

# Electronic Advisories Increase Naloxone Prescribing Across Health Care Settings

Patients at high risk of opioid overdose are under prescribed Naloxone, a life-saving medication.

The research team evaluated the changes in prescriber practices at a large county hospital due to an electronic health record (EHR) advisory.

The advisory prompted opioid prescribers to co-prescribe naloxone when prescribing a high-dose opioid. It also provided prescribers with guidance on decreasing opioid doses for safety.

## Methods

- On June 1, 2019, the hospital implemented a best practice advisory designed by clinicians and information technologists to reduce risks of harm due to opioids and is based on CDC guidelines for opioid prescribing.
- This was a retrospective chart abstraction study looking at all opioid prescriptions and all naloxone prescriptions written as emergency department (ED) discharge, inpatient hospital discharge, or outpatient medications, between July 1, 2018, and February 1, 2020.
- Included in the analysis were all adult patients seen in the above mentioned settings at a large county hospital and associated outpatient clinics.
- Researchers performed an interrupted time series analysis looking at naloxone prescriptions and daily opioid dosing in morphine milligram equivalents (MMEs), before and after initiation of the electronic health record (EHR) advisory.

## Findings

- The EHR advisory was associated with changes in prescribers' behavior
  - The rate of naloxone prescription significantly increased following the EHR advisory initiation (Fig. 1).
  - The rate of >50 (MME) prescriptions significantly decreased following advisory initiation.
- The EHR advisory had little effect on prescriptions with lower MMEs.

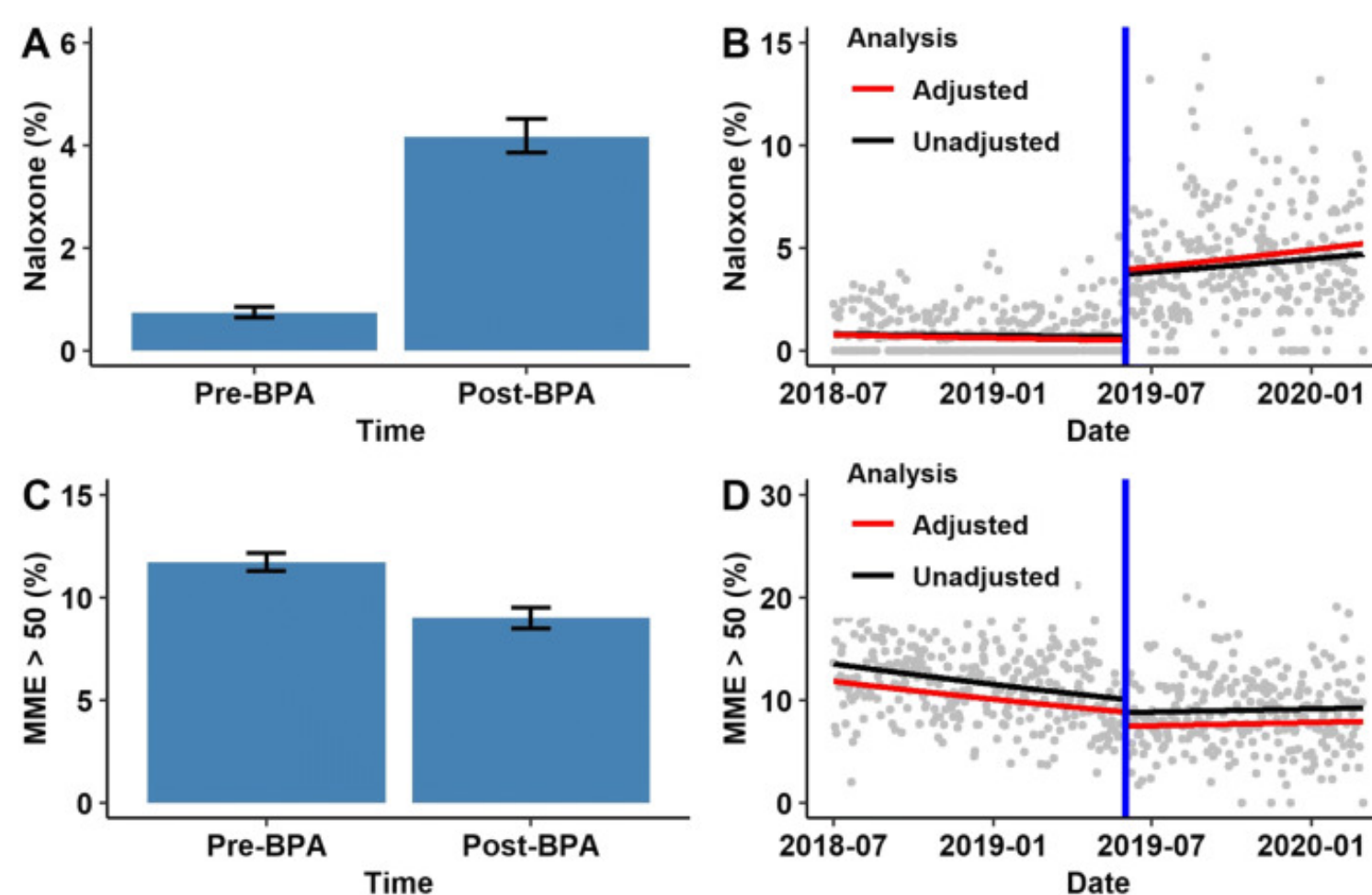


Figure 1- Overall rates of naloxone prescribing prior to the roll-out of the BPA and after (A), and naloxone prescribing rates over time (B), with the BPA initiation shown as a vertical blue line. Panels C and D show rates of prescribing of opioids with MME dosing > 50, as overall rates (C) and rates over time, adjusted and unadjusted (D).

## Discussion

Electronic Health Record (EHR) advisories are an effective systems-level intervention to enhance the safety of prescribed opioids and increase rates of naloxone prescribing. In this set of analyses, researchers examined the effect of an EHR advisory on prescribers' behavior, specifically, the co-prescription of naloxone and the dosage of prescribed opioid in MMEs/day. The best practice advisory (BPA) was associated with a change in providers' behavior, including increased rates of naloxone prescribing.

## Citation

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