

Reductions in prescribing following legislative intervention to make gabapentin a controlled substance at the state level in the U.S.

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- Huge thanks
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 - Kyle Beekman

Gabapentin background

- Treatment of epilepsy and neuralgia
- Prescribed off-label
 - Anxiety
 - Treatment of substance use disorder
 - Physical pain
- Low addictive liability level
- Prescription required




Non-medical Use of Gabapentin

Abuse and Diversion of Gabapentin Among Nonmedical Prescription Opioid Users in Appalachian Kentucky

Gabapentin misuse, abuse and diversion: a systematic review

Rachel V. Smith^{1,2,3}, Jennifer R. Havens^{1,2} & Sharon L. Walsh^{1,4,5}

Law enforcement-derived data on gabapentin diversion and misuse, 2002-2015: diversion rates and qualitative research findings

Mance E. Buttram¹  | Steven P. Kurtz¹ | Richard C. Dart² | Zachary R. Margolin²

Potential of the Effect of Buprenorphine/Naloxone With Gabapentin or Quetiapine

TO THE EDITOR: Although it is an effective treatment for opioid dependence, buprenorphine/naloxone may be misused. We report here a case of potentiation of buprenorphine/naloxone with gabapentin and quetiapine.

Prescription Medication Misuse Among Opioid Dependent Patients Seeking Inpatient Detoxification

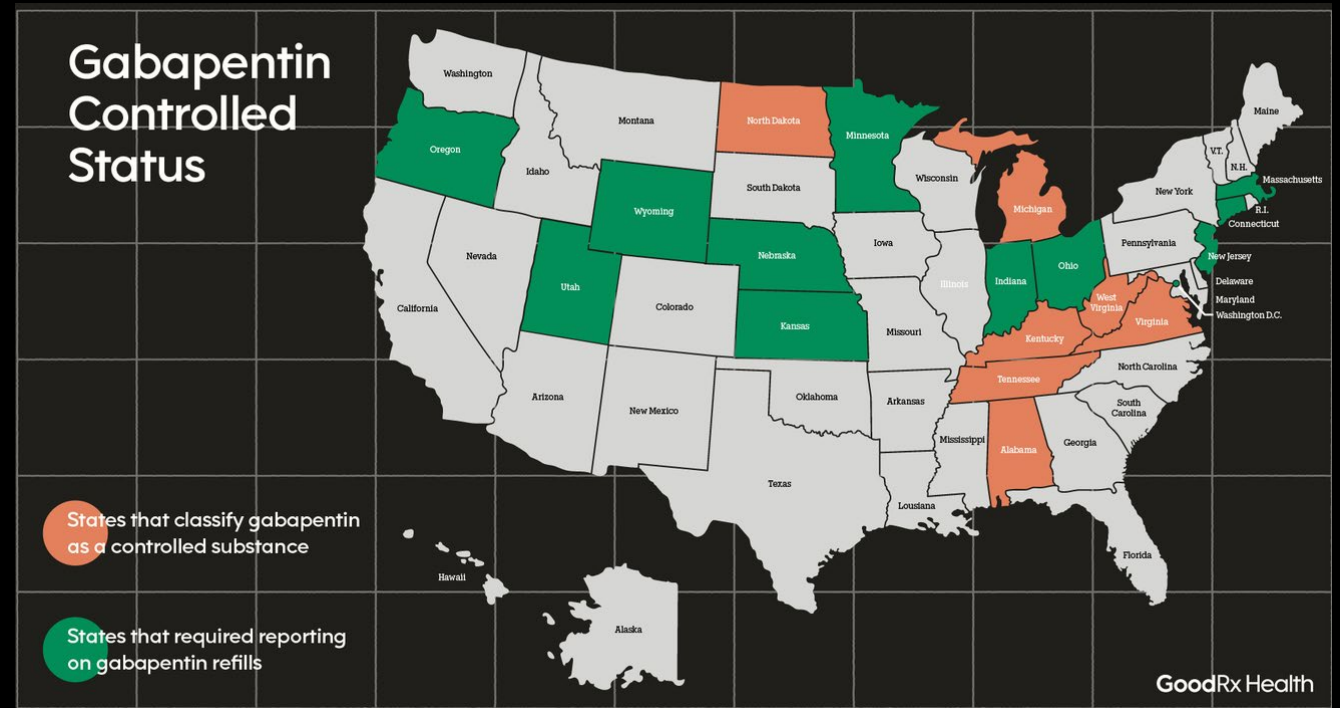
Timothy Wilens, MD,^{1,2} Courtney Zulauf, BA,¹ Denece Ryland, RN,² Nicholas Carrellas, BA,¹ Isela Catalina-Wellington, RN, BSN²

Gabapentinoid Abuse in Order to Potentiate the Effect of Methadone: A Survey among Substance Misusers

