A Look at Boulder County Opioid Prescribing Practices

Nationally and in Colorado, substance use - and in particular the negative consequences of opioid misuse - have been identified as a significant public health concern. Accidental deaths involving opioids have quadrupled since 1999, making drug overdose the leading cause of unintentional death in the United States. Over the last 15 years, the rate of deaths from drug overdose in Colorado have been higher than the national rate; opioid-related overdoses represent the largest portion of those deaths. Overdoses related to prescription opioids have quadrupled since 2000.

In response, states across the country have implemented prescription drug monitoring programs (PDMP). Colorado’s PDMP was created in 2003. It is a secure database of Schedule II-V controlled substance prescriptions dispensed by Colorado pharmacies. The goal of the PDMP is to provide prescribers and pharmacists with patient information to ensure prescribing and dispensing practices are appropriate.

Colorado PDMP data from 2014-2016 suggests that prescribing practices are improving in Boulder County and Colorado; however, in 2016 compared to the state, a higher proportion of Boulder County residents received high-dose prescriptions ( ≥ 120 MME), and a higher proportion of opioid-naïve individuals (i.e. have not had an opioid prescription in the past 60 days) in Boulder County received prescriptions for long duration opioids. Similar to the state, approximately one in ten individuals in Boulder County with an opioid prescription also had an overlapping benzodiazepine prescription, placing them at increased risk for overdose.


<table>
<thead>
<tr>
<th>PDMP Indicator</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of patients receiving more than 90 MME</td>
<td>Boulder</td>
<td>Colorado</td>
<td>Boulder</td>
</tr>
<tr>
<td>11.8%</td>
<td>10.3%</td>
<td>10.6%</td>
<td>8.9%</td>
</tr>
<tr>
<td>% of patients receiving more than 120 MME</td>
<td>Boulder</td>
<td>Colorado</td>
<td>Boulder</td>
</tr>
<tr>
<td>7.3%</td>
<td>6.3%</td>
<td>6.5%</td>
<td>5.5%</td>
</tr>
<tr>
<td>% of patients prescribed long duration opioids who were opioid-naïve**</td>
<td>Boulder</td>
<td>Colorado</td>
<td>Boulder</td>
</tr>
<tr>
<td>21.2%</td>
<td>16.0%</td>
<td>20.9%</td>
<td>15.3%</td>
</tr>
<tr>
<td>% of patient Rx days with overlapping opioid and benzodiazepine Rx</td>
<td>Boulder</td>
<td>Colorado</td>
<td>Boulder</td>
</tr>
<tr>
<td>11.4%</td>
<td>12.1%</td>
<td>11.5%</td>
<td>11.9%</td>
</tr>
</tbody>
</table>

* Schedule 2-4 controlled substances; excludes buprenorphine and other drugs commonly used for treatment.
**Patients who have not had an opioid prescription in the past 60 days.

Fortunately, the rate of multiple provider episodes - a proxy for doctor shopping - is lower in Boulder County than elsewhere in the state (11 per 100,000 in Boulder County versus 32 per 100,000 in the state). However, as high-dose opioids become less frequently prescribed, it has been suggested that there has been an increase in heroin use. According to a Denver Metro study of 504 methadone clients, 70% of clients interviewed stated that prescription pain killers played a role in their decision to start heroin (Heroin in Colorado Report, 2017). In 2016, the fatal heroin overdose rate in Boulder County increased to 4.7 per 100,000. Between 2010 and 2016 in Boulder County there was an 800% increase in the number of individuals accessing safe injection supplies from the

Rates of CRE are on the Rise

Enterobacteriaceae are a family of bacteria (including E. coli and Klebsiella species) that are found in the gastrointestinal tract and can cause infections in both community and health care settings. Carbapenem-resistant Enterobacteriaceae (CRE) are non-susceptible to at least one of the carbapenem antibiotics. CRE infections typically occur in ill patients and people with exposure to health care settings. They can be found in any part of the body. CRE are epidemiologically important because treatment options are limited, and infections are associated with high mortality rates.

Colorado Department of Public Health & Environment (CDPHE) performs population-level surveillance of antimicrobial-resistant organisms. CRE is a Colorado reportable condition; CDPHE receives all positive results from laboratories.

The incidence of CRE in Colorado and Boulder County has been increasing over the last few years. From 2013-2015, there were a total of 538 CRE cases reported in Colorado. The incidence rate jumped from 2.4 to 5.3 per 100,000 population between 2014 and 2015. In Boulder County, the number of CRE cases tripled between those same years.

Boulder County Public Health is participating in an ongoing initiative led by CDPHE to understand antimicrobial-resistant pathogens in the community and in health care facilities in order to identify local prevention priorities.

For more information, or to learn how to become involved with this effort, please contact Kylie Chilton at 303-413-7531 or kchilton@bouldercounty.org.

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Boulder County syringe access program. While fatalities, emergency room visits, and hospitalizations from prescription opioids decreased between 2011 and 2015 in Boulder County, emergency room visits involving heroin increased.

**Best Practices to Improve Prescribing Practices:** Statewide, the Colorado Consortium for Prescription Drug Abuse and Prevention is working to standardize regulations and guidance; however, variations still exist. For example, the Colorado Quad-Regulator Boards of Dental, Medical, Nursing, and Pharmacy currently recommends limiting opioid dosages to less than 120 mg morphine equivalents (MME) per day to reduce negative outcomes while the Centers for Disease Control and Prevention (CDC) prescribing guidelines recommend opioid dosages be limited to 90 MME per day, if possible. Further, the Colorado Department of Health Care Policy and Financing (HCPI) announced changes to the policy on prescribing opioids for Medicaid patients in July, whereby beginning in October, doses over 250 MME per day will require prior authorization.

With variances like these, improving opioid prescribing practices can be a challenge. It is recommended that each practice review and revise its policies, as needed. Learn more at Colorado.gov; enter “pain management resources” in the search box. Additional guidance for prescribing practices, including dosing, tapering, converting, and discontinuing, is available at OpioidAdvisoryGroup.org; click on “Opioid Prescribing Practices.”

### Actions to Reduce Opioid Misuse
- Develop tapering schedules when discontinuing opioid prescriptions completely for high-risk individuals.
- Refer to medication-assisted treatment, including methadone, buprenorphine, and naltrexone, for individuals with an opioid use disorder.
- Check the Prescription Drug Monitoring Program (PDMP) database.
- Consider non-opioid alternatives for pain treatment.
- Consider referrals to medication-assisted treatment for individuals with opioid use disorder.
- Consider prescribing naloxone to anyone with a long-term opioid prescription.
- Get involved in local efforts described below.

### Local Partners Leading Community Response
The Boulder County Opioid Advisory Group is a group of individuals, organizations, and community members dedicated to preventing and responding to the opioid issue in Boulder County.

### Accomplishments to Date
- In late January 2017, 375 naloxone kits were distributed to 12 Boulder County law enforcement agencies through the Attorney General’s Naloxone for Life Initiative.
- In April 2017, Community Justice Services, with technical support from the District Attorney’s Office, Mental Health Partners, and Boulder County Public Health, applied for a grant for local-level diversion efforts from the Bureau of Justice Assistance (BJA) to utilize the sequential intercept model.
- In May 2017, group members from law enforcement, harm reduction, and public health participated in a symposium to learn about the Law Enforcement Assisted Diversion (LEAD) program from national experts. Funding from the state legislature will support four programs in Colorado beginning in the fall or winter 2017.

The group is seeking participation by medical providers to inform current opioid policy, guidelines, and responses to ensure best practices for patients and providers.