication Oct 1, 2019; revisions received Oct 1, 2019; accepted for publication Oct 2, 2019; available ahead of print Oct 16, 2019.

Address for reprints: Kimberly A. Holst, MD, Department of Cardiovascular Surgery, Mayo Clinic, 200 First St, SW, Rochester, MN 55901 (E-mail: holst.kimberly1@mayo.edu).

J Thorac Cardiovasc Surg 2020;160:966-7

0022-5223/\$36.00

Copyright @ 2019 by The American Association for Thoracic Surgery

https://doi.org/10.1016/j.jtcvs.2019.10.018

Clement and colleagues<sup>1</sup> share an investigation into new persistent opioid use in patients following coronary artery bypass grafting in this issue of the *Journal*. In recognition of the established concerns with opioid dependence and diversion in the United States as well as the role of the cardiothoracic surgeon, the authors provide a timely assessment using a large private insurance database that contributes to the growing evidence on how to best provide pain management for surgical patients.

The authors found that roughly 8% of patients undergoing coronary artery bypass grafting had new persistent opioid use. Their multivariable analysis indicated that female sex, anxiety, tobacco use, previous substance abuse, chronic obstructive pulmonary disease, living in the South, and increased amount of opioid prescribed were each independently associated with this new persistent opioid use, which was further associated with dramatically greater health services use, including both rehospitalization and presentation to an emergency department.

The problem of opioid use and misuse is considerable, and the analysis strong. However, one must consider other contributing potential contributing factors not available through this analysis. First, the database used, Truven Health MarketScan Database, does not capture cardiac surgery-specific clinical data or provider or hospital-level prescribing practices, including inpatient pain strategies and how this contributed to postdischarge prescriptions and/or persistent use—important given our analysis of our own institutional experience, which demonstrated that institutional prescribing had a greater impact on amount of opioid prescribed than procedureor patient-specific variables.<sup>2</sup> Further, the authors assessed their outcome using only one definition of opioid dependence, whereas others exist, such as those developed by the Consortium to Study Opioid Risks and Trends (CONSORT).<sup>3</sup>

While this analysis adds to our understanding of the implications of opioid prescribing following cardiac surgery,





Kimberly A. Holst, MD, and Elizabeth B. Habermann, PhD

## Central Message

Cardiothoracic surgeons should improve opioid stewardship for our patients as we continue to develop our understanding of postoperative opioid dependence.

See Article page 954.

we must decide how this evidence can and should influence how we prescribe to our patients. What do we do to augment risk of opioids in our patients? We do not choose which patients need cardiac surgery, but we do control the amount of opioid prescribed and education on multimodal pain management strategies. After implementing an opioid reduction strategy at our hospital, the median opioid prescription decreased to 112 morphine milligram equivalents (15 tabs of oxycodone 5 mg); there was not an increase in opioid refill rate or a decrease in patient satisfaction.<sup>4</sup> Outside the initial discharge prescription, what may be other contributing factors that may lead to new persistent use of opioids? What factors are modifiable? Which nonmodifiable factors may lead to enhanced discussions regarding pain management with our patients and our colleagues?

In conclusion, while cardiothoracic surgeons continue to develop our understanding of best practices for opioid prescribing, surgery teams have the responsibility to use evidence available to guide multimodal pain management and reduced opioid prescriptions to the benefit of our patients.

## References

Clement KC, Canner JK, Lawton JS, Whitman GJR, Grant MC, Sussman MS. Predictors of new persistent opioid use after coronary artery bypass grafting. *J Thorac Cardiovasc Surg.* 2020;160:954-63.e4.

Holst and Habermann Commentary

- 2. Holst KA, Thiels CA, Hanson KT, et al. What drives opioid prescriptions following cardiac surgery: practice or patient? *Ann Thorac Surg*, in press.
- Von Korff M, Saunders K, Thomas Ray G, Boudreau D, Campbell C, Merrill J, et al. De facto long-term opioid therapy for noncancer pain. Clin J Pain. 2008;24:521-7.
- 4. Holst KA, Hanson KT, Helder MRK, et al. Do discharge opioid prescriptions impact patient-reported healthcare surveys following cardiac surgery? Presented at: 99th Annual Meeting of the American Association for Thoracic Surgery. Toronto, ON, Canada; May 7-9, 2019.