Colin R.W. Baird^a Pauline Fox^b Lesley A. Colvin^a

Gabapentin legal environment

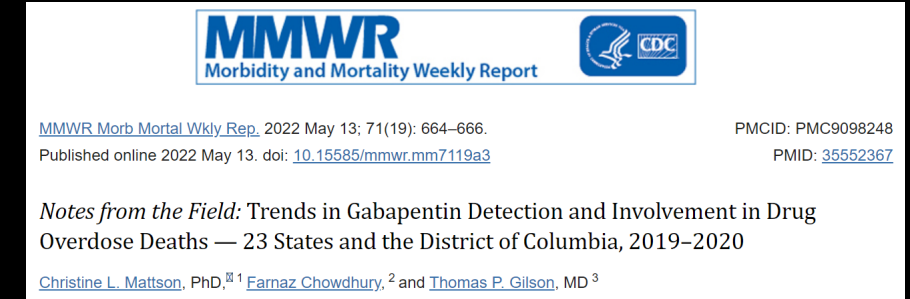
- Reclassified as a Controlled Substance
 - Kentucky: July 2017
 - West Virginia: June 2018
 - Tennessee: July 2018
 - Michigan: January 2019
 - North Dakota: April 2019
 - Virginia: July 2019
 - Alabama: November 2019
- Mandatory reporting to Prescription Drug Monitoring Programs in 11 additional states and the District of Columbia



Source: <https://www.goodrx.com/gabapentin/is-gabapentin-a-controlled-substance>

Increase in gabapentin-related overdose deaths

- Overdose deaths in the U.S. involving gabapentin doubled from 2019-2020
- 90% of cases also involved opioids
- In combination with opioids, gabapentin is associated with:
 - Respiratory depression
 - Opioid overdose



June 28, 2022

Gabapentin Increasingly Implicated in Overdose Deaths

Bridget M. Kuehn, MSJ

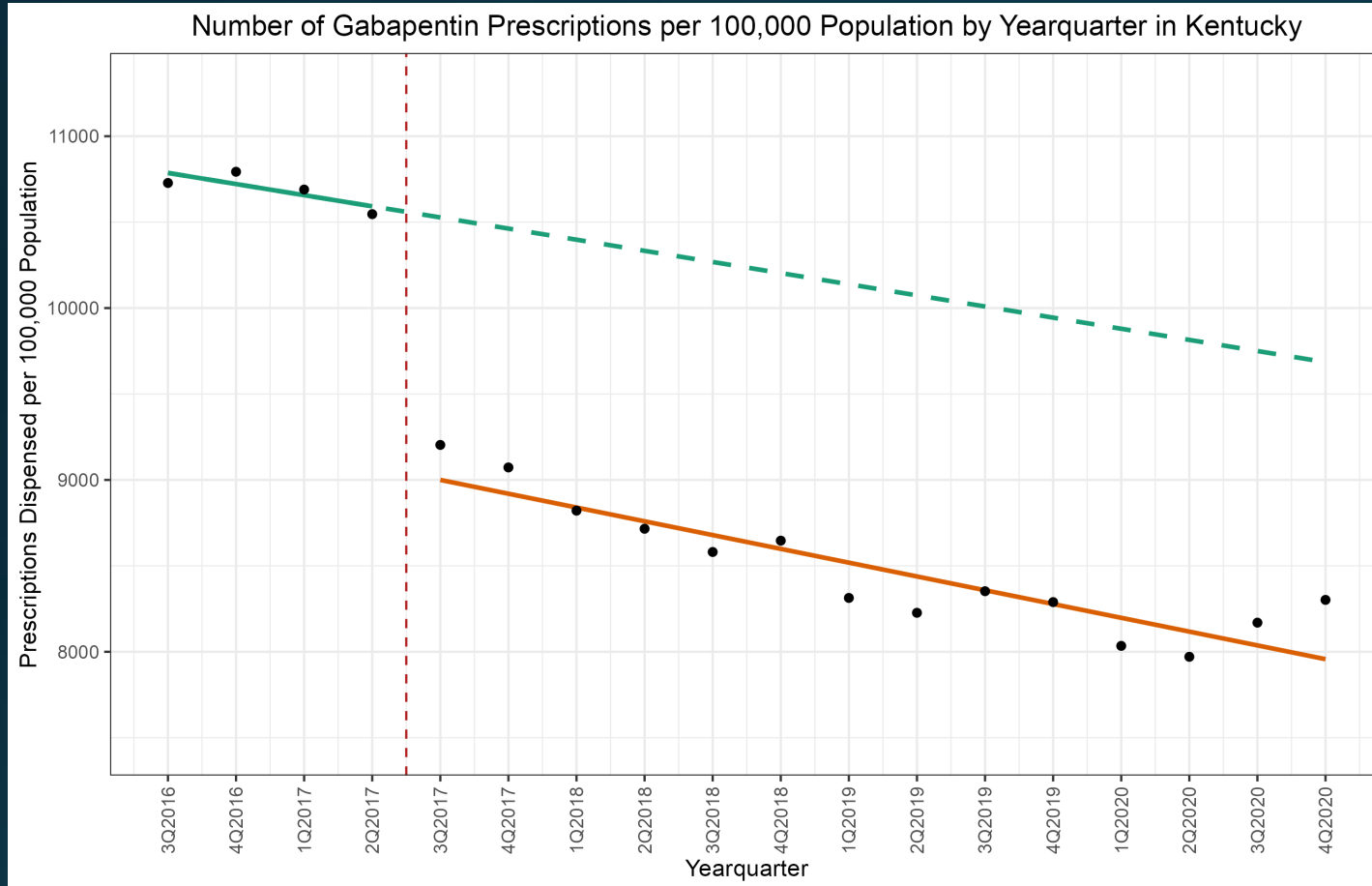
JAMA. 2022;327(24):2387. doi:10.1001/jama.2022.10100



