

## Association of Medical and Adult-Use Marijuana Laws With Opioid Prescribing for Medicaid Enrollees.

Wen H<sup>1</sup>, Hockenberry JM<sup>2,3</sup>.

## **Author information**

## **Abstract**

**IMPORTANCE**: Overprescribing of opioids is considered a major driving force behind the opioid epidemic in the United States. Marijuana is one of the potential nonopioid alternatives that can relieve pain at a relatively lower risk of addiction and virtually no risk of overdose. Marijuana liberalization, including medical and adult-use marijuana laws, has made marijuana available to more Americans.

**OBJECTIVE:** To examine the association of state implementation of medical and adult-use marijuana laws with opioid prescribing rates and spending among Medicaid enrollees.

**DESIGN, SETTING, AND PARTICIPANTS:** This cross-sectional study used a quasi-experimental difference-in-differences design comparing opioid prescribing trends between states that started to implement medical and adult-use marijuana laws between 2011 and 2016 and the remaining states. This population-based study across the United States included all Medicaid fee-for-service and managed care enrollees, a high-risk population for chronic pain, opioid use disorder, and opioid overdose.

**EXPOSURES:** State implementation of medical and adult-use marijuana laws from 2011 to 2016.

**MAIN OUTCOMES AND MEASURES:** Opioid prescribing rate, measured as the number of opioid prescriptions covered by Medicaid on a quarterly, per-1000-Medicaid-enrollee basis.

**RESULTS:** State implementation of medical marijuana laws was associated with a 5.88% lower rate of opioid prescribing (95% CI, -11.55% to approximately -0.21%). Moreover, the implementation of adult-use marijuana laws, which all occurred in states with existing medical marijuana laws, was associated with a 6.38% lower rate of opioid prescribing (95% CI, -12.20% to approximately -0.56%).

1 of 2 6/16/18, 12:52 AM

**CONCLUSIONS AND RELEVANCE:** The potential of marijuana liberalization to reduce the use and consequences of prescription opioids among Medicaid enrollees deserves consideration during the policy discussions about marijuana reform and the opioid epidemic.

PMID: 29610827 DOI: <u>10.1001/jamainternmed.2018.1007</u>







LinkOut - more resources

2 of 2 6/16/18, 12:52 AM