

Background

- Prescription drug monitoring policies can be effective at reducing overuse of prescription opioids, but there are still opportunities for development for patients seeking illicit opioids.
- The Michigan Opioid Laws consist of three main bills (HB-4408 PA 246, SB-116 PA248, and SB-167 PA 249), which require clinicians to consent patients prior to prescribing opioids, along with other mandatory requirements.
- We hypothesized that hospital admissions will likely increase after enactment of the Michigan Opioid Laws.

Methods

- Data was abstracted utilizing the State Inpatient Databases (SID) and National Inpatient Sample (NIS) from the Healthcare Cost and Utilization Project (HCUP).
- Patient information was de-identified and ICD-10 codes were applied for analyses with an intentional analysis comparing years 2016-2017 to 2018-2019; representing pre- and post-implementation of the Michigan Opioid Laws.
- A multivariable logistic regression model was utilized to examine the association between demographic variables and OUD.

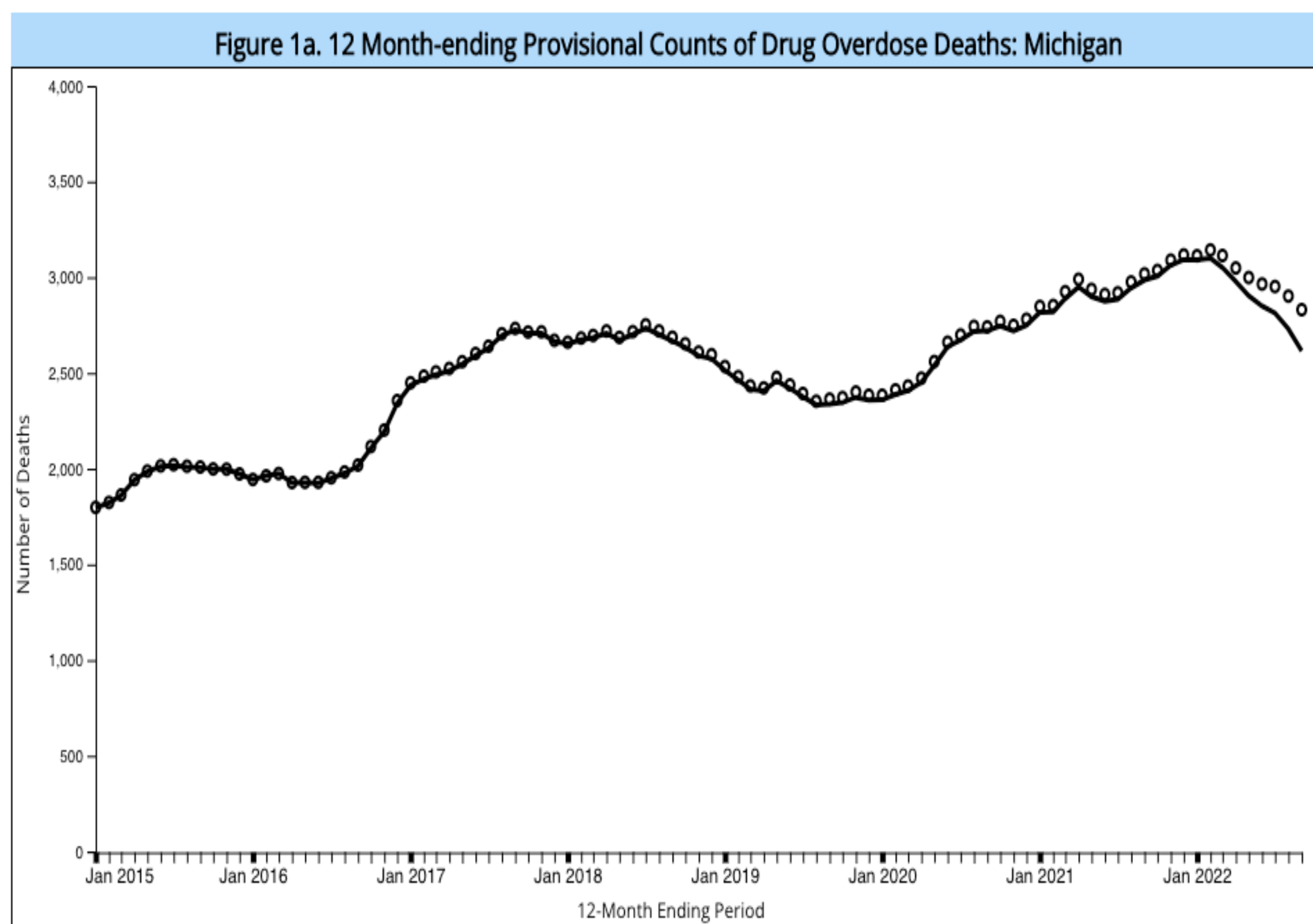


Figure utilized from: <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>

Results

- Both SID and NIS datasets confirmed that urban areas held more cases of patients with OUD ($p < 0.0001$, $p < 0.0001$).
- SID dataset confirmed that large metropolitan areas had more concomitant OUD and SUD cases as compared to rural ($p < 0.0001$).
- SID dataset confirmed that concomitant OUD and SUD cases decreased across all hospital location categories after implementation of the Michigan Opioid Laws ($p < 0.0001$).
- There was a noticeable decrease in the number of patients with OUD and SUD coming from large urban hospitals, while there was little change in micropolitan and rural areas ($p < 0.05$).
- Urban areas may have benefitted from the implementation of the Michigan Opioid Laws more directly versus their smaller counterparts.

Incidence of OUD		Pre-Implementation (2016-2017)	Post-Implementation (2018-2019)	p-value
Location:				
	Large Metro	29,238	25,807	<0.0001
	Small Metro	17,589	15,512	<0.0001
	Micro	3,777	3,501	<0.0001
	Rural	2,344	2,192	<0.0001
Sex:				
	Female	27,330	24,489	<0.0001
	Male	25,317	22,971	<0.0001

Conclusions

- Despite the challenges of our nation's current opioid epidemic, the policies that work to increase patient knowledge of the risks of usage disorder and transparency in prescription drug history for patients using controlled substances, do make a legitimate difference in hospital admissions of patients with OUD and/or SUD.
- Further implementation of healthcare policies could continue to strengthen efforts in reducing the negative impacts of opioid medication in pain management in the United States.

Addressing Health Equity

- Opioid-associated diagnoses exist variable based on several factors including: age, race, pay, disposition, education, employment status, housing status, social environment, and health access.
- This study functions to solidify and highlight the variability and intricacies of OUD and SUD, and how social determinants of health effect health outcomes.
- In highlighting how these various health disparities exist in the context of opioid use disorder and substance use disorder, we hope already existing healthcare policies can work to affect change in order to create opportunities for those who are variably disadvantaged to receive appropriate and equitable healthcare by encouraging policymakers to expand on patient protections against this dangerous epidemic.

Disclosures

- None of the authors on this project have any financial disclosures.

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