Aim and Methods

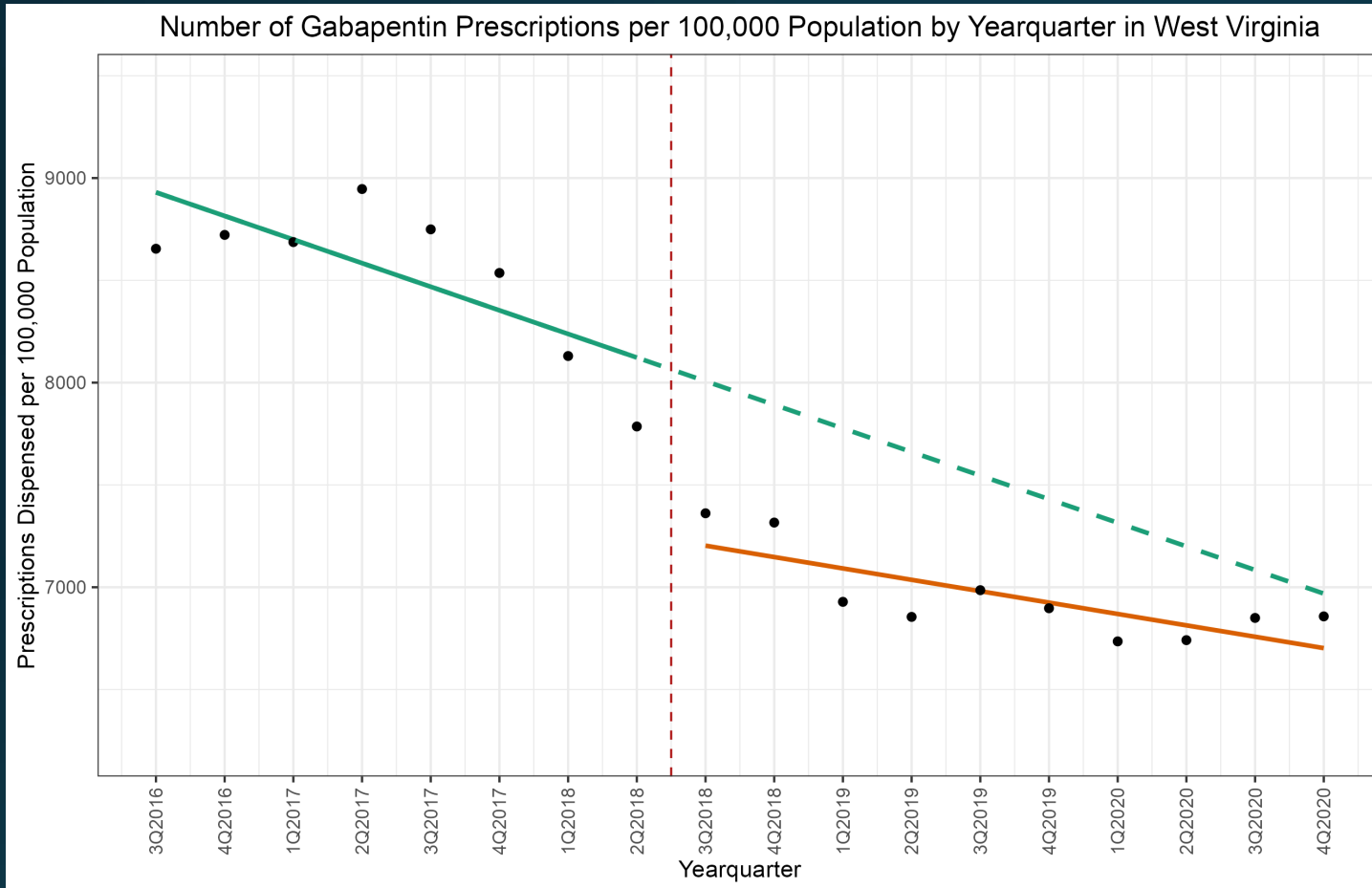
- To examine changes in gabapentin prescribing in states that reclassified gabapentin as a controlled substance.
- Rates of prescriptions dispensed (per 100,000 population) were calculated by year/quarter.
- Data obtained from U.S.-based IQVIA™ Longitudinal Patient Data.
- Data from 3rd quarter 2016 through 4th quarter 2020 were analyzed using an interrupted time series model.

