

Medical, Recreational Cannabis Dispensaries Lead to Reduced Opioid Prescriptions

Cannabis may be a pain-management substitute for people experiencing chronic or acute pain from conditions like cancer.

November 20, 2025 By Leigh Hataway and University of Georgia

Medical marijuana isn't one size fits all but could help mitigate prescription painkiller crisis, researcher says.

Cannabis may be a pain-management substitute for people experiencing chronic or acute pain from conditions like cancer, according to new research from the University of Georgia.

The studies comprise two articles, one forthcoming in the [American Journal of Health Economics](#) and one published in [JAMA Health Forum](#) focusing on patients with cancer diagnoses.

The first study found that laws legalizing the sale and use of medical marijuana led to fewer opioid prescriptions. On average, the rate of patients receiving opioid prescriptions fell by 16% in states that had legalized medical cannabis.

These decreases were seen across sexes, age groups, and different races and ethnicities.

The second study focused on data from patients with cancer diagnoses, following how cannabis dispensary openings affected opioid prescription rates, the average number of days per prescription and the average number of prescriptions per patient.

The researchers found medical and recreational cannabis dispensary openings were associated with significant reductions in all opioid outcomes.

"The results of these two studies are consistent across states and subpopulations: Cannabis legalization has a role to play in mitigating the opioid epidemic," said [Felipe Lozano-Rojas](#), lead author of the study and an assistant professor in the UGA [School of Public and International Affairs](#). "The opioid epidemic is ongoing. Moving away from opiates and toward cannabis seems to be a safer way of managing chronic and acute pain after discussing with the physician in charge of the

case.

“That being said, this is not a free for all. These findings do not mean that everyone experiencing any pain should use cannabis.”

Medical marijuana led to fewer opioid prescriptions, slight NSAID increases

Prescriptions for non-steroidal anti-inflammatory drugs, like ibuprofen and aspirin, slightly increased during the same time period, suggesting a move toward non-opioid pain management strategies.

The study relied on data from claims of millions of commercially insured patients, with approximately 15 million to 20 million enrollees per year from 2007 to 2020. The article also addresses concerns about previous studies that compared states that had legalized cannabis to those that had not. Because of differences in timing, populations and other factors, these comparisons can’t always draw causal conclusions.

The present studies are among the first to test the relationship between legalized cannabis and opioid use using methods that can plausibly support causation.

“We were able to leverage the data we had access to in a way that shows the decrease in opioids happens across genders, across ages, across races, across socioeconomic demographics when medical cannabis is available as an alternative,” Lozano-Rojas said.

Those patient level characteristics remained unexplored until this article.

“Even those who do receive opioid prescriptions received less in situations when medical cannabis was available.”

It may be safer to use cannabis for chronic, acute pain than opioids

Prescription opioids like hydrocodone (brand name Vicodin), oxycodone (Oxycontin, Percocet) and morphine (Kadian) help manage pain. But the painkillers come with risks of addiction, overdose and even death. [Rural areas were particularly hard hit](#) and continue to face high rates of opioid abuse and use disorders.

To date, 39 states and Washington, D.C., have legalized medical cannabis for these patients and others with qualifying conditions. Almost half of all states (plus Washington, D.C.) also legalized recreational cannabis.

Pain patients are less likely to develop a substance use disorder to marijuana than opioids, the researchers said.

“It’s nuanced, but if you’re in a lot of chronic or acute pain, it may be safer to use cannabis than opioids, provided your physician recommends that as an appropriate course of treatment,” Lozano-Rojas said.

This study was co-authored by David Bradford and Amanda Abraham, of UGA's Department of Public Administration and Policy, and Sumedha Gupta, an associate professor at Indiana University.

Cancer patients may benefit from greater access to cannabis

More than half of all cancer patients report experiencing pain during their health struggles.

The study focused on cancer patients due to the high volume of opioid prescriptions they receive for pain management. However, the findings extend beyond this population as the previous study showed.

The researchers also found greater reductions in opioid prescriptions when dispensaries opened than when medical cannabis was legalized. This finding suggests removing barriers to access may be key in swaying some individuals from opioids to cannabis.

The JAMA Health Forum study is among the first to draw a plausible causal relationship between the opening of dispensaries and a reduction in opioid prescriptions for cancer patients, a population that has remained understudied.

The study was co-authored by Victoria Bethel, David Bradford and Amanda Abraham, of UGA's Department of Public Administration and Policy; Shelby Steuart, a doctoral graduate of UGA's School of Public and International Affairs who is now an assistant professor at University of Maryland; and Sumedha Gupta, an associate professor at Indiana University.

This [news release](#) was published by the University of Georgia on November 13, 2025.