In the past three months, opioid prescriptions fell more quickly in Massachusetts than in the country as a whole — potential good news that follows increased attention to opioid abuse and a sweeping new state law that limits opioid prescriptions.

According to prescription records tracked on the athenahealth network, Massachusetts saw a 14 percent drop in the number of patients prescribed opioids between the first and second quarter of 2016, compared to an 8 percent drop nationwide.

Experts say it’s too soon to attribute the decline to any single measure, including the opioid bill that Governor Charlie Baker signed into law in March, just over 100 days ago. Still, they say the data could be a harbinger of a long-awaited turnaround, in a state that has seen a 162 percent increase in opioid-related deaths over the past five years.

“While it would be realistic to say that the governor signing that legislation and putting it on paper affected that change, the system doesn’t change that quickly,” says Jeffrey D. Baxter, M.D., an addiction specialist at University of Massachusetts Medical School. Still, he said, “I do have to credit the politicians and public health officials for really raising the public profile of this issue.”

athenahealth researchers found that in the second quarter of 2016, 5.2 percent of patients in Massachusetts received at least one opioid prescription, compared to 8.3 percent of patients nationwide. This stayed true across insurance provider, age, and spec-
cialty group, based on a statewide sample of community practitioners. From the first to second quarter of 2016, prescriptions lowered by an average of about 15 percent for primary care providers and 11 percent for specialists in the state.

The data comes from an analysis of prescribing rates for more than 890 Massachusetts physicians and 500,000 Massachusetts patients on athenahealth’s electronic health record network between 2015 and 2016. Those were compared to prescribing rates for more than 17,700 physicians and 8.8 million patients on the network nationwide.

Future athenahealth research will investigate prescribing rates nationwide among different specialities, practices, and demographics of doctors and patients.

Lower prescription rates could lead to better overall public health outcomes, says Angela Kilby, a Ph.D. candidate in economics at MIT who recently conducted research on the effectiveness of drug monitoring databases — and found that a 10 percent reduction in opioid prescriptions correlates with an approximately 8 percent reduction in opioid-related deaths.

But some have warned of a downside to an across-the-board reduction in opioid prescriptions, which can make it harder for patients in pain to receive medication and find relief. “Are we restricting access to effective pain treatment that people really need and therefore, allowing people to suffer?” says Baxter. “We’re shifting the burden, now, in my opinion. People are still getting opiates, and we still haven’t dealt with the elephant in the room, and that’s the lack of access to high-quality pain care.”

Opioid prescription rates in Massachusetts have been falling since 2015 after being flat in 2014, athenahealth data shows, and Massachusetts physicians have been writing fewer prescriptions than physicians nationwide for years. But it’s hard to attribute the most recent drop to the March opioid abuse bill alone — even one of the most celebrated portions of the bill, a seven-day limit on first-time opioid prescriptions.

It takes time for such laws to trickle through the system and actually change provider behavior, Baxter says. In meetings with physicians across the state, he has found that providers still don’t know what the March law means for their day-to-day practice.

Still, over time, 7-day prescription limits are likely to impact prescribing trends. Studies show that when patients are prescribed more opioids, they tend to use more of them or share them, says Stephen W. Patrick, M.D., an assistant professor of pediatrics and health policy at Vanderbilt University School of Medicine and the lead author of a recent study on prescription drug monitoring databases.

“Anything that tackles the excess amount of opioids we have in our community is good news. People don’t take back the opioid prescriptions they don’t use, they often stay in medicine cabinets,” Patrick says. “So for me, [limiting the number of pills prescribed] holds promise.”

Researchers note that the 2016 law — which also includes guidelines for physicians and funding for community educational programs — joins several other interventions in Massachusetts, from a 2014 prescription monitoring database law to a working group on opioids that Baker established in 2015. In 2012, the Massachusetts Board of Registration in Medicine began tying licensing to mandatory

Patients Receiving Opioid Prescription By Specialty

Possible roles for patients receiving opioid prescription by specialty.

- US
- MA
- US
- MA

NOTE: percentage change in relative terms
SAMPLE: Over 100,000 patients seeing 300 primary care providers and over 3 million patients seeing 536 other specialists in the 2nd quarter of 2016, providers on athenahealth network since 2013.
SOURCE: athenahealth
educational programs on opioid abuse. Some insurers have begun to put limits on opioid prescriptions.

And the downward trend in Massachusetts tracks nationwide efforts to curb the opioid crisis. The Centers for Disease Control and Prevention released a set of primary care prescribing recommendations in March, cautioning doctors to think very carefully about prescribing opiate medications for patients with chronic, non-cancer pain.

The first half of 2016 also brought a tidal wave of attention to the epidemic — from nationwide coverage of the social ills of addiction to national policy debates to the death of Prince. A recent Kaiser Health poll found that the opioid epidemic was one of the top three healthcare stories people care about right now.

“The press coverage has influence on providers, as well as the public,” says Patrick. “How might just the conversation that happens change behaviors for both providers, and for patients? All of those things, I think, are important things to consider.”

It’s possible that Massachusetts providers are following opioid news and trends particularly closely, says Alene Kennedy-Hendricks, Ph.D., a researcher at the Johns Hopkins Bloomberg School of Public Health, who published a recent study about how patients share, store, and dispose of opioid medications.

“States that end up adopting new laws like this one are different from states that don’t,” she says. “Are some of these providers in Massachusetts more likely to be following what’s going on with the opioid epidemic...than perhaps some of these other primary care providers in some of the other states?”

Chelsea Rice is a staff writer for athenaInsight. To keep up to date with athenahealth research into the opioid crisis, subscribe to the athenaInsight Weekly Brief (Photo by John Moore/Getty Images)