Kentucky



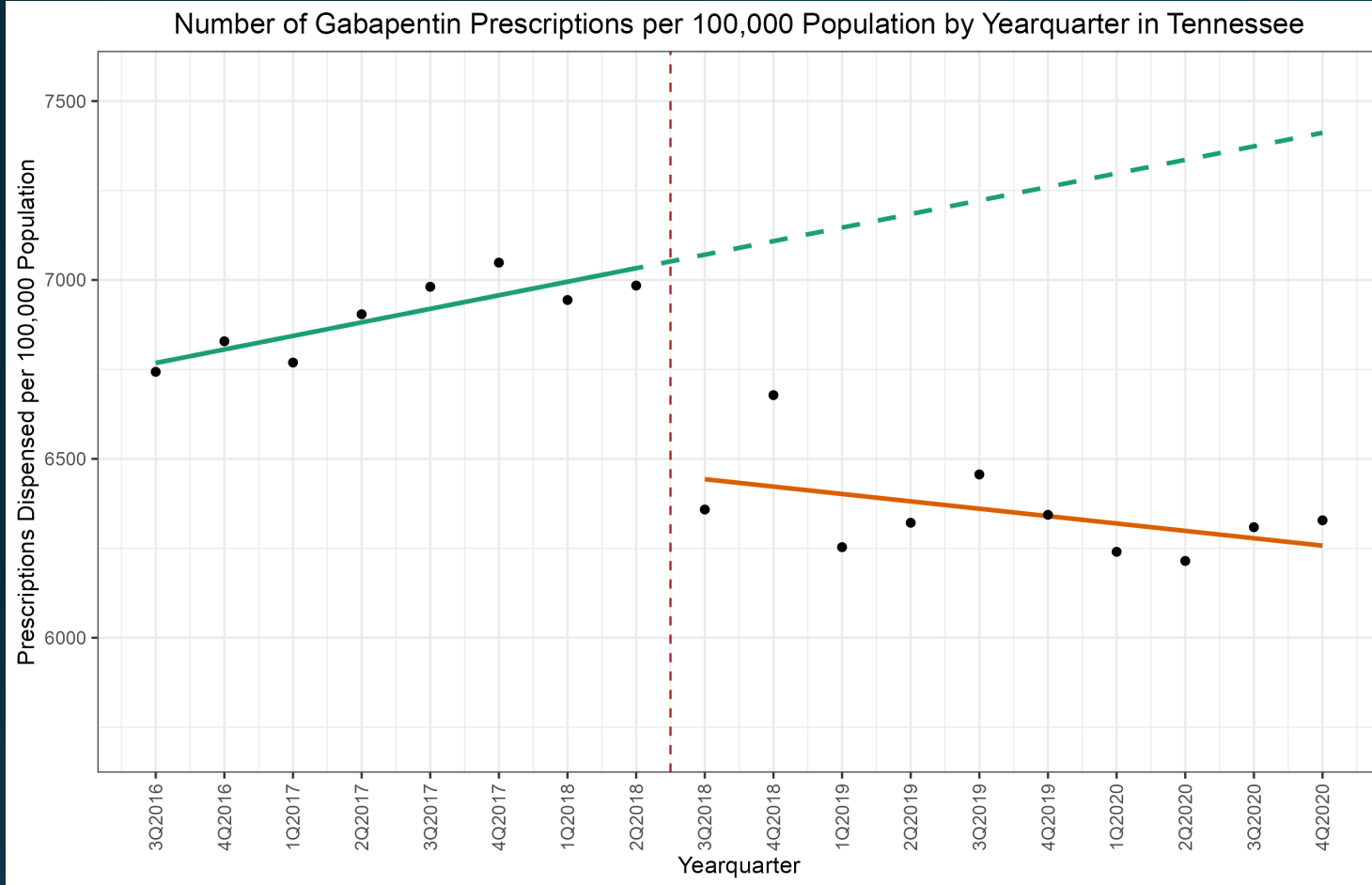
- Prior to reclassification, the rate of prescriptions dispensed was decreasing.
- Reclassification caused an immediate decrease in prescriptions dispensed ($p < .001$).
- Post-reclassification slope of rate of prescriptions dispensed maintained a similar decline compared to pre-reclassification.

