The US has been experiencing an opioid epidemic, and the widespread prescription of opioids for pain management has been identified as one of the key factors. More than 11 million adolescents and adults in the US have reported misuse of prescription opioids.1 Response by the scientific community and governing agencies has included developing guidelines for appropriate use of opioids in pain management, such as the Guideline for Prescribing Opioids for Chronic Pain developed by the Centers for Disease Control and Prevention.2 Nevertheless, implementing these guidelines at the point of care has proven challenging. Meanwhile, electronic health records have been adopted by nearly all hospitals and clinics in the US, and computerized clinical decision support (CDS) has been widely used to enforce clinical best practice and improve patient safety.3 In their study, Duan et al4 provided evidence that use of a CDS tool, which was designed to encourage compliance with opioid prescribing regulations, may be associated with improved compliance with a law that focuses on clinicians’ opioid prescribing behavior. The study analyzed data from before and after the CDS tool (alerts or prompts) was designed and implemented at a large health care system in California.4 The design of this CDS tool was in alignment with the State of California Assembly Bill (AB) 2760, which mandates that patients who are at high risk for opioid overdose are also offered an opioid antagonist such as naloxone. The CDS tool was enabled a few days before AB 2760 went into effect. By analyzing the data recorded during 1,903,289 outpatient encounters for 500,711 patients, including orders placed by 6,515 clinicians, Duan et al4 found that naloxone ordering rates sharply increased after the implementation of the CDS tool.

The quasi-experimental nature of the study and the fact that the CDS tool was implemented concurrently when AB 2760 took effect make it difficult to ascertain whether the association between the use of the CDS tool and the improved rate of naloxone ordering was causal. Nevertheless, findings from this study are still interesting from several perspectives.

First, although the CDS tool focused on specific aspects of opioid-prescribing best practices, primarily the coprescription of naloxone and opioids, Duan et al4 noticed that other outcome measures, such as the rate of concomitant prescription of opioids and muscle relaxants, also changed during the study period (January 1, 2018, to December 31, 2019). Even if these associations were confounded by other factors or because of secular patterns, their concurrent observation suggests that targeting safe prescribing practices may have beneficial collateral outcomes. The study also highlights why interventional studies on prescription practices must use a broad set of outcomes, including those seemingly unrelated to the intervention itself, to identify potential beneficial or adverse unintended consequences of the intervention.

Second, the data showed that there was a secular downward trajectory in overall opioid use both before and after the implementation of the CDS tool and AB 2760, but no such trajectory existed for naloxone prescribing in the preintervention period. In other words, the use of opioids, which was measured both in terms of total quantity of prescriptions and in morphine milligram equivalent, was already decreasing in 2018, before AB 2760 was passed and took effect on January 1, 2019; however, although coprescription of naloxone had been recommended by the scientific community, clinicians placed almost no naloxone orders until AB 2760 and the CDS tool were implemented. The rate of naloxone ordering sharply increased in the first 3 months of 2019 and reached a relative plateau of 27.1% thereafter.4 If the already decreasing opioid prescribing rate...
reflected the heightened awareness of clinicians about the opioid crisis and their role in managing it, the knee-jerk reaction to the implementation of AB 2760 and the CDS tool proved that awareness alone was not sufficient for changing clinical practice. Findings from knowledge, attitude, and practice surveys on opioid prescribing also corroborate this point.\(^5\) It signifies the importance of bundled solutions that target more than 1 element of knowledge, attitude, and practice. In the study by Duan et al,\(^4\) AB 2760 and the news coverage about this law would have targeted the knowledge and attitude of clinicians, whereas the CDS tool would facilitate the change in their practice.

In this last point lies an opportunity for health care policy makers: if the law promotes a multifaceted approach to addressing a quality or safety issue, it may achieve its goal faster and better. This approach could be considered analogous to setting up better goals and allowing organizations to achieve those goals, rather than offering a very specific approach. Although AB 2760 requires clinicians to prescribe an opioid antagonist along with the opioid prescription, it does not specify how this mandate should be enforced or monitored. Findings from the study by Duan et al\(^4\) suggested that the reach of AB 2760 might have been more widespread if other health care institutions were also incentivized to implement data-driven solutions, such as CDS tools and electronic clinical quality metrics, that were focused on naloxone prescribing.

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**ARTICLE INFORMATION**

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Corresponding Author: Hojjat Salmasian, MD, MPH, PhD, Division of General Internal Medicine, Brigham and Women's Hospital, 1620 Tremont St, OBC4, Boston, MA 02120 (hsalmasian@bwh.harvard.edu).

Author Affiliation: Division of General Internal Medicine, Brigham and Women's Hospital, Boston, Massachusetts.

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