Statewide Evaluation of the Data Submitted to the Arkansas Prescription Drug Monitoring Program by Arkansas Retail Pharmacies (Conducted 2022-2023)
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*see: Limitations*
Statewide Evaluation of the Data Submitted to the Arkansas Prescription Drug Monitoring Program by Arkansas Retail Pharmacies (Conducted 2022-2023): Results

The data submitted by Arkansas retail pharmacies has been found to be 95.7% accurate. Of the inaccurate data, over 75% of the errors were minor (see Appendix: List of Errors and Error Definitions).

The three most common errors identified overall were:
1. Missing/Incorrect/Misspelled Address of Patient* (1,835 instances, 27.0%)
2. Incorrect Day Supply* (369 instances, 5.4%)
3. Misspelled Patient Name (358 instances, 5.3%)

Severe error breakdown
- Wrong Patient (0 instances, 0%)
- Wrong Drug (8 instances, 0.1%)
- Wrong/Missing/Dummy DEA* (84 instances, 1.2%)
- Wrong Prescriber (25 instances, 0.4%)
- Prescription Not Reported (13 instances, 1.0%)

Distribution of errors across pharmacies statewide
- 21 pharmacies were found to have no errors
- The most common number of errors per pharmacy was 3 (126 pharmacies) or 4 (104 pharmacies)
- The most errors found at any pharmacy were 15

The three least common errors identified overall were:
1. Wrong Patient (0 instances, 0%)
2. Incorrect Quantity Dispensed (2 instances, 0.0%)
3. Wrong Drug (8 instances, 0.1%)

The most common error identified for each level were:
- Minor: Missing/Incorrect/Misspelled Address of Patient* (1,835 instances, 27.0%)
- Intermediate: Misspelled Patient Name (358 instances, 5.3%)
- Severe: Wrong/Missing/Dummy DEA* (84 instances, 1.2%)

Mean number of errors per pharmacy by public health region
- Northwest: 3.8 (212 pharmacies)
- Northeast: 4.3 (151 pharmacies)
- Central: 4.0 (186 pharmacies)
- Southwest: 5.5 (69 pharmacies)
- Southeast: 5.8 (62 pharmacies)

*see: Limitations
Statewide Evaluation of the Data Submitted to the Arkansas Prescription Drug Monitoring Program by Arkansas Retail Pharmacies (Conducted 2022-2023): Results Excluding the Minor Patient Address Error

Because the validity of the minor error “Missing/Incorrect/Misspelled Address of Patient” cannot be determined (see: Limitations, section a.), the accuracy was also assessed excluding that error and it increases to 98.4%.

The three most common errors identified overall were:
1. Incorrect Day Supply* (369 instances, 5.4%)
2. Misspelled Patient Name (358 instances, 5.3%)
3. Incorrect Date Issued or Date Dispensed (Date filled) (222 instances, 3.3%)

Severe Error Breakdown
- Wrong Patient (0 instances, 0%)
- Wrong Drug (8 instances, 0.1%)
- Wrong/Missing/Dummy DEA* (84 instances, 1.2%)
- Wrong Prescriber (25 instances, 0.4%)
- Prescription Not Reported (13 instances, 1.0%)

Distribution of errors across pharmacies statewide
- 181 pharmacies were found to have no errors
- The most common number of errors per pharmacy was 1 (190 pharmacies) or 2 (162 pharmacies)
- The most errors found at any pharmacy were 10

The three least common errors identified overall were:
1. Wrong Patient (0 instances, 0%)
2. Incorrect Quantity Dispensed (2 instances, 0.0%)
3. Wrong Drug (8 instances, 0.1%)

The most common error identified for each level were:
- Minor: Incorrect Day Supply* (369 instances, 5.4%)
- Intermediate: Misspelled Patient Name (358 instances, 5.3%)
- Severe: Wrong/Missing/Dummy DEA* (84 instances, 1.2%)

Mean number of errors per pharmacy by public health region
- Northwest: 1.4 (212 pharmacies)
- Northeast: 1.6 (151 pharmacies)
- Central: 1.5 (186 pharmacies)
- Southwest: 2.3 (69 pharmacies)
- Southeast: 2.0 (62 pharmacies)

*see: Limitations
Introduction

The Arkansas Prescription Drug Monitoring Program (PDMP) was authorized in 2011 by the Arkansas State Legislature Act 304. This program was created for the following purposes:

- To enhance patient care by providing prescription monitoring information that will ensure legitimate use of controlled substances in healthcare
- 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, the state medical examiner, and other authorized individuals and agencies

Arkansas law requires that each retail pharmacy shall submit, by electronic means, information regarding each prescription dispensed for a controlled substance no later than the next business day after the date of dispensing.

In 2021, 6,376,797 controlled prescriptions were reported as dispensed in the state of Arkansas. In 2022, this number was 6,353,288.

Pursuant to AR Code § 20-7-607 (2021), the Arkansas PDMP launched an evaluation of the controlled substance dispensation data reported to the PDMP by Arkansas retail pharmacies in an effort to determine the accuracy of the data reported.