West Virginia



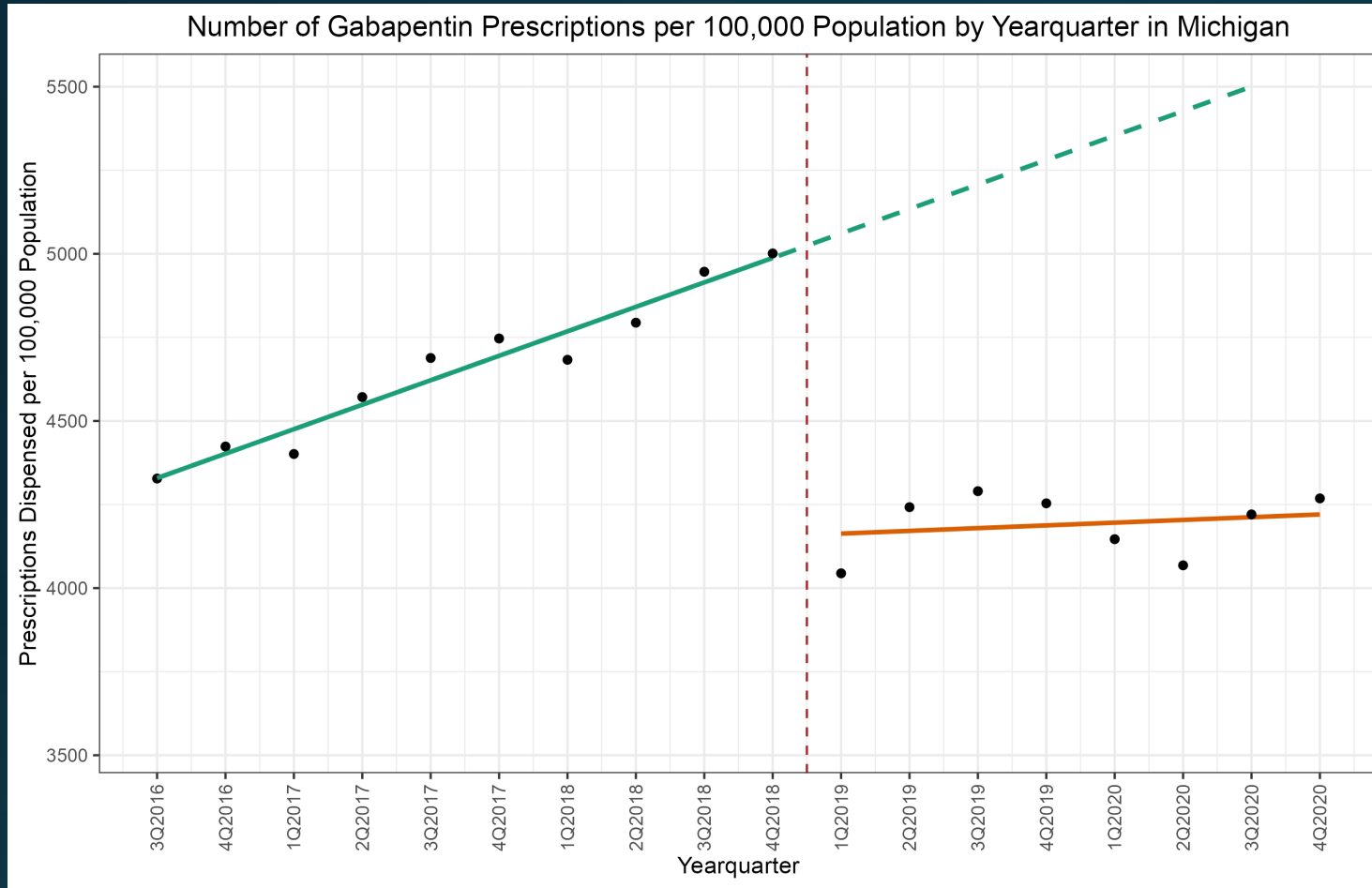
- Prior to reclassification, the rate of prescriptions dispensed was decreasing ($p=.003$).
- Reclassification caused an immediate decrease in prescriptions dispensed ($p<.001$).
- Post-reclassification the rate of prescriptions dispensed decreased at a slower rate compared to pre-reclassification.

