Arkansas Prescription Monitoring Program

Annual Report

January-December

2015
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Executive Summary

Background
This report addresses activities of the Arkansas Prescription Monitoring Program (PMP) for the calendar year 2015. It includes statistical data, operations updates and legislative changes that affect the program.

Data Highlights:
The use of the PMP by stakeholders continued to move in a positive direction. The number of registered users increased in 2015 by 22%. The number of queries made by prescribers and pharmacists increased 33% and 36%, respectively. The number of queries made by law enforcement increased 117%. The number of “doctor shoppers” or “multiple provider episodes” (seeing 7 or more prescribers and 7 or more pharmacies in a 90 day period) decreased 22%. The number of doses of hydrocodone dispensed in 2015 decreased 10% compared to 2014. This is encouraging due to hydrocodone being the top dispensed opioid in the state.

Legislative Acts:
Act 1208 of 2015 allowed prescribers and dispensers to assign delegates to access the Arkansas PMP data on their behalf. The goal is to increase usage of the program and to enhance user workflow. Delegate access was initiated in late December 2015.

Act 901 of 2015 allowed access to the program by a new type of law enforcement user; certified law enforcement prescription drug diversion investigator. Access is granted after completion of certified training by the investigator and his/her agency head.
**Introduction**

Act 304 of 2011 authorized the Arkansas Prescription Drug Monitoring Program (PMP).

Arkansas law states that each dispenser shall submit, by electronic means, information regarding each prescription dispensed for a controlled substance. Each time a controlled substance is dispensed to an individual, the dispenser shall submit the information required by Arkansas law to the central repository weekly for the previous week, Sunday through Saturday.

The Arkansas Department of Health (ADH) shall establish and maintain procedures to ensure that the privacy, confidentiality, and security of patient information collected, recorded, transmitted, and maintained is not disclosed except as provided in Act 304.

The goals of the PMP:

♦ To enhance patient care by providing prescription monitoring information that will ensure legitimate use of controlled substances in health care.

♦ To help curtail the misuse and abuse of controlled substances.

♦ To assist in combating illegal trade in and diversion of controlled substances.

♦ To enable access to prescription information by practitioners, law enforcement agents, and other authorized individuals and agencies.

The number of authorized PMP users increased between January and December 2015 (Table 1).

**Table 1: Number of Authorized Users of the Arkansas Prescription Monitoring Program Database by Type, Arkansas, 2015**

<table>
<thead>
<tr>
<th>PMP User Type</th>
<th>Jan 2015</th>
<th>Dec 2015</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician</td>
<td>1895</td>
<td>2209</td>
<td>17%</td>
</tr>
<tr>
<td>Osteopathic Physician</td>
<td>151</td>
<td>175</td>
<td>16%</td>
</tr>
<tr>
<td>Podiatrist</td>
<td>20</td>
<td>24</td>
<td>20%</td>
</tr>
<tr>
<td>Physician Assistant</td>
<td>127</td>
<td>153</td>
<td>20%</td>
</tr>
<tr>
<td>Advanced Practice Nurse</td>
<td>696</td>
<td>944</td>
<td>36%</td>
</tr>
<tr>
<td>Optometrist</td>
<td>4</td>
<td>10</td>
<td>150%</td>
</tr>
<tr>
<td>Dentist</td>
<td>323</td>
<td>381</td>
<td>18%</td>
</tr>
<tr>
<td>Veterinarian</td>
<td>9</td>
<td>14</td>
<td>56%</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>1897</td>
<td>2187</td>
<td>15%</td>
</tr>
<tr>
<td>Delegate</td>
<td>0</td>
<td>129</td>
<td>129%</td>
</tr>
<tr>
<td>Law Enforcement</td>
<td>44</td>
<td>71</td>
<td>61%</td>
</tr>
<tr>
<td>Licensing Board</td>
<td>4</td>
<td>4</td>
<td>0%</td>
</tr>
<tr>
<td>TOTALS</td>
<td>5170</td>
<td>6301</td>
<td>22%</td>
</tr>
</tbody>
</table>
Database Access

Querying the Arkansas PMP for controlled substance history reports provides the user with data to make more informed decisions. The total number of PMP queries increased steadily over 2015 (Figure 1). Queries made by prescribers drove most of the increases seen since January, 2015.

Figure 1: Number of Queries to the Prescription Monitoring Program Database by Prescribers and Pharmacists — Arkansas, January—December, 2015

Licensing board and law enforcement queries have fluctuated over time and are a small number of the total queries made to the PMP. (Figure 2).

Figure 2: Number of Monthly Queries by Licensing Boards and Law Enforcement (Jan to Dec 2015)
**Interstate Data Sharing**

ACT 304 authorizes the Arkansas PMP to share controlled substance prescription data with other states. Most states begin the program by sharing data with neighboring or border states. Arkansas shares data with 16 other states including four of our border states; Oklahoma, Louisiana, Tennessee, and Mississippi. Texas has recently passed legislation allowing them to share data with other states. Missouri has not passed PMP legislation and therefore does not have a PMP.

The Red States in Figure 3 are the states with which Arkansas currently shares data. The goal is for all states and territories to share data by 2020. State laws that bar or restrict data sharing must change in order to reach the goal.

**Figure 3: States that Share Controlled Substance Prescription Data with Arkansas, December, 2015**
Prescription Data

Monitoring “doctor shopping” (visiting multiple prescribers and multiple pharmacies) by recipients is a key way to evaluate the effectiveness of a prescription monitoring program. The Arkansas PMP has made progress in reducing the number of “doctor shoppers” in Arkansas. The number of recipients visiting seven (7) or more physicians and seven (7) or more pharmacies in a 90-day period.

**Figure 4: Controlled Substance Recipients Seeing Seven (7) or More Physicians and Seven (7) or More Pharmacies in a 90-day Period — Arkansas, January 2014—December 2015**

![Graph](image)

The total number of doses of controlled substances dispensed to “doctor shoppers” (recipients visiting seven or more physicians and seven or more pharmacies in 90 days) decreased in 2015 (Figure 5).

**Figure 5: Quantity of Doses Dispensed to 7 X 7 “Doctor Shoppers” — Arkansas, January 2014—December 2015**

![Graph](image)
Morphine Equivalent Dose (MED)

Potency varies among the different opioids. In order to standardize comparison of opioid potency, morphine equivalent dose is used. Morphine equivalent dose is the dose of a particular opioid that is equal to that of morphine. It is calculated as follows:

\[ \text{MED} = \text{Opioid dosage} \times \text{quantity} \times \text{conversion factor} / \text{days supply} \]

For example, a recipient with a prescription for 90 tablets of oxycodone 30 mg three times a day is receiving a \( \text{MED} = 135 \) mg per day.

Risk of opioid overdose and death has been shown to increase at doses above 100 MED per day (CDC Guideline for Prescribing Opioids for Chronic Pain-US, 2016, MMWR, Vol. 65, March 15, 2016).

Tracking the number of individuals that receive a daily MED >100 mg/day is a valuable indicator of opioid prescribing practice change. Figure 6 below shows a positive change in risky opioid prescribing in Arkansas.

Table 2: Example of Opioid Conversion to Morphine Equivalent Dose (MED)

<table>
<thead>
<tr>
<th>OPIOID</th>
<th>CONVERSION FACTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fentanyl</td>
<td>2.4</td>
</tr>
<tr>
<td>Hydrocodone</td>
<td>1</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Figure 6: Adult Recipients of >100 Morphine Equivalent Doses, Arkansas, January 2015—December 2015
Drug Type

In 2015, 1,144 pharmacies uploaded dispensing data to the Arkansas PMP. Figure 7 shows the distribution of prescriptions reported to the Arkansas PMP by product type. Hydrocodone was dispensed more than any other opioid in 2015 (Figure 7). In 2015, enough hydrocodone was dispensed for every person in Arkansas to receive 37 pills (Table 3).

Figure 7: Distribution of Number of Prescriptions by Product Type Reported to the Arkansas Prescription Monitoring Program, January—December, 2015

Table 3: Top Five Drugs Distributed — Arkansas, January — December, 2015

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Number of Prescriptions</th>
<th>Quantity Dispensed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocodone</td>
<td>1,714,600</td>
<td>111,987,967</td>
</tr>
<tr>
<td>Tramadol</td>
<td>762,766</td>
<td>58,672,813</td>
</tr>
<tr>
<td>Alprazolam</td>
<td>689,292</td>
<td>44,543,911</td>
</tr>
<tr>
<td>Oxycodone (all)</td>
<td>646,333</td>
<td>50,244,192</td>
</tr>
<tr>
<td>Zolpidem</td>
<td>568,550</td>
<td>17,718,692</td>
</tr>
</tbody>
</table>
Geographic Distribution

The amount and type of prescription opiates dispensed in Arkansas varies widely by county. Hydrocodone is the most dispensed prescription opiate in the state. Rates of hydrocodone use vary from 20 doses per capita in Lincoln County to 65 doses per capita in Pike County (Figure 8). The potential also exists for oxycodone to be misused or diverted because of its potency and popularity. Like hydrocodone, oxycodone use varies by county (Figure 9). Oxymorphone is a powerful opiate painkiller that has a high potential for abuse. Pockets of high use are scattered throughout Arkansas (Figure 10). Buprenorphine is used to treat opiate addiction. Buprenorphine use is concentrated in central Arkansas (Figure 11). A complete set of maps showing county-level rates of prescription drug use is available at http://www.arkansaspmp.com/
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