without SYG laws) and negative control (firearm suicide) to address time-varying confounding.

Results Before Florida's SYG law, the mean quarterly rate was 1.53 firearm homicides per 100,000 adolescents. There was no significant underlying trend. After adjusting for trends, the enactment of Florida's SYG law was associated with a 44.6% significant increase in quarterly rates of adolescent firearm homicides (RR=1.45; 95% CI=1.17–1.79; $p=0.0006$). Black adolescents comprised 63.5% of all adolescent firearm homicides before and 71.8% after the law. No equivalent increases were seen in our synthetic control and negative control analyses.

Conclusions We found preliminary evidence that Florida's SYG law is associated with an increase in adolescent firearm homicides and may also exacerbate racial disparities.

Significance and Contributions to Injury and Violence Prevention Science Determining the impacts of legalisation is key to identifying opportunities to reduce adolescent death by firearms and promote health equity.

Policy efforts in substance use and abuse

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INTENDED AND UNINTENDED CONSEQUENCES OF A STATE POLICY TO COMBAT OPIOID OVER-PRESCRIBING AMONG PATIENTS RECEIVING HIGH DOSE LONG TERM OPIOID THERAPY

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Statement of Purpose In May 2016, the North Carolina Medical Board (NCMB) launched the safe opioid prescribing initiative (SOPI) to limit overprescribing of opioids by investigating high volume prescribers and prescribers who have had two or more patient deaths due to opioid overdose. In this study we examined the immediate and sustained effects of NCMB's SOPI on tapering and discontinuation of opioids among patients receiving high doses (>90 MME) of long-term (>90 days) opioid therapy (LTOT).

Methods We conducted an interrupted time series study to examine change in temporal trends of opioid discontinuation and appropriate and inappropriate tapering among high dose LTOT patients in NC, following the NCMB's implementation of SOPI in May 2016. We used de-identified data from January 2010 through March 2017 from the NC Controlled Substances Reporting System (CSRS).

Results During the study period 205,255 people received high dose LTOT in NC. Compared to ~0.01% monthly decline in discontinuation and tapering pre-SOPI, immediately after the implementation of SOPI, the rate of abrupt discontinuation, inappropriate tapering, and appropriate tapering of opioids among high dose LTOT patients increased by 1% (95% CI: -0.22, 2.23), 2.2% (95% CI: 0.91, 3.47) and 1.3% (95% CI: 0.96, 1.57), respectively. Those receiving opioids from one prescriber were more frequently discontinued, while multiple prescriber patients were more frequently inappropriately tapered post-SOPI.

Conclusions The increase in appropriate tapering can be considered a success of SOPI, but, the simultaneous increase in

discontinuations and inappropriate tapering may be cause for some concern as these results represent a chilling effect on opioid prescribing that may adversely affect those receiving high dose LTOT.

Significance to Injury and Violence Prevention Science Well-intentioned policies such as the SOPI may have harmful effects when not well communicated and combined with education of prescribers to prevent potential unintended consequences.

Opioids: epidemiology and interventions

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SOCIODEMOGRAPHIC AND CLINICAL PREDICTORS OF PRESCRIPTION OPIOID USE IN A LONGITUDINAL COMMUNITY-BASED COHORT STUDY

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Purpose While opioids have commonly been prescribed for pain management, their use may be more likely in certain patients. The objective of this study was to assess predictors of prescription opioid use in an adult population with a high prevalence of chronic pain.

Methods Data were from a community-based cohort of White and African American adults aged 50–90 years residing in Johnston County, North Carolina. Univariable and multivariable logistic regression models were used to evaluate sociodemographic and clinical factors in non-opioid users ($n=795$) at baseline (2006–2010) as predictors of opioid use at follow-up (2013–2015). Variables included age, sex, obesity (body mass index ≥ 30 kg/m²), employment status (unemployed, employed/retired), Census block group household poverty rate ($<12\%$, $12\%–24\%$, $\geq 25\%$), depressive symptoms (Center for Epidemiologic Studies Depression Scale ≥ 16 and/or depression diagnosis), perceived social support (moderate/poor [<19], strong [≥ 19]; Strong Ties Measure of Social Support), insurance (uninsured, public, private), polypharmacy (5+ medications), pain sensitivity (sensitive [<4 kg], normal [≥ 4 kg] pressure-pain threshold), and pain catastrophizing (high [≥ 15], moderate/low [<15]; Pain Catastrophizing Helplessness Subscale).

Results At follow-up, 13% ($n=102$) of participants were using prescription opioids. In univariable models, younger age, female sex, obesity, unemployment, higher poverty rate, depressive symptoms, poorer perceived social support, public (vs. private) health insurance, polypharmacy, pain catastrophizing, and elevated pain sensitivity were independently associated ($p<0.05$) with opioid use. In the multivariable model, younger age (60 vs. 70 years; adjusted odds ratio, 95% confidence interval=1.76, 1.12–2.77), polypharmacy (2.21, 1.27–3.85), high pain catastrophizing (2.12, 1.29–3.48), and depressive symptoms (1.93, 1.12–3.31) remained significant independent predictors.

Conclusion/Significance The simultaneous assessment of a breadth of clinical and sociodemographic factors identified polypharmacy, pain catastrophizing, and depressive symptoms as modifiable predictors of prescription opioid use. These findings support the incorporation of behavioral approaches and pharmacological review into chronic pain management strategies. Further research is warranted to track changes in these factors as prescription opioid use declines nationwide.