Evaluation Process

a. Method of Pharmacy Selection

A list of all retail pharmacies located in Arkansas (746) was provided by the Arkansas State Board of Pharmacy (BOP). Epidemiologists from the Arkansas Department of Health (ADH) extracted dispenser Drug Enforcement Agency (DEA) identifiers that were reporting to the PDMP and narrowed the list down by selecting retail locations that:

i. dispensed at least 1000 controlled prescriptions within a 9-month window; and,
ii. dispensed at least 4 opioid prescriptions, 2 stimulant prescriptions, and 2 sedatives within the 9-month window.

These conditions brought the number of retail locations flagged for evaluation from 746 to 680.

b. Method of Evaluation

This evaluation has been conducted by the AR PDMP in waves of 43 – 115 pharmacies at a time.

i. Packets containing information and a request for documentation were faxed to pharmacy locations prior to evaluation. Requested documentation was required to be provided to the AR PDMP within 10 business days of receipt of fax.
ii. A total of ten prescriptions were requested from each location:
   A. Eight controlled (schedule II-V) prescription images were requested by the AR PDMP. These prescriptions were selected randomly from dispensations reported to the PDMP and included 4 opioid prescriptions, 2 stimulant prescriptions, and 2 sedative prescriptions.

*see: Limitations
B. An additional two controlled (schedule II-V) prescriptions of the pharmacist’s selection; and
C. the corresponding fill labels.

iii. The pharmacy prescriptions were evaluated by a registered pharmacist against the data reported to the AR PDMP. Each prescription was reviewed for 10 possible errors (see Appendix).

iv. Once the documentation was evaluated by a registered pharmacist against the data reported to the AR PDMP, a virtual visit was scheduled with the pharmacy to discuss results. These visits generally lasted no longer than 10 – 15 minutes. During the virtual visit, the AR PDMP:
   A. discussed the results from the pharmacy’s individual evaluation,
   B. discussed relevant PDMP Best Practices (provided a Best Practice pamphlet),
   C. provided the pharmacy with their individual result documents via e-mail or fax, and
   D. the pharmacy was asked to correct any errors identified.

v. Per the Rules Pertaining to the PDMP, the pharmacy was given 14 days to correct any errors identified. Only severe errors were followed up on by the evaluating pharmacist at the AR PDMP.

c. Error Identification

During the evaluation process, the data on the face of the prescription (or fill label when applicable) was compared to the data reported to the AR PDMP. Each of the ten prescriptions were examined for ten possible errors (see Appendix) for a total of 100 possible errors per pharmacy. The errors ranged from minor to severe.

Limitations

a. Limitations to the Evaluation Process

i. The most common error found in the evaluation was minor: “Missing/Incorrect/Misspelled Address of Patient”. There are several factors that make this error difficult to validate. This error may not be true for the following reasons:
   A. This evaluation compares clinic data found on the face of the prescription to what was reported to the AR PDMP (pharmacy record). On written or called-in prescriptions, the patient address could have been written on the prescription by the pharmacy (not clinic data). There isn’t a method for determining the source of the patient address information (whether it was truly clinic data or pharmacy record).
   B. For AR PDMP purposes, the patient address reported should reflect the address at the time of dispensation. The pharmacy may have the most up to date address on file and while there was a discrepancy between data on the face of the prescription and what was reported, the address reported was the most current at time of dispensation and therefore, correct.

ii. Two of the ten prescriptions selected for this evaluation were selected at random by the pharmacy. The purpose of the last two prescriptions selected by the pharmacy, was to identify instances where a prescription was filled and dispensed at a pharmacy but not reported to the PDMP. There isn’t a method to verify the two prescriptions selected by the pharmacy were selected randomly.

b. Limitations to Error Definitions

The most common severe error was found to be “Wrong/Missing/Dummy DEA.” Instances where the prescriber DEA was identified as “missing” (216 instances total) from the face of the prescription, were more frequent than originally anticipated. Ultimately, “missing” DEA instances were removed from the total number of severe errors but tracked separately for the following reasons:

*see: Limitations
i. While 21 CFR 1306.05 requires a prescriber’s DEA to be on the prescription, it does not specify where (face or back). Many pharmacies place the prescriber DEA on the backtag. But while the DEA wasn’t “missing,” a pharmacy-generated backtag is not considered “clinic data” and not considered during this evaluation.

ii. On written or call-in prescriptions, the prescriber DEA could have been obtained and written on the prescription by the pharmacy (not clinic data). There is no method for determining the source of the DEA information on the prescription (whether it was truly clinic data or pharmacy record).

c. Limitations Found in Reporting

For AR PDMP purposes, the day supply reported should reflect the day supply intended by the provider. When evaluating for day supply, the prescription was examined first for a defined day supply by the prescriber (i.e.: a value in the ‘day supply’ field, a note stating, “this must last thirty days,” or a “max daily dose,” etc.). If no defined day supply was present, the calculated day supply would be considered the intended day supply (i.e.: if the quantity dispensed was 120 with the following set of directions “take one tablet four times daily,” the calculated day supply would be considered 30). The following reporting limitation was found during this evaluation: prescription coverage may impose dosing limitations that prevent an accurate day supply from being reported.