Tennessee



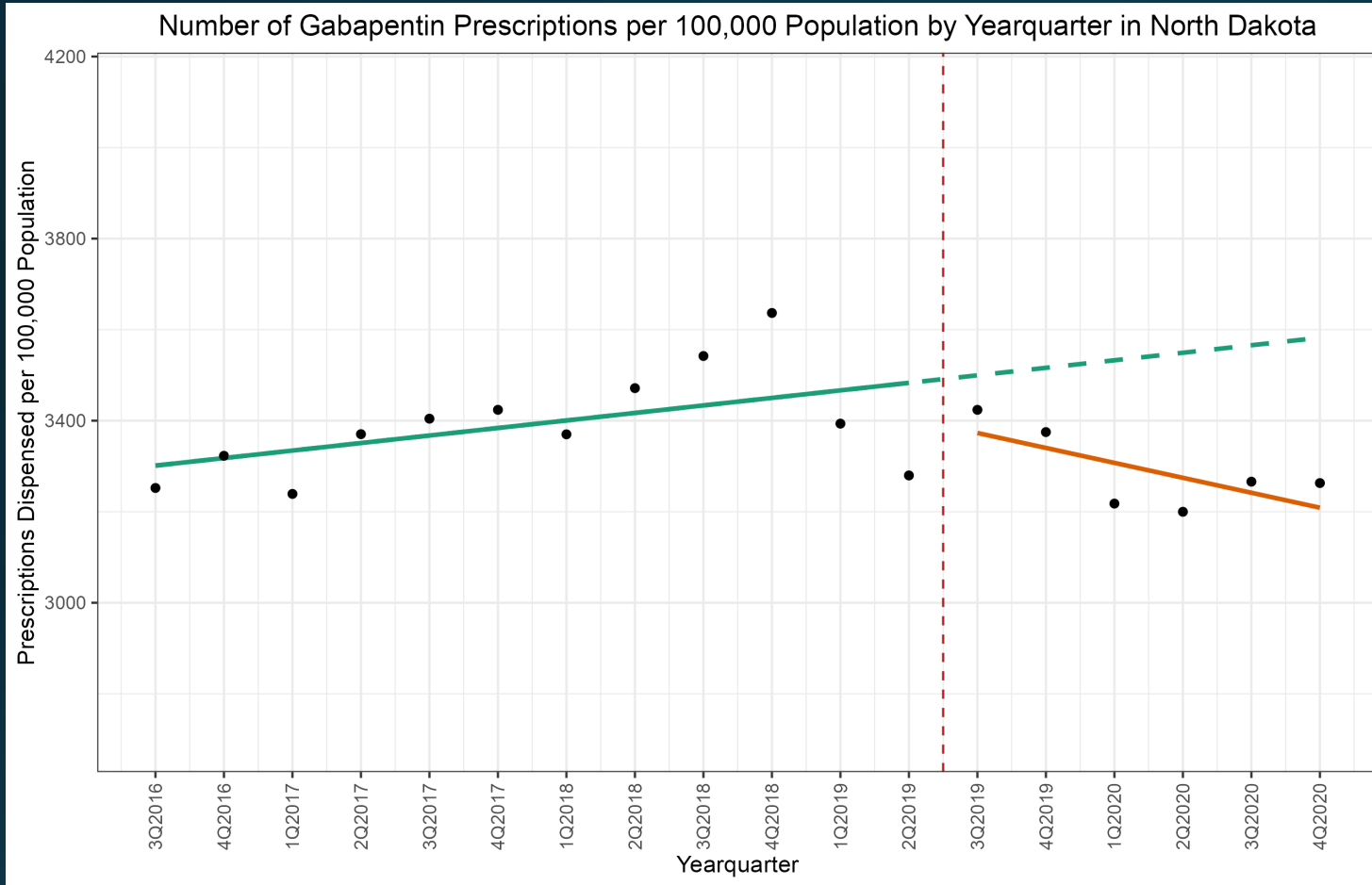
- Prior to reclassification, the rate of prescriptions dispensed was increasing ($p=.033$).
- Reclassification caused an immediate decrease in prescriptions dispensed ($p<.001$).
- Post-reclassification the slope of the rate of prescriptions dispensed changed direction compared to the slope before reclassification ($p=.01$).

Michigan



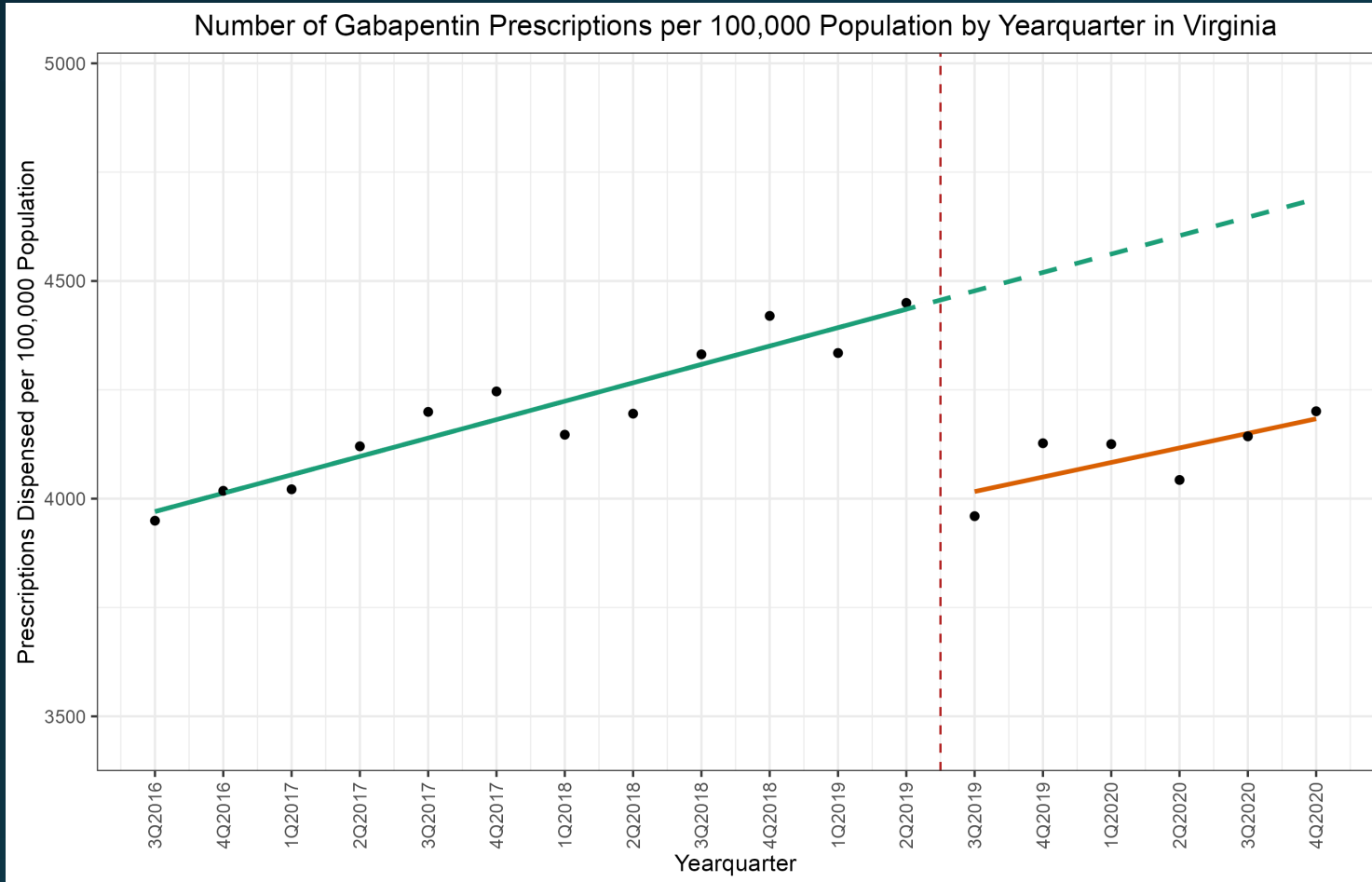
- Prior to reclassification, the rate of prescriptions dispensed was increasing ($p < .001$).
- Reclassification caused an immediate decrease in prescriptions dispensed ($p < .001$).
- Post-reclassification the slope of the rate of prescriptions dispensed was less than the slope compared to before reclassification ($p < .001$).

North Dakota



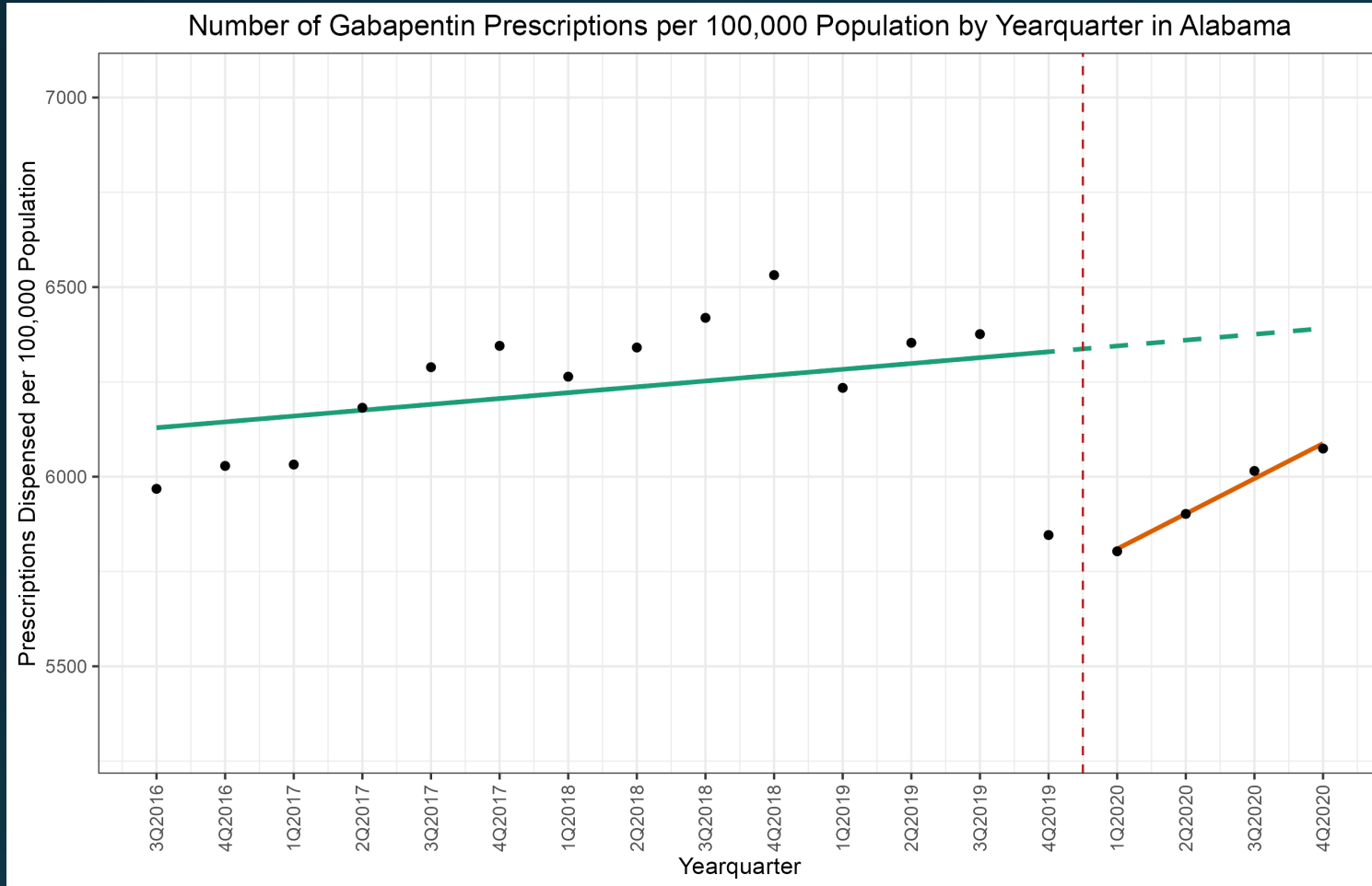
- Prior to reclassification, the rate of prescriptions dispensed was trending upward ($p=.062$).
- Reclassification did not cause an immediate decrease in prescriptions dispensed.
- Post-reclassification the slope of the rate of prescriptions dispensed trended less than the slope compared to before reclassification ($p=.065$).

Virginia



- Prior to reclassification, the rate of prescriptions dispensed was increasing ($p < .001$).
- Reclassification caused an immediate decrease in prescriptions dispensed ($p < .001$).
- Post-reclassification the slope of the rate of prescriptions dispensed was not different compared to before reclassification.

Alabama



- Prior to reclassification, the rate of prescriptions dispensed was not significantly increasing.
- Reclassification caused an immediate decrease in prescriptions dispensed ($p=.021$).
- Post-reclassification the slope of the rate of prescriptions dispensed was steeper compared to before reclassification.

Discussion

- In 6 of the 7 states, the reclassification of gabapentin caused an immediate decrease in prescriptions dispensed.
- Some of the most notable differences were Michigan and Tennessee which saw significant ongoing decreases in the rate of gabapentin prescriptions dispensed.
- Although reclassification in North Dakota did not cause an immediate decrease in prescriptions dispensed, post-reclassification the slope of the rate changed direction and prescriptions dispensed trended less.
- State-level scheduling likely reduced availability and diversion in these states, as well as non-medical use.

Limitations

- These analyses have some limitations worth noting:
 - Data were only available for analysis beginning in 2016 and thus there were fewer time points to analyze in Kentucky.
 - Similarly, data were only available through the 2020, thus limiting time points for analysis post-reclassification in several states (e.g., Alabama)
 - Quarterly data, compared to more frequently reported time points, further limit the analyses.

Future Directions

- Findings suggest that state-level reclassification of gabapentin has an immediate effect on prescribing.
- Future investigations should include:
 - State-level policy influence on co-prescribing of opioids and gabapentin
 - Potential reductions in opioid/gabapentin overdoses and fatalities
 - Risks and benefits of new policies for chronic pain patients