Informed Data Sharing

Kentucky All Schedule Prescription Electronic Reporting (KASPER)
2019 Harold Rogers Prescription Drug Monitoring Program National Meeting
June 26, 2019
Why do PDMPs share data?

“To help ensure a more complete picture of a patient’s controlled substance usage for appropriate treatment, and because doctor shoppers and drug diverters are not constrained by state borders.”

Dave Hopkins
Background

• Kentucky began data sharing in 2011
• Since 2015, Kentucky has shared data with six of our seven border states
• Kentucky currently shares with 12 states which represents the resident states of 86% of the unique persons coming to KY for controlled substances
The Challenges of Data Sharing

• Background
  – Prescription Monitoring Information eXchange Standards Organization (PMIX)
  – Kentucky All Schedule Prescription Electronic Reporting System (KASPER)

• Differences in statute and regulation
• Patient matching
• Impetus for interstate querying
Data Sharing Methodology Concerns

• The success of our current interstate data sharing methodology is questionable

• The significant increase in queries from integrated partners and states sharing data may further decrease the efficacy
  – Potential increase in false positives and false negatives

• Characteristics of substance use disorder and diversion are not considered in PDMP data requests, in state or intra state

• There are currently no evidence based practices in place
Interstate Requests Processed by KASPER

For the period January 1, 2017 through December 31st 2018:

• KASPER processed a total 23.7 million requests for information (intrastate and interstate)

• 11.7 million of those requests were processed in the KASPER portal
  – 19.4% of KASPER portal requests included a request for another state’s data
How Successful Are Our Requests?

Portal Requests to Kentucky from Other States: 2017–2018

- No Data: 77.73%
- Disallowed: 11.73%
- Error: 6.12%
- Data Found: 4.41%
How Successful Are Our Requests?

Portal Requests to Kentucky from Border States: 2017–2018

- No Data: 77.81%
- Disallowed: 15.61%
- Error: 0.72%
- Data Found: 5.86%
How Successful Are Other States’ Requests to KASPER?

Other States’ Requests to Kentucky: 2017–2018

- Data Provided: 6.18%
- Deferred: 1.72%
- No Data: 92.09%
Out of State Residents with CS Dispenses

2017-2018

Unique Persons

- MO, 1132
- VA, 3109
- IL, 7411
- WV, 14730
- TN, 16174
- IN, 30551
- All Others, 27012
- OH, 72924

Total number of unique persons from other states = 173,043
This represents 8.2% of the unique persons in our database for the same time frame (2,109,153)
Average Interstate Requests per Month

Average Requests

Border States

All States

AL  IL  ME  MI  MN  NM  SC  TN  UT  VA  WA  WV
Out of State Residents with CS Dispenses

Total number of unique persons from other states = 173,043
This represents 8.2% of the unique persons in our database for the same time frame (2,109,153)
Border State Residents with CSII Dispenses

- OH, 18%
- TN, 62%
- WV, 60%
- VA, 64%
- IN, 48%
- IL, 65%

% of Unique Persons with a CS II Rx
The Problem

• Querying other states
  – Requests in our portal are based on the individual user’s selection
  – Integrated requests are based on a corporate decision

• Currently, composition of a patient request is based on what the originating state requires and not what the processing state utilizes

• Regular reports of false positives and false negatives
Project Goals

Conduct an analysis of the cross border transactions between Kentucky and a couple of border states as well as a couple of non-border states to determine the nature and pattern of the transactions by:

• Examining patients with other state addresses who are dispensed controlled substances in the home state;
• Analyzing the prescriber location of these transaction;
• Developing metrics to identify risk behavior patterns for diversion and substance use disorder in these populations;
• Mapping pharmacy, prescriber and patient zip codes considered to have risky behavior;
• Piloting in Kentucky a process to use this data to inform interstate data sharing at the end user level through modifications to the KASPER system, and
• Measuring the impact of informed sharing on CS II dispensing patterns in these states.

Future Phase:

• Comparing and contrasting the results of this analysis with a reverse analysis in the other partner states
• This project will document the analysis process and system modification in order to share with other states at no cost.
• Examined further by:
  – Mapping addresses of VA Unique Persons receiving CS II at a KY Pharmacy
  – Mapping KY Pharmacies Dispensing to VA Unique Persons
VA to KY Cross Border Dispenses

Kentucky Pharmacies Dispensing Any CS Rx To Virginia Residents (CY 2017-2018)

Legend: Proportional Symbols
- KY Pharmacies
- VA Residents
VA to KY Cross Border Dispenses

Kentucky Pharmacies Dispensing C-II Rxs To Virginia Residents (CY 2017-2018)

Legend: Proportional Symbols

- KY Pharmacies
- VA Residents
## Comparison of Unique Persons to Requests

<table>
<thead>
<tr>
<th>State</th>
<th># of Unique Persons</th>
<th># of Requests from KY</th>
<th># of Responses with Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>State A</td>
<td>102</td>
<td>400,310</td>
<td>69 (*49 unique persons)</td>
</tr>
<tr>
<td>State B</td>
<td>259</td>
<td>403,761</td>
<td>12 (*9 unique persons)</td>
</tr>
<tr>
<td>State C</td>
<td>16,174</td>
<td>1,305,218</td>
<td>41,984 (*16,553 unique persons)</td>
</tr>
</tbody>
</table>
Intended Outcomes

• Reduce burden on requesters
• Increase the probability of a patient match
• Encourage interstate requests based on trends in interstate travel for controlled substances
• Ensure our data sharing results in informing healthcare providers
Thank you!

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