Other Information

Funding

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Author

This report was created by the Arkansas PDMP at the ADH.

For any question regarding this evaluation, please contact the Arkansas Prescription Drug Monitoring Program:
(501) 683 - 3960

*see: Limitations
# Appendix: List of Errors and Error Definitions

<table>
<thead>
<tr>
<th>Error</th>
<th>Definition</th>
<th>Checklist of items to compare to PDMP</th>
<th>Law/Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Minor</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing/Incorrect/Misspelled</td>
<td>Identified if the address on the face of the prescription doesn’t match the address reported.</td>
<td>o Patient street address (or P.O. Box) on prescription</td>
<td>See 21 CFR 1306.05 “Manner of Issuance of prescriptions”</td>
</tr>
<tr>
<td>Address of Patient*</td>
<td>Identified if the address isn’t located on the face of the prescription.</td>
<td>o Patient city on prescription</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>o Patient state on prescription</td>
<td></td>
</tr>
<tr>
<td>Incorrect Day Supply*</td>
<td>The face of the prescription is examined first, for a defined day supply by the prescriber (i.e.: a value in the 'day supply' field, a note stating, “this must last thirty days,” a “max daily dose,” etc.). If no defined day supply is present, the calculated day supply is considered the intended day supply (i.e.: if the quantity dispensed is 120 with the following set of directions “take one tablet four times daily,” the calculated day supply would be considered 30).</td>
<td>o First, a prescriber defined day supply</td>
<td>Rules Pertaining to the Arkansas Prescription Drug Monitoring Program</td>
</tr>
<tr>
<td>Incorrect Quantity Dispensed</td>
<td>Identified if the quantity dispensed value on fill label doesn’t match the quantity reported.</td>
<td>o Quantity on fill label (quantity dispensed)</td>
<td>See 21 CFR 1306.05 “Manner of Issuance of prescriptions”</td>
</tr>
<tr>
<td>Incorrect Date Issued or Date</td>
<td>Identified if date issued (date written) on prescription doesn’t match date issued reported or is missing from face of prescription; OR if Date filled (typically found on fill label) doesn’t match the date filled reported.</td>
<td>o Written date on prescription</td>
<td>See 21 CFR 1306.05 “Manner of Issuance of prescriptions”</td>
</tr>
<tr>
<td>Dispensed (Date Filled)</td>
<td></td>
<td>o Dispensed Date (fill date) on label</td>
<td></td>
</tr>
<tr>
<td>Misspelled Patient Name</td>
<td>Identified if patient name (first or last) on the face of the prescription does not match the name reported. This includes any misspell, patient name variance, or alias.</td>
<td>o Patient first name on prescription</td>
<td>See 21 CFR 1306.05 “Manner of Issuance of prescriptions”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o Patient last name on prescription</td>
<td></td>
</tr>
<tr>
<td>Severe</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wrong Patient</td>
<td>Identified if patient on the face of the hardcopy prescription is not the patient reported.</td>
<td>o Patient first name on prescription</td>
<td>See 21 CFR 1306.05 “Manner of Issuance of prescriptions” (full name) and Rules Pertaining to the Arkansas Prescription Drug Monitoring Program</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o Patient last name on prescription</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>o Patient date of birth (if on prescription)</td>
<td></td>
</tr>
</tbody>
</table>

*see: Limitations
<table>
<thead>
<tr>
<th>Error</th>
<th>Definition</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Severe Continued</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Wrong Drug/Incorrect Dosage Form/Incorrect Strength/Inactive Rather Than Active Ingredient Reported for Compound | Identified if the drug, dosage form or strength on the face of the prescription does not match the drug, dosage form, or strength reported. | o Drug name on prescription  
|                                                             |                                                                            | o Drug dosage form on prescription  
|                                                             |                                                                            | o Drug strength on the prescription | See 21 CFR 1306.05 “Manner of Issuance of prescriptions”                 |
| Wrong/Missing/Dummy DEA*                                   | Identified if the prescriber’s DEA on the face of the prescription does not match the prescriber DEA reported. | o Prescriber DEA on the prescription | See 21 CFR 1306.05 “Manner of Issuance of prescriptions” and Rules Pertaining to the Arkansas Prescription Drug Monitoring Program |
| Wrong Prescriber                                           | Identified if the name of the prescriber on the prescription does not match the name reported. | o Prescriber name on prescription    | See 21 CFR 1306.05 “Manner of Issuance of prescriptions”                  |
| Prescription Not Reported to the PDMP (Noncompliance, Wrong File Format, Vendor Software Error) * | Identified if prescription was not reported.                                | o n/a                                 | Rules Pertaining to the Arkansas Prescription Drug Monitoring Program    |

*see